Family Practice Forum

The Family Doctor and Grantsmanship

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Most family practice programs depend heavily on the grant mechanism for funding support. This is particularly true in university programs where it is not unusual for more than half of the funding to be dependent on this means. A large amount of a program director's time and effort must be devoted to the pursuit of grants – particularly since it is true that many are culled but few are chosen. It might be useful, then, for those of us who expend such efforts to share what we have learned.

My own introduction to the grant writing circus is probably similar to that of many other program directors. After 17 years in private solo practice, I entered the academic world in 1967 by becoming chairman of a newly established department in a new medical school. The term "grants" had no personal meaning to me other than as the name of a convenient local five-and-ten-cent store. I did gradually become aware that the institution had a grants office and that some people were able to obtain additional funding through grants. I thereupon wrote a proposal and submitted it to a private foundation. I was most pleased to have it accepted and to receive a check for $21,000. I took the check to my dean with great pride in my accomplishment but, alas, was met with a barrage of questions. "Has it gone through the Grants Office?" "Does it have University approval?" "What about the overhead?" etc, etc.

Since then I have learned much about the grant writing process – usually through the same educational process – that of making mistakes. Gradually it has been possible for us to develop a series of steps and basic principles which have proven helpful to us in our pursuit of grants. While these simple steps may be obvious to many, they were certainly not to me, and I hope that enumerating them will be of some value to others.

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Rules:

1. First, determine the overall goals of the organization and the specific programmatic objectives required to meet them. Then examine the objectives to see which might contain fundable ideas. Not all worthy aims contain fundable ideas and it may even be necessary to modify some of the program objectives to meet the goals of the funding agency. Great care must be taken to see that any modifications are still within the overall organizational goals and that faculty effort does not become so dispersed as to be ineffectual.

Determination of goals and objectives should precede the search for funding mechanisms and specific resources. It is always tempting to reverse the procedure and attempt to find or design a program to meet the funding that is available.

2. The next step after identifying a need is combing the grass, beating the bushes, and shaking the trees to flush out all possible grant sources. An institutional grant office can be a good resource. It is helpful to talk with others in the field about possible state, federal, and private funding sources. It is valuable to establish personal contact with central and regional federal offices to get information about new grant opportunities at the earliest possible moment. Waiting for "REQUESTS FOR PROPOSALS" to appear on one's desk is most frustrating because they frequently turn up within a few days of the deadline.

3. Establish personal contact with the representatives of the granting agency. The purpose of this is to gain help in understanding the requirements, regulations, purposes, and method of review – not to try to obtain favorable review.

4. In planning and preparing a proposal seek all available help. Brainstorming sessions including everyone involved, consultation with persons in the granting office or experts in the field, and library search for all related literature are all helpful means.

5. After locating a granting source and receiving the necessary instructions there is usually a very short time fuse. If this is the case identify immediately which pieces of data will be most time-consuming to collect. For example, letters of endorsement may be useful and may require several weeks to collect.

6. The obvious next step is the collection of all available data. This should include background materials, history, tables, references, support data, and cost estimates. It usually also will include documentation of previous efforts by the organization of a related nature.

7. The difficult part of actually writing the proposal is the next step after collecting the ideas of many people and most of the data. It is possible for various persons to write drafts of sections of a large proposal but it has been our experience that, in the final stage, *one* person needs to edit and rewrite to provide cohesion.

In the writing of the proposal clarity is more important than style, and brevity is important but all related information must be included. Often the latter can be handled through appropriate footnotes and appendices. All possible documentation should be added, with as much indexing and cross-referencing as possible, for the convenience of the reviewers.

8. In writing a proposal it is helpful to try to understand the reviewers' needs. What goals are they attempting to meet? Who are the reviewers likely to be? Can they understand what you have written if they have no previous knowledge of your operation or your field? Can they grasp the excitement and significance of your new ideas? Have you given them adequate reason

to believe what you have written? Is your work readable enough to keep them awake?

9. Use positive statements. Such realistic words as "would" and "should" or "hopefully" or "try" should be replaced with such euphemisms as "will," "shall," and "absolutely."

Attention to such basic rules as proper punctuation, spelling, syntax, and grammar are helpful in portraying an image of an investigator or educator with a good personal sense of organization and management.

