

DR HULDA REGHER CLARK: PUBLIC PARASITE NO.1?

Dr Hulda Clark is the popular author of the books, "A Cure for All Cancers", "A Cure for AIDS" and "A Cure for All Diseases" etc. Any books with such a titles deserve to be burned, and in days of old, the author along with them, since preying on the vulnerable, whether via alternative or orthodox medicine, is evil parasiticism personified. You have probably read the book(s), now balance indoctrination with a measure of reality... and judge for yourself.



The following has been compiled for this purpose by **Stuart Thomson**, Director, Gaia Research Institute. I would gladly receive scientific data for and against.

For additional information, see the following links:

<http://www.uoguelph.ca/~kkolas/index.html>
<http://www.uoguelph.ca/~kkolas/fluke.html>
<http://www.ftc.gov/opa/2001/06/cureall.htm>
<http://www.uoguelph.ca/~kkolas/wormwood.html>
<http://www.biosci.ohio-state.edu/~parasite/home.html>



Fasciolopsis buskii, the human intestinal fluke, is an organism endemic in several southeast and south Asian countries (eg China, Taiwan, India & Thailand). There is **no** scientific evidence that it is distributed world-wide, nor is there any evidence that the organism (or its life stages) is present in all or even most cases of cancer or AIDS.

Cancers caused by the human fluke? The internet is an excellent medium for information exchange, but in most cases there is no form of peer review that provides some form of guarantee that the information is scientifically sound. Mainly owing to a lack of knowledge, the general public uses basic search statements to explore the internet, which favors hits on popular non-professional sites. Because of this, one easily encounters statements such as 'all cancers are caused by the human intestinal fluke' (<http://www.coloncare.com/cancer.htm>). There is no doubt that scientists working in the field know that this is nonsense, and such sites should be further ignored. However, it is not easy for the general public to discriminate between sites that provide correct information and sites that do not. If we want to reduce the spread of nonsense, competitive sites providing scientifically sound information of interest to the general public should be installed. This appears to be a task for governmental health institutions, universities and (inter-) national societies for parasitology. Theo Schettters, Cancers caused by the human fluke? Trends in Parasitology, 2001, 17:10:468-469

EXPERT OPINION

Dr Ralph W Moss PhD has for over two decades, been an outstanding journalist in the field of cancer. From 1974 to 1977, he was science writer, later assistant director of public affairs at Memorial Sloan-Kettering Cancer Center, NY. Since being fired for whistle-blowing, he has written ten books that have helped define the field of alternative medicine. **Dr Moss was a founding advisor to the National Institutes of Health's Office of Alternative Medicine** and has been an advisor on alternative cancer treatments to the **National Institutes of Health**, the **National Cancer Institute**, the American Urological Association, the Rosenthal Center of Columbia University, the University of Texas School of Public Health, the Susan G. Komen Foundation and the German Society of Oncology. Dr Moss is an advisory board member of the journal *Alternative Therapies in Health and Medicine*.

Dr Moss wrote the first article on alternative medicine for the Encyclopedia Britannica yearbook. He is the author of *The Moss Reports* and previously, *The Cancer Chronicles*, as well as such groundbreaking books as *Cancer Therapy, Questioning Chemotherapy*, and *The Cancer Industry*. For more information on Dr Moss's books, see: <http://www.ralphmoss.com/html/books.shtml> In his book "Herbs Against Cancer: History and Controversy" Dr Moss in Chapter 16, entitled "Hulda Clark (Canada)" (referring to "The Cure For All Cancers") states:

"The other cases in the book are of similar quality. Many did not have cancer except by their own self-diagnoses or by the OPT (orthophosphotyrosine) and F. buski tests that Dr. Clark devised. Overwhelmingly, those who were diagnosed with cancer by oncologists still had their cancer when they left Dr. Clark's care. It is doubtful if there is a single patient in her book with a genuine biopsy-diagnosed malignancy who was treated by Dr. Clark and whose full recovery was documented using the standards observed by medical scientists all over the world. Yet, amazingly, the cult of Hulda Clark continues to grow."

Dr Moss's chapter concludes with the following paragraph:

"What is lacking in all this is not only logic, but any data to support Hulda Clark's contention that she can cure cancer. I once requested from a major Clark promoter the names of people who had been cured of cancer by her method. The only reply I got was a fax from a kindly old gentleman who told me that he "knew" he had cancer from the small bore (diameter) of his bowel movements. On his own, he began treatment with Hulda Clark's three-herb program. After taking the treatment, he exulted, "I pooped like a horse!" That is what passes for proof of "the cure for all cancers."

This declaration was filed by Joseph Pizzorno, N.D., in Federal Trade Commission v. Western Dietary Products Co (Skookum) et al. (C01-818R, W.D., Washington), a case in which the Federal Trade Commission sued a company that was marketing devices and herbal products based on recommendations by Hulda Clark.

Western Herb and Dietary Products
Evaluation by Dr. Joseph E. Pizzorno, N.D.
May 8, 2001

Introduction

Michael Milgrom and Brinley Williams of the Federal Trade Commission have requested I review the validity of claims made by Western Herb & Dietary Products, Inc. (WHD) of Blaine, Washington. Following are my qualifications, description of my process and review of the claims made by WHD.
My Qualifications

I am widely recognized as one of the world's leading authorities on science-based natural medicine. My formal education includes a B.S. in Chemistry in 1969 from Harvey Mudd College in Claremont, CA and an N.D. (Doctor of Naturopathic Medicine) degree in 1975 from National College of Naturopathic Medicine, now located in Portland, OR. I have been licensed (#NT00000369) as a naturopathic physician, with prescriptive authority, in Washington State since 1975.

As the founding president, now president emeritus, of Bastyr University, the first fully accredited, multidisciplinary university of natural medicine in the United States, I have been very active in the academic and research advancement of natural medicine. As senior editor of the Textbook of Natural Medicine (Churchill-Livingstone 1999) the most authoritative textbook on natural medicine currently available, I have helped set the standard for alternative medicine education. Over the years, I have taught naturopathic philosophy, clinical diagnosis, nutrition, environmental medicine, and integrative therapeutics, and supervised students in the Bastyr University teaching clinic.

I have significant experience in public health and health care policy. I have been a member of the Seattle/King County Board of Health since 1996 (as far as I know, I am the first natural medicine practitioner ever to have received such an appointment), chair of the special primary interest group in alternative medicine of the American Public Health Association since 1999, and appointed in December 2000 by the President to the White House Commission on Complementary and Alternative Medicine Policy. In October 2000, I was an invited participant in the Josiah Macy, Jr., Foundation Conference on Education of Health Professionals on Complementary and Alternative Medicine. The conference generated a consensus recommendation on complementary and alternative medicine education in conventional medical schools. I have provided expert consultation on natural medicine education and research to governmental agencies internationally, including Argentina, Canada, China, Great Britain, Japan, and Taiwan.

Scope of Work/Process

Over the past several weeks, I have performed the following:
Reviewed the WHD website

Reviewed the WHD claims and theories
Reviewed documentation of claims and theories
Reviewed the four Hulda Clark books:
The Cure for All Cancers
The Cure for All Advanced Cancers
The Cure for All Diseases
The Cure for HIV and AIDS
Consulted several credible conventional and alternative medicine textbooks
Consulted cancer and HIV/AIDS experts
Conducted several MedLine and other database searches.

I believe this process has resulted in my understanding the WHD claims, the quality and validity of the substantiation they provided and the current standards of evidence required for the claims they made.

To substantiate a cure, I utilized the following criteria:

The condition must first be accurately demonstrated to exist, using objective reproducible diagnostic standards. The methodologies utilized to make the diagnosis must be documented.
The therapeutic approach should have a sound theoretical basis, validated by supportive research published in the peer-reviewed scientific literature. If no theoretical basis, then it must have at least proven clinical efficacy or a long history of traditional use.
The identification and quality of the therapies must be demonstrated.
The patient must be objectively demonstrated to be free of the disease. The methodologies utilized to demonstrate cure must be documented.
The process must be repeatable in different patients, preferably by several different practitioners.

Claims

As requested by the FTC, I have evaluated the following claims found on the WHD website:

- a. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing cancer;
- b. WHD's herbal formulas, cure packages, herbal cure packages and the Zapper Electrical Unit are effective in treating and curing Alzheimer's Disease;
- c. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing diabetes;
- d. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing arthritis;
- e. WHD's herbal formulas, cure packages, herbal cure packages and the Zapper Electrical Unit are effective in treating and curing AIDS and HIV infection;
- f. WHD's herbal formulas, cure packages and herbal cure packages, when used by persons with cancer, make surgery and chemotherapy unnecessary.

Evaluation of the Substantiation for the Western Herb & Dietary Products' Claims

The Clark books contain numerous unevaluated theories, unsubstantiated clinical observations, invalid diagnostic procedures and unproven therapies. As detailed below, no reasonable health care professional would consider her books to provide substantiation of the WHD claims.

Hulda Clark's Credentials

Clark is apparently a graduate in naturopathy from Clayton College, a correspondence school located in Alabama. As far as I know, the naturopathy decree issued by Clayton College is not considered a valid credential by any state licensing naturopathic doctors. It is also not considered a sufficient credential to sit for the national naturopathic licensing examination (NPLX). The standard of education in the United States for N.D. degree licensure is an accredited four-year, residential graduate program. I am unaware of any state licensing body that would consider a distance-learning program of a few hundred hours adequate for clinical practice.

Claim A. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing cancer.

There is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure cancer. The curecancer.com website makes explicit claims to cure not only every type of cancer, but also AIDS, Alzheimer's disease, arthritis, back problems, diabetes and heart diseases. The claims are explicitly to cure, not prevent mitigate or treat disease. The WHD rationale for these claims is the works of Hulda Clark. In fact, the

curecancer.com web pages appear to be directly transcribed from the Hulda Clark books. On its first page, [1] the website provides a quote from Clark [2] which asserts:

Cancer is caused by a certain parasite, for which evidence has been found in every form of cancer. So lung cancer is NOT caused by smoking, Colon cancer is NOT caused by a low roughage diet, Breast Cancer is NOT caused by a fatty diet, Retinal Blastoma is NOT caused by a rare gene, and Pancreatic cancer is NOT caused by alcohol consumption. Although these are all CONTRIBUTING FACTORS, they are not THE cause.

Clark's books make a very large number of unfounded assertions and claims. In general, Clark claims a parasite, the fluke *Fasciolopsis buskii* [3] is the cause of many chronic diseases. She asserts to have found it in every case of cancer, HIV infection, Alzheimer's disease, Crohn's disease, Kaposi's sarcoma, endometriosis, and in many people without these diseases. Clark asserts that the high level of toxins in the human body allows the parasite to complete its full life cycle without requiring the intermediate snail host. This in-human life cycle process then causes, according to Clark the production of a "mitotic stimulant" She also asserts several other parasites are endemic in the U.S. as well, but *F. buski* is her primary culprit

The following appear to be the core elements that comprise her theories:

All cancers and most diseases due to *Fasciolopsis buski* infection

Fasciolopsis buski is commonly found in humans in the U.S.

Solvent buildup in the body prevents the body from eliminating this and other parasites

Humans have high levels of isopropyl alcohol, both from exposure and by generation in the intestines by a bacterium called *Clostridium*

The presence of aflatoxin B prevents the detoxification of isopropyl alcohol

The coincidence of aflatoxin B and isopropyl alcohol in the liver results in the production of human chorionic gonadotropin

Human chorionic gonadotropin causes distant cells to produce the "mitotic stimulant" ortho-phospho-tyrosine

Killing the parasites and removing toxins and carcinogens from the body and diet result in cure in a short time

The parasites can be killed with an herbal formula

A device she calls a "Syncrometer" can be used to diagnose the presence of parasites, disease and toxins

A device she calls a "Zapper" can be used to kill the parasites. Following is my evaluation of these theories and therapies.

Fasciolopsis buski and human disease

Parasite infections in humans have long been associated with specific types of cancers. For example, *Schistosoma hematobium* is a known inducer of urinary bladder cancer, *Helicobacter pylori* is a gastric carcinogen, and hepatitis B virus is a causative agent of liver cell cancers. However, the claim that all cancers (let alone all AIDS, etc.) are caused by *Fasciolopsis buski* is unsubstantiated and extremely unlikely.

Fasciolopsis buski is a recognized snail-transmitted, intestinal, food-borne human intestinal fluke [4]. It is found in many parts of Asia and principally parasitizes the intestines of pigs. The prevalence of infection in children ranges from 57% in mainland China to 25% in Taiwan and from 50% in Bangladesh and 60% in India to 10% in Thailand [5]. Human infection, fasciolopsiasis, is acquired by ingesting water plants such as water chestnuts, which bear metacercariae of the parasite. Light infection is asymptomatic, while heavy infection is associated with abdominal pain, ulceration, hemorrhage, intestinal obstruction and facial and generalized edema. Diagnosis is made by finding adult flukes or, more commonly, by finding *F. buski* eggs in the feces. In light infections, even without treatment, spontaneous cure normally occurs within one year. Current conventional treatment is with praziquantel. There is no research documenting the association of *F. buski* with cancer or any disease other than fasciolopsiasis. Considering the well-documented level of infestation in these other countries, if the Clark theory was true we'd see an equally high level of cancer, which we don't.

Isopropyl alcohol, role in disease, body burden, and sources

Isopropyl alcohol exposure is common: rubbing alcohol, window cleaner solution, cosmetics, hair tonics, etc. It is considered to be about twice as toxic as ethanol. Isopropyl alcohol is readily absorbed from the intestines. The main problems are acute toxicity, typically from ingestion, and potentiation of the toxicity of some other chemicals, such as carbon tetrachloride. The half time for the elimination of isopropyl alcohol by the dog and rat is 4 and 2 hours, respectively. There is no research support for its persistence in the body, association with any parasitic infections, nor any association with cancer or any other disease. According to the National Library of Medicine's ToxNet, isopropyl alcohol is not classified as a carcinogen in either animals or humans.

Aflatoxin B and isopropyl alcohol

There is no research demonstrating any relationship between aflatoxin and isopropyl alcohol. Nor is there any research showing a relationship between these chemicals and chorionic gonadotropin.

Chorionic gonadotropin

Human chorionic gonadotropin (HCG) is a chemical secreted in large amounts by pregnant women and by some cancers. I was unable to find any research that HCG induces cancer.

Ortho-phospho-tyrosine

While tyrosine kinases are involved in some carcinogenic processes, I was unable to document the significance (i.e., cancer growth stimulant and measure of cancer) attributed by Clark to "ortho-phospho-tyrosine." Tyrosine phosphorylation is one of the key covalent modifications that occur in multicellular organisms as a result of intercellular communication during embryogenesis and maintenance of adult tissues. The enzymes that carry out this modification are the protein tyrosine kinases (PTKs), which catalyze the transfer of the phosphate of AIP to tyrosine residues on protein substrates. Phosphorylation of tyrosine residues modulates enzymatic activity and creates binding sites for the recruitment of downstream signaling proteins. Because PTKs are critical components of cellular signaling pathways, their catalytic activity is strictly regulated. Many growth factor receptors and retroviral transforming proteins share the property of phosphorylating proteins on tyrosine. Protein tyrosine kinase also plays an important role in the viability of several parasites. None of this appears to provide support for the Clark theories.

Herbal eradication of parasites

The herbs recommended by Clark for eliminating parasites have some tradition of use as anthelmintics (worm-killing agents). [7-10]

Black walnut hulls (*Juglans nigra*): Peripherally mentioned in King's American Dispensatory, recommended in Indian Herbology of North America. A recent study evaluated a kerosene milky-stage walnut (*Juglans spp.*) extract, a Russia folk medication, in an animal model. A dose of 75 mg/kg in albino mice provided 100% efficiency against ascariasis [11].

Wormwood (*Artemisia absinthium*): Contains absinthian, a well documented anthelmintic with a long history of use, though primarily for round worms, not flukes.

Cloves (*Syzygium aromaticum*): Mentioned in Green Pharmacy. No current research found.

The only botanical medicine for which I found research demonstrating efficacy against *Fasciolopsis buski* is the alcohol extract of the root-tuber of *Flemingia vestita* (not recommended by Clark). [12]

Although the dosages recommended by Clark are unclear and the research has only assessed their efficacy in round worms, the recommended herbs may be effective in the treatment of *Fasciolopsis buski*. There is no evidence they have any efficacy in patients with cancer or other diseases.

Syncrometer

No research is presented demonstrating that the Syncrometer is a valid diagnostic device or that it correlates with any accepted cancer or other disease diagnostic procedure.

Zapper

No research is presented demonstrating that the Zapper has any physiological effects, let alone ability to kill parasites or cure cancer. The claim that mild electrical shocks to the skin can eliminate intestinal parasites is, frankly, preposterous.

Case histories

The Clark book *The Cure for All Cancers* presents about a hundred cases, some numbered and some not. Since most of the cancer cases are diagnosed with the Syncrometer, not a standard or accepted diagnostic procedure, they do not provide substantiation of the validity of the theories or efficacy of the treatments. Those with accurate diagnoses appear to have either been successfully treated with conventional interventions or fared uniformly poorly. The patients that appeared to respond had no documentation of cancer other than the Syncrometer. Clark intermixes what appear to be accurately conventionally diagnosed cancer patients with patients diagnosed only with the Syncrometer. It gives the superficial appearance of cancer treatment efficacy, but close reading reveals a very clear distinction in outcomes: proper diagnosis -- no results, Syncrometer diagnosis -- results. Peppered

throughout the case discussions are such outrageous diagnoses as a patient being "full of fiberglass because she was coughing a lot" and that an elevated alkaline phosphatase level was due to the presence of a dye (DAB) when this is a well known sign of bone cancer metastases!

Clarks's *The Cure for All Advanced Cancers* is a more sophisticated book. It provides about a hundred citations for various aspects of her theories and the "cured" cancer cases are provided in far more detail. Many of the individual statements she makes are consistent with the current scientific knowledge. For example, many environmental toxins (e.g., polycyclic aromatic hydrocarbons) do cause cancer, heavy metals do damage immune function, iron deficiency does decrease cytochrome P450 activity, mycotoxins do increase the risk of certain cancers, etc. However, such statements of common knowledge, while seeming to provide science, do not provide substantiation of her theories.

For analysis of the validity of the "cured cancer cases, I consulted an oncologist, Dr. Aron Primack. At my request, he reviewed *The Cure for All Advanced Cancers*. He makes several observations:

A biopsy proof is required to diagnose cancer and the same is true for the fast evidence of metastases. Inflammatory lesions of all organs occur, and these can mimic cancer in every respect. These lesions then heal with time and credit is often given to intervening "therapies" such as those described in this book. Even in *bona fide* cases of malignancy, chemotherapy and radiation therapy, as well as surgery, can make people feel worse after treatment and this can mimic ongoing disease, requiring a period of time of healing before one can assess the treatment.

The cases in this book are all of an extreme nature. They all have more widespread disease and odder distribution of metastases than one sees in oncology practice. The pattern of spread of disease in these patients is different from that normally seen in comparable patients.

There are clearly stated "causes" for findings that do not stand up to scrutiny. E.g. Case 25 (Hodgkin's Disease) in which she states: night sweats are caused by *Mycobacterium Avium* brought in by ascaris. There is NO indication of this. Hodgkin's Disease patients have had numerous biopsies of these nodes and there has never been a correlation with tuberculosis or ascaris.

Blood tests are not a substitute for biopsies. They may improve, such as in prostate cancer, but the cells may be more undifferentiated and the cancer actually worse.

Finally, spontaneous improvements do occur.

He assessed the diagnostic procedures and outcomes in many of the cases. In summary, he did not find adequate diagnostic evidence indicative of cures. In particular, he found many examples where changes in radiological or other reports were either misinterpreted, or not the appropriate diagnostic tool for the interpretations presented. For example, changes in bone scans or x-rays were often cited as documentation of the presence and remission of cancer. However, without proper biopsies, the lesions described could indicate a tumor, metastasis, infection, inflammation, or simply a developmental abnormality.

As can be see from the above analysis, there is no significant substantiation for the Clark theories, diagnostic procedures, therapies or claimed clinical successes.

Claim B. WHD's herbal formulas, care packages, herbal care packages and the Zapper Electrical Unit are effective in treating and curing Alzheimer's Disease.

There is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure Alzheimer's disease.

Claim C. WHD's herbal formulas, care packages and herbal cure packages are effective in treating and curing diabetes.

There is no competent and reliable evidence that the WED formulas and packages effectively treat or cure diabetes.

Claim D. WHD's herbal formulas, cure packages and herbal care packages are effective in treating and curing arthritis.

There is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure arthritis. The rationales for my evaluation of Claims B, C, and D are considered together as they are all supposedly substantiated by one source, Clark's book *The Cure for All Diseases*.

Clark's theory of the causes and treatment of all diseases is essentially the same as for cancer. It suffers from the deficiencies noted above. Her claims of cure also suffer from the same problems of invalid diagnostic and evaluative procedures which provide no substantiation for either the presence of the disease or its eradication and therapies with no reliable documentation of efficacy.

On the front page of this book Clark sets the stage with the assertion: "Electricity can now be used to kill bacteria, viruses, and parasites in minutes, not days or weeks as antibiotics require." Other than describing her "discovery process", she provides no substantiation for this assertion. If her electrical device could indeed kill these microorganisms, it would be simple to perform and reproduce this effect in any microbiology laboratory or biology classroom.

This is followed by the equally undocumented assertion of cause on page 2: "No matter how long or confusing is the list of symptoms a person has, from chronic fatigue to infertility to mental problems, I am sure to find only two things wrong: they have in them pollutants and/or parasites. I never find lack of exercise, vitamin deficiencies, hormone levels or anything else to be a primary causative factor." This statement appears to simply ignore hundreds of thousands of studies published in the peer-reviewed research literature to the contrary.

For Alzheimer's disease, Clark adds to the basic theory the assertion that xylene and toluene, from decaffeinated powders and carbonated drinks, are "brain-seeking" toxins, as are aluminum, mercury, freon, thallium, and cadmium and the bacterium Shigella. While these solvents and heavy metals are indeed toxic to the brain, there is no substantiation of their presence, other than the Syncrometer. The therapies recommended are unlikely to be toxic (except the excessively high dosage of vitamin B2); they are also unlikely to have an effect unless the patient was deficient in one or more of them, not uncommon in an elderly population. The four case histories given are not at all compelling, with only one showing possible improvement. Considering the variability of Alzheimer's disease, such cases need to be followed objectively for months before efficacy can be assessed.

For diabetes, Clark adds infestation of the pancreas with *Eurytrema pancreatum*, a cattle fluke, as a cause. She also asserts that methanol is a toxin found in all patients with diabetes. There is no research to support either of these claims. However, several of the therapies recommended may help some patients with adult onset (NIDDM) diabetes. Specifically, fenugreek seeds and the trace mineral chromium may be beneficial in improving blood sugar levels and bilberry extract may decrease the vascular damage seen in patients with diabetes. The case results presented suggest possible improvement in several, and could be the result of improved diet and supplementation with these natural therapies. However, longer term monitoring would be required to assess actual outcomes. The WHD diabetes formula (black walnut, wormwood, cloves, L-arginine, L-ornithine, african bird cayenne, burdock root, and marshmallow root) does not contain any of the herbs or nutrients known to improve diabetes.

For rheumatoid arthritis, Clark asserts that the worms actually live in the joints. For osteoarthritis, she asserts that chronic, undetected staph and strep infections are responsible. She also believes that excessive phosphates (from meat, soft drinks and grams) are a problem in this condition. There is no substantiation for these theories. The case histories presented were diagnosed based only on symptoms, not standard diagnostic procedures. Without an accurate diagnosis, it is impossible to determine if there is any significance to the very modest clinical improvements in a few of the cases. There was no apparent pattern in the therapies, so I am unable to determine if they've any valid theoretical basis. However, one therapy, recommending the avoidance of nightshade family foods, does have some research support for patients with osteoarthritis.

Claim E. WHD's herbal formulas, cure packages, herbal care packages and the Zapper Electrical Unit are effective in treating and curing AIDS and HIV infection.

There is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure HIV/AIDS. In addition, I believe the WHD claim and the Clark book pose a serious public health hazard. The risk of contagion of the deadly HIV virus is well documented.

Clark's theory for the cause of HIV/AIDS is essentially the same as for other diseases. For HIV/AIDS, she adds the assertion that the HIV virus is found in the snail stage of the *Fasciolopsis* lifecycle and develops into the human version due to accumulation of benzene in the thymus. She further asserts the fluke is necessary for the HIV virus to maintain its presence in the body and that "benzene is the cause of AIDS [13].

Clark's theory has no validity. There is no research documenting the presence of the any type of HIV virus in snails, no research supporting the unusual prevalence of a fluke such as *Fasciolopsis buski* in HIV positive patients, no evidence of benzene contamination in HIV positive patient, no evidence that benzene preferentially accumulates in the thymus, no evidence that a parasitic infection is necessary for the maintenance of an HIV infection and no evidence that benzene has any relationship to HIV.

Clark asserts to have cured HIV/AIDS based on 58 numbered and approximately 30 unnumbered patients in her book *The Cure for HIV and AIDS*. Virtually all were "diagnosed" as HIV positive based on her Syncrometer, not standard blood tests. There is no substantiation of the validity of the Syncrometer as an accurate measure of HIV virus, let alone being able to determine in which organs it resides. Of these 88 reported cases, only 14 actually had blood tests. The test results were typically reported by the patient and not confirmed by Clark and most of them were not reported in enough detail to determine their validity. Of the 14 with a blood test, three were actually negative, even though reported positive by the Syncrometer. One of these apparently became HIV positive during therapy. Of the 11 with possibly accurate diagnoses, only 3 reported the type of test performed. Of those reported to have become HIV negative according to "clinical tests," the type of blood test was only stated in 4. While PCR has validity in tracking the viral load of an HIV positive patient, to be valid it needs to be performed serially by the same laboratory using the same methodologies, due to the highly variable genetics of the virus. Of particular significance, however, is that during the early 90s when these tests were run, PCR was a new procedure with low reliability.

The clinical results of the 11 with a possibly accurate diagnosis are highly variable, ranging from continued progression of the disease, to patient-reported subjective improvements to those who left before completion of therapy. The information provided does not document actual improvement, let alone cure, and the concomitant use of conventional therapy was not reported.

The therapies recommended have no research supporting their efficacy in the eradication of the HIV virus. The "Zapper" does not appear to have been subjected to any objective research evaluation and the idea that an electrical current will selectively destroy specific viruses has no credibility. As discussed above, the "deworming" therapies may be effective in eliminating some parasites, but have no research supporting elimination of the HIV virus.

To diagnose a person as HIV positive based on an unproven device without a confirmatory blood test is unconscionable. The needless worry and suffering this causes is appalling, as is the anguish of the spouses who thought they were in a monogamous relationship and parents with no understanding of how their young children could have become infected. Asserting cure because this device no longer reports the disease is not in anyway credible.

Not only is there no substantiation for these diagnostic and therapeutic claims, I believe this website and the Clark books pose a serious public health hazard. HIV is a deadly communicate virus whose incidence of infection is again increasing. Convincing an HIV positive patient that he or she is HIV negative after a few weeks of ineffective therapy, implying he or she no longer needs to practice safe sex is outrageous. This is likely to increase the spread of the disease and undermine the efforts of public health departments across the country to contain it.

Claim F. WHD's herbal formulas, cure packages and herbal cure packages, when used by persons with cancer, make surgery and chemotherapy unnecessary.

As discussed above, there is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure cancer. Therefore the recommendation that these interventions make surgery or chemotherapy unnecessary is equally inappropriate and may deter a patient from obtaining an accurate diagnosis and potentially life-saving therapy.

Conclusion

Not only is there is no competent and reliable evidence that the WHD formulas and packages effectively treat or cure cancer, AIDS or other serious diseases, I believe their claims pose a substantive public health danger. This ranges from: allowing serious disease to progress untreated to the increased risk of the spread of the deadly virus due to HIV-infected individuals mistakenly believing their virus is eradicated.

Foonotes

<http://www.curecancer.com>

Clark HR. *The Cure for All Cancers*. New Century Press, Chula Vista, CA, 1993, first page.

Clark consistently misspells *Fasciolopsis buski* as *Fasciolopsis buskii*. The correct scientific spelling is used in this declaration.

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The Cure for HIV and AIDS, page 5.

This declaration was filed by Aron Primack, M.D., in F.T.C. v. Western Dietary Products Co (Skookum) et al. (C01-818R, W.D., Washington), a case in which the Federal Trade Commission sued a company that was marketing devices and herbal products based on recommendations by Hulda Clark.

Affidavit of Aron Primack, M.D.

April 26, 2001

Aron Primack, M.D., pursuant to 28 U.S.C. § 1740, hereby states as follows:

1. My name is Aron Primack. I am a United States citizen over the age of 18. I currently reside in Silver Spring, Maryland.

2. I earned a B.S. degree from Northwestern University in 1964, an M.D. degree from Northwestern University Medical School in 1967 and an M.A. degree in medical anthropology from Catholic University in 1986. I am licensed as an M.D. in Maryland and the District of Columbia.

3. I am board certified in Internal Medicine and Medical Oncology. Medical Oncology is the branch of medicine concerned with the medical treatment of the various forms of cancer. Currently, I serve as Associate Professor of Preventive Medicine and Biometrics at the Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Maryland. I also serve as a preceptor in several programs at USUHS and at George Washington University Medical Center. I have served as a senior investigator for the National Cancer Institute, both in Bethesda and in Kampala, Uganda, in East Africa, where I designed and conducted clinical trials with new drugs and new combinations of drugs. I also did laboratory research studying drug metabolism. I have served as a consultant to the Office of Alternative Medicine in the Office of the Director of the National Institutes of Health (NIH).

4. I have published numerous articles and written several chapters in textbooks, including a chapter entitled "Alternative Medicine and Cancer" for Alternative Medicine: an Evidence Based Approach, a medical school textbook published in 1999. I co-edited a publication for NIH entitled "The Collection and Evaluation of Clinical Research Data Relevant to Alternative Medicine and Cancer", published in 1996. I have substantial experience in the evaluation of alternative treatments for diseases, particularly for cancer. My full CV is attached.

5. I have been asked by the Federal Trade Commission to provide an opinion concerning substantiation for the following claims made by Western Herb & Dietary Supplements, Inc. (WHD):

- a. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing cancer;
- b. WHD's herbal formulas, cure packages, herbal cure packages and the Zapper Electrical Unit are effective in treating and curing Alzheimer's Disease;
- c. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing diabetes;
- d. WHD's herbal formulas, cure packages and herbal cure packages are effective in treating and curing arthritis;
- and e. WHD's herbal formulas, cure packages and herbal cure packages and the Zapper Electrical Unit are effective in treating and curing AIDS and HIV infection,
- f. WHD's herbal formulas, cure packages and herbal cure packages, when used by persons with cancer, make surgery and chemotherapy unnecessary.

6. I have visited WHM's website at www.curecancer.com and reviewed an earlier version of the website provided by the FTC, in order to become familiar with the specific packages that WHD offers as a claimed cure for each of the above illnesses and to become familiar with the representations. I understand that WHI has said that the basis for its claims is the work of Hulda Regehr Clark. I have reviewed the following works by Hulda Regehr Clark: *The Cure for All Diseases*, *The Cure for all Cancers*, *The Cure for HIV and AIDS*, *The Cure for All Advanced Cancers*

and *Syncrometer Science Laboratory Manual*. These are all the books by Hulda Clark sold by New Century Press, a publishing house that specializes in the sale of her books (see <http://www.newcenturypress.com/titles.html>).

7. In my professional opinion the books by Hulda Clark listed above do not provide competent and reliable scientific evidence in support of the claims listed above. Moreover, in my opinion, apart from Hulda Clark's books, the claims are not supported by competent and reliable scientific evidence anywhere.

8. The basis for my opinion is as follows:

a. Hulda Clark's books, listed above, describe her own method of diagnosing and curing all diseases. She claims to have developed her own diagnostic tool, called the Syncrometer, which works on the principle of "resonance" (*The Cure for All Diseases*, pp 5, 465). The operator of the device must compare two sounds to see if they resonate in order to provide a Yes or No diagnosis (*Id.* p 462) The Syncrometer provides the basis for her entire work. However, there is no scientific basis for the use of the Syncrometer. Its use has not been verified or tested in any scientific manner and the conclusions that Clark reaches from its use (see subparagraph [b] below) are implausible to begin with and contrary to documented research. Assuming that a person actually had a parasitic infestation, there is no scientific reason to believe that this device could detect it, let alone diagnose which parasite was causing the infestation, the lifecycle stage of the parasite or its location within the body, all of which Clark claims to be able to do.

b. As a result of her use of the Syncrometer, Hulda Clark claims that all diseases are caused by parasites, particularly the intestinal fluke whose activities may be caused or aggravated, according to her theories, by pollutants. For example, she claims that Myasthenia Gravis is probably caused by flukes in the thymus gland, that Alzheimer's Disease and multiple sclerosis result from flukes in the brain, and that diabetes is caused by flukes in the pancreas. She also claims that cancer and HIV/AIDS are caused by intestinal flukes. She even claims that HIV is not a virus in humans but only in flukes and that the virus disappears when the flukes are killed. These claims are demonstrably false. For example, the brains of Alzheimer Disease patients have been studied and there has been no indication of parasitic infection. The same is true for the thymus glands of Myasthenia Gravis patients. (Removal of the thymus is the standard treatment for this disease and the universal practice in medicine is to study a removed organ microscopically.)

Diabetes is caused by an abnormality of insulin production and of insulin usage and uptake by cells, not by parasitic infestation of the pancreas. This has been shown through light microscopic and electron microscopic study. The HIV virus is now observed directly in humans and replicates in humans without the need for a fluke host which is not found in HIV/AIDS patients. Cancer is caused by a variety of known and unknown factors. Flukes and other parasites have been associated with a few, relatively rare forms of cancer, namely: a) There is a very rare type of adenocarcinoma of the liver caused by liver flukes, and b) bladder cancer in places with highly endemic schistosomiasis (e.g Egypt) is related to this disease. However, even in such cases, it does not follow that killing the flukes eliminates the cancer and the overwhelming majority of cancers are neither caused by flukes or similar parasites nor are flukes or similar parasites associated with them. If they were present, such flukes certainly would have been found by ordinary pathology techniques.

c. With regard to cancer, Clark also claims that a substance called "ortho-phospho-tyrosine" that she detects with her Syncrometer is an infallible cancer or malignancy marker. (*The Cure for All Cancers*, pp 8, 59,203-4; *The Cure for All Diseases*, p. 9) This is simply an assertion for which no evidence is provided in her books, nor is it supported by any competent and reliable evidence. Clark seems only to have found or tested for "ortho-phospho-tyrosine" with the Syncrometer. In her book, *The Cure for All Advanced Cancers*, in which she includes a large number of blood test results, she never shows results for this substance. Thus, Clark's theories of cancer diagnosis and cure are completely unsupported by scientific evidence on at least two counts: intestinal flukes as the cause of all cancers and "ortho-phospho-tyrosine" as a marker for all cancers.

d. Clark claims that a device she has invented called the Zapper can kill the flukes within the body and cure the diseases using an electric current of the right frequency. However, her books provide no competent scientific evidence that this device does what she claims or even that it has any effect on the body. In any event, the premise for its use is completely false, since the diseases are not caused by parasites. Nor does any body of scientific literature anywhere else support the theory that these diseases can be cured with such a device.

e. In Hulda Clark's system a combination of herbs and other dietary supplements, which WHD sells as herbal packages and cure formulas, supplement use of the Zapper to cure the diseases. However, her books provide no competent scientific evidence that such combinations of herbs and other dietary supplements are, in fact, effective for this purpose. There is no scientific literature to support the use of herbal remedies in the treatment of flukes, even if these were present. And, as with the Zapper, the premise for using these herbs and other substances is

false since the diseases are not caused by parasites. Nor are such claim supported by any body of scientific literature outside of Hulda Clark's books.

f. Hulda Clark uses specific cases to exemplify the success of her unorthodox and unproven methods. But these are also undocumented cases. They are glibly stated without supporting evidence. While there are rare cases of severe disease that show spontaneous regression and improvement, the cases in Clark's books are expounded without proper documentation of the treatment or of the response. It is impossible for me to verify either the diagnosis, treatment or cure from the information presented. In her first three books, *The Cure for all Cancers*, *The Cure for All Diseases*, and *The Cure for HIV and AIDS*, all her diagnoses and cures are premised on testing with the Syncrometer. There is no scientific reason to believe that either the diagnoses or cures are reliable.

g. Clark's fourth book, *The Cure for All Advanced Cancers*, contains more detailed case histories than the previous three (though these are selected, rather than a random sample or a complete accounting, p. 251) and does not rely entirely on Syncrometer data. However, in virtually all cases the data are still insufficient to confirm either a diagnosis or a cure. Inflammatory lesions of all organs occur and these can mimic cancer in every respect. These lesions heal with time regardless of any intervening therapy. In order to diagnose cancer biopsy proof is required. Biopsy proof is also needed in order to diagnose metastasis (the spread of the cancer). For example, in case #1 (p. 251), Clark appears to have diagnosed bone cancer and renal (kidney) cancer on the basis of a bone scan and kidney scan. This is not sufficient for such a diagnosis. Bone scans show abnormalities in patients with chronic arthritis or other bone disease, much more commonly benign than malignant, in which there is inflammation of the bone. Hot spots on bone scans can indicate an infection, but not necessarily. In case #6 (p. 272) several X-rays are shown but these are also insufficient to diagnose cancer. In case #8 (p. 282) an MRI is shown, but this is insufficient to diagnose cancer. It is noted that the patient had refused to have the swelling biopsied before visiting Clark's clinic. Without a biopsy, it is impossible to tell if this is cancer. A lymph node can, and should, swell and then recede in size as an inflammatory reaction. The other cases all show a similar lack of documentation sufficient either to diagnose cancer or to document a cure.

9. I am particularly concerned about WHD's suggestion that patients forego standard medical treatments in favor of purchasing its remedies. By way of illustration:

a. People suffering from cancer will be harmed by foregoing standard medical treatment in favor of the remedies promoted by WHD. Many forms of cancer respond to surgery, chemotherapy and/or radiation treatment. They do not, however, respond to no treatment, which is what WHD's suggested remedies amount to.

b. HIV/AIDS; is caused by a virus that is measurable in the blood stream of patients. It is now controllable with medical treatment. HIV/AIDS patients had a life expectancy of under six months from the time of diagnosis to death in the first decade and a half after the disease was discovered. That time is now over two years. This is a major breakthrough. There is no question that it is a terrible and life-threatening practice to tell patients to forego the use of modern, dramatically successful medical treatment for the methods expounded in Clark's books.

c. Allopathic treatment of arthritis relieves the suffering (e.g. using ibuprofen and other Non-steroidal products) and reverses much of the relentless inflammation (e.g. using cox-1 inhibitors). It would be a major regression for patients to forego the use of these products in favor of treatments expounded in Clark's books.

10. In my opinion the claims at the website www.curecancer.com are based on erroneous information and can cause patients to do themselves harm when thinking they are helping themselves.

I declare under penal of perjury, that the foregoing statement is true and correct. Executed this 26th day of April, 2001 at Bethesda, Maryland.

This declaration was filed by Peter W. Pappas, Ph.D, in F.T.C. v. Western Dietary Products Co (Skookum) et al. (C01-818R, W.D., Washington), a case in which the Federal Trade Commission sued a company that was marketing devices and herbal products based on recommendations by Hulda Clark.

Declaration of Peter W. Pappas, Ph.D.
May 9, 2001

Peter W. Pappas, Ph.D, pursuant to 28 U.S.C. § 1746, hereby states as follows:

1. My name is Peter W. Pappas. I am a United States citizen over the age of 18. I currently reside in Columbus, Ohio.

2. I have a B.A. degree in biology from Humboldt State University in Arcata, California, awarded in 1966. In 1968 I received an M.A. in Biology from Humboldt State University. I received a Ph.D. in 1971 from the University of Oklahoma, Norman, Oklahoma, in zoology, parasitology, and biochemistry. I served a post-doctoral fellowship through the National Institutes of Health from 1971-1973 at Rice University in Houston, Texas in parasitology, and served as research associate at Rice in parasitology in 1973.

3. From 1973 until 2000 I was a faculty member at The Ohio State University in Columbus, Ohio. I served as an Assistant Professor from 1973 through 1977, as an Associate Professor from 1978 through 1982 and as Professor of Zoology from 1983 through 2000. From 1989 through 1998 I was chairman of the Department of Zoology at Ohio State. (The Department's name was changed to "Evolution, Ecology, and Organismal Biology" in 2000.) In 1998 and 1999 I was the Director of the Introductory Biology Program at Ohio State. I am now retired from Ohio State, having been awarded the title of Professor Emeritus, and I am a technical consultant for LabBook.com in Columbus, Ohio. LabBook.com develops and markets commercial software for managing laboratory information and mining genomic databases.

4. My specialized academic training is in the area of parasitology -- the study of parasites. In general terms, "parasitologists" study all aspects of the "biology of parasites," including, but not limited to, (1) taxonomy and systematics, (2) life cycles, (3) pathology, (4) epidemiology (including the distribution, control, and eradication of parasitic infections), (5) and treatment of parasites and parasitic infections. Parasitologists might specialize in one or more of the above areas, they might specialize in the study of parasites infecting a specific host (e.g., "human parasitology"), or they might specialize in other biological disciplines related directly to one of the above areas (e.g., biochemistry of parasites in relation to chemotherapy). Many biologists with specialized training in other biological disciplines study parasites as "model systems," including evolutionary biologists, molecular biologists, taxonomists and systematists, and ecologists. Parasitic organisms are extremely diverse -- virtually every major group of animals has at least one member that is a "parasite," and in some groups of animals all members are parasites. Just like parasites, parasitologists are also extremely diverse in terms of "what" they study and "why" they study it.

5. While a faculty member at Ohio State University, I maintained an active research program in parasitology, primarily biochemistry, physiology, and cell biology of parasites. I have published approximately 90 articles in refereed scientific journals and edited three reference books. I have also served on the editorial boards of five national/international parasitological journals, and I currently serve as co-moderator of the primary parasitology news group on the web (bionet.parasitology). My CV is attached.

6. At Ohio State University, my primary teaching responsibility for 27 years was an advanced undergraduate/graduate-level course, Introductory Parasitology. As part of maintaining the course's content with contemporary parasitological concepts and principles, I have read extensively in many areas of parasitology and "human parasitology." This includes reading and studying many general, human, and veterinary parasitology textbooks written in the U.S. or U.K., and extensive readings in the original literature (refereed scientific journals). For the past five years I have maintained a large web site (Parasites and Parasitological Resources) designed as (1) a teaching aid for college-level students and (2) a source of information for the lay person. The web site contains information on over 200 species of parasites and over 500 photographic images of parasites, and most of the important parasites of humans are included. During a typical month, the web site's home page receives more than 10,000 hits, and the entire web site receives >150,000 hits. Through an e-mail link in this web site, I receive and answer many questions from all over the world regarding many aspects of parasitology. The web site's URL is www.biosci.ohio-state.edu/~parasite/home.html.

7. I became aware of Hulda Clark's claims regarding parasites and disease in 1996 when I developed my web site. As part of developing this web site, I conducted extensive searches of the web for other parasitology sites. In addition to sites that were clearly academic and instructional in content, I came across many sites that espoused the belief of Hulda Clark that parasites cause many diseases including cancer, AIDS, Alzheimer's disease, diabetes, etc. Throughout my 33 years in academia, I had never heard of nor read about such a theory. Initially, I simply ignored Hulda Clark and her theory, as I was simply too busy. However, as my web site developed, I began to get e-mails asking for my "opinion" about Clark and her theories. I also discovered that many of the "proClark" web sites had copied copyrighted images from my web site and were using them without my permission. Thus, I not only purchased Clark's books, *The Cure for All Cancers* (1993), *The Cure for HIV and AIDS* (1993), and *The Cure for All Diseases* (1995), but I also began an extensive search for and investigation of "pro-Clark" web sites. Over the past few years, I have become familiar with Hulda Clark's theories and many of the web sites that support her theories and sell various cures for parasites.

8. In her writings, Clark makes a number of claims about parasites and disease. In *The Cure for All Cancers*, Clark states: In this book you will see that all cancers are alike, They are all caused by a parasite A single parasite! It is the human intestinal fluke. [Clark is referring to *Fasciolopsis buski*, a parasitic flatworm.] And if you kill this parasite, the cancer stops immediately. The tissue becomes normal again. In order to get cancer, you must have this parasite.

9. In *The Cure for HIV and AIDS*, Clark states: "This [parasite] is the source of the HIV virus (sic)" and a photograph of *Fasciolopsis buski* follows. She goes on to say, "The HIV virus (sic) belongs to this fluke," and "[I]f it establishes itself in the thymus, it causes HIV/AIDS." Furthermore, in both of these books, Clark emphasizes that effective treatment for this parasite (and, therefore, a cure for cancer, AIDS, and may other diseases purportedly caused by this parasite) requires the use of both herbal remedies and electrical devices "Zappers").

10. The claims of Hulda Clark (and many of the web sites that sell herbal remedies and "Zapper") that (1) a single parasite causes cancer, AIDS, and many other diseases, and that this parasite can be killed with electrical devices ("Zappers") are not supported by competent and reliable scientific evidence. This statement is based on the observations and correspondence summarized below.

11. Cancer, AIDS, and many of the diseases that Clark claims are caused by *Fasciolopsis buski*, are distributed world-wide, yet the distribution of this parasite is limited to S.E. Asia.

12. Clark claims that she has diagnosed this parasite in everyone with cancer, AIDS, and other diseases, and that she diagnoses these infections using a "Syncrometer" (an electrical device that somehow indicates the presence of parasites and/or toxins in the body.) However, the only reliable and acceptable method for the diagnosis of *Fasciolopsis buski* infections in humans is demonstrating the presence of the parasite's eggs in human feces. Thus, her statement that "everyone" is infected with this parasite is based on inaccurate diagnostic methodology. Moreover, if this parasite caused all of these diseases, the parasite would be found during routine pathology procedures. I have been unable to find any evidence that this parasite is found during such routine procedures.

13. Clark's books contain a number of inaccurate statements about the biology of *Fasciolopsis buski* and other parasites, so one must question her as an authority on parasites or parasitic diseases. She misspells the scientific name of the parasite; she spells the specific *buskii*, when the correct spelling is *buski*. When discussing any species of living organism, the correct spelling of the scientific name is essential. In *The Cure for All Cancers*, the title for Figure 2 (which is not a photomicrograph) refers to "strings of eggs from the parasite -- the parasite does not produce "strings of eggs," and the eggs are microscopic (cannot be seen without a microscope). Clark states that "[T]he adult [parasite], though, stays tightly stuck to our intestine (or liver, causing cancer, or uterus, causing endometriosis, or thymus, causing AIDS, or kidney, causing Hodgkin's disease.)"

The adult parasite does live in the small intestine, as stated by Clark, but I have been unable to find any reports (other than Clark's) of this parasite being found in the human uterus, thymus, or kidney. Clark states: "Some of these eggs [produced by the adult parasites] batch in the intestine or the blood." There is no credible evidence that the eggs of any species of fluke will batch in the human intestine, or in the blood or time. There are a few species of flukes in which the eggs normally enter the blood or tissues (e.g., the schistosomes which cause schistosomiasis), but, even with these species of parasites, the eggs do not hatch in the blood or tissue. Clark states that "[w]e all have tapeworm stages in our bodies...." and "[e]very tumor, benign or malignant, has a tapeworm stage in the middle of it, even including warts." I have been unable to substantiate either of these statements in the medical literature. Although Clark has an advanced academic degree (a Ph.D. in physiology) and an N.D., she has no academic training as a parasitologist and she clearly does not have a basic understanding of the most fundamental parasitological principles.

14. There is overwhelming evidence in the form of peer-reviewed articles appearing in scientific journals that virtually all types of cancer result from the uncontrolled division of cells, and that the uncontrolled division of cells has a genetic basis. That is, cancer is caused by the activation or inactivation of specific genes that control the division of cells; it is not caused by a parasite. If this parasite truly causes cancer and, therefore, kills thousands of people each year, how could this parasite go unnoticed? Even in areas of the world where *Fasciolopsis buski* is endemic, there are no published studies that demonstrate (1) a relationship between this parasite and cancer and (2) that curing this parasite cures cancer. The only studies that support these theories are those mentioned in Clark's books, and her studies lack scientific integrity. Similarly, there is overwhelming evidence that AIDS is caused by HIV (human immunodeficiency virus), not a parasite.

Although there's some disagreement as to when and where HIV was introduced first into the human population, it is clear that it was not a prevalent disease until the early 1980s. However, *Fasciolopsis buski* has been recognized as a human parasite for hundreds of years, a fact recognized by Clark in her books.

15. Hulda Clark believes that parasites cause many common diseases. In the terminology of the scientific method, Clark is stating a hypothesis or statement of belief. However, the scientific method requires that, for a hypothesis to be accepted as a theory, the hypothesis must be tested. That is, controlled, empirical, unbiased experiments must be done. Moreover, the experiments and their results must be reviewed by other scientists to insure that the experiments were conducted properly and that the data are unbiased. This is what differentiates good science from bad science. Herein lies a major flaw with Clark's theories. Her hypotheses have not been tested using controlled experiments, and her methods of collecting data are biased. Rather, most of the diseases were diagnosed and treated by Clark, and Clark also claimed the diseases were cured. Thus, Clark's "case histories" represent an egregious example of a highly biased experimental protocol, and her theories are based on bad science.

16. After reading Clark's books and receiving many e-mails asking questions about Clark's theories, I tried to find information in the original literature. (The articles in refereed scientific journals or reputable reference books) that would support Clark's beliefs. Despite extensive searches of numerous major academic and medical libraries and extensive scientific and medical databases, I could not find a single article that supported Clark's theories about *Fasciolopsis buski* and diseases.

17. In early 1999, I posted the following statement on my web site: Hulda Regehr Clark claims that this parasite causes "all diseases, " cancer, and HIV and AIDS, and several web sites use these claims in their advertisements to sell various "cures "for these diseases. There are no peer-reviewed, published, scientific studies demonstrating that *Fasciolopsis buski* causes any of these diseases in humans. Furthermore, there are no peer-reviewed, published, scientific studies demonstrating that the various treatments, tinctures, cleanses, electrical devices (e.g., the "Zapper"), etc., sold through these web pages have any therapeutic value.

18. In response to the appearance of this statement, I received several e-mail messages from David Amrein, the President of the "Dr. Clark Research Association." Mr. Amrein asked that I remove this statement from my web site, and, in hopes of finding supporting information, I responded with the following: "Tell me where I can find information that supports the theories of Hulda Clark, information that has been published in peer-reviewed journals, and I will remove the comments from my web page. In fact, if you tell me where I can find this information, I will be more than happy to (1) include the information in my web page and (2) add an apology to my web page. I await anxiously your response." Despite my very clear request for information, Mr. Amrein did not provide any information that would support Clark's theories.

19. Later in 1999, Mr. Tim Bolen (who is referred to as "a media consultant" on the "Dr. Clark Research Association web site) and Mr. Leo Regehr [Hulda Clark's brother] sent a number of e-mail messages to me and various administrators at Ohio State University complaining about the statements on the website. I made them the same offer that I made to Mr. Amrein. I received no information that refutes the comments that are included in my web site. I must assume that no such information exists.

I declare under penalty of perjury, that the foregoing statement is true and correct.

Executed, this 9th day of May, 2001 at Columbus, Ohio.
Peter W. Pappas, Ph.D.