10. Aesthetics are also important. Margins, spacing, underlining, type style, copy methods, and organization all add much to the overall appearance. Regulations will frequently be very specific as to margins and spacing; if necessary for a more attractive presentation, they might be better ignored.

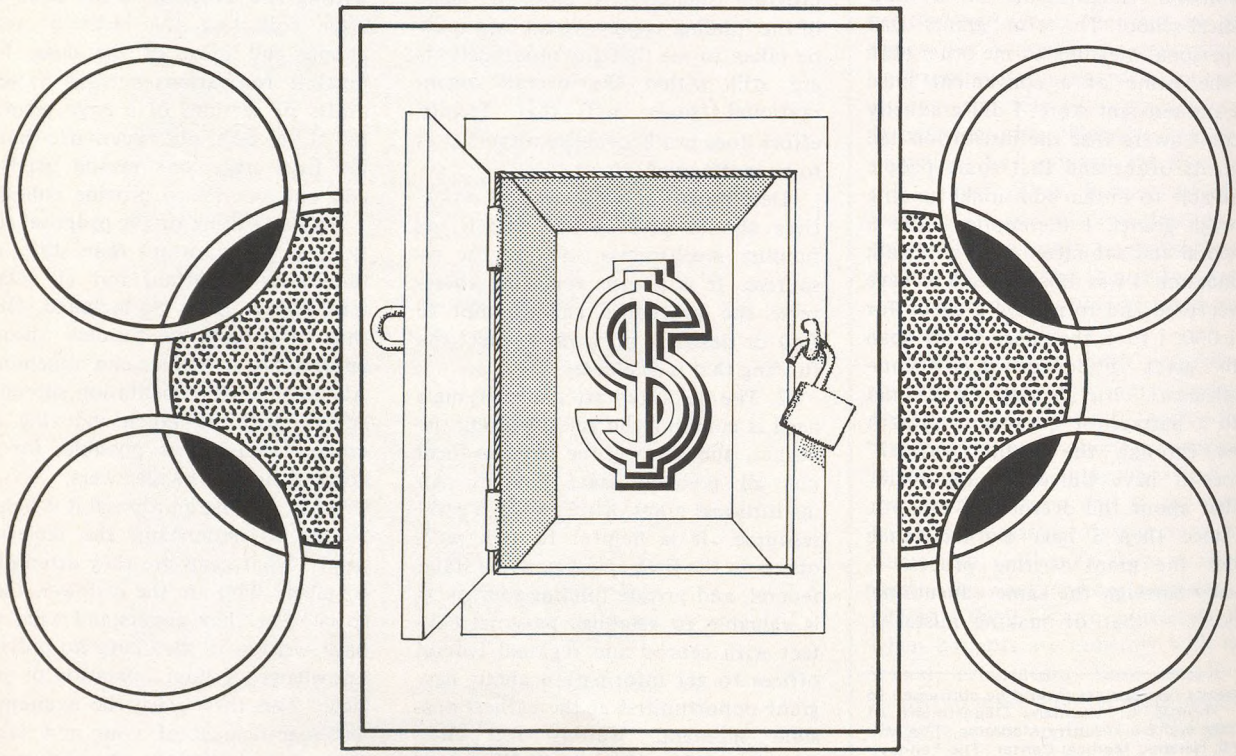
11. Having submitted a proposal within the allotted time span (usually within one hour of the ultimate deadline) it is not sufficient to relax and await results. It is wisest to continue to maintain periodic contact with the granting agency to see if additional information might be needed or whether there has been any change in the rules. (I have had the unforgettable experience of finding a foundation to have changed its basic policy between the time of an encouraging site visit and the submission of the final redraft.)

12. If your project should be rejected, disapproved, or not funded, it is very useful to find out why. It may be because you were in the wrong congressional district, but it might also be because of some fault in the way you designed your proposal. Granting agencies, perhaps assisted by the new sunshine laws, are quite willing to provide feedback information.

13. Do not expect 100 percent positive results. A batting average of .300 in the grantsmanship game will please the chief. A rating of .300 to .400 may even make the chief smile. If you average more than .400, summon the chief and smile on him.

14. Do not take the process of grantsmanship too seriously – remember that every day in the practice of medicine you make decisions which are far more important on a long-term basis than the decisions that are made about your grants.

To me, grant writing has become one of the most stimulating aspects of my role as a department chairman. It combines opportunities for creativity and inventiveness with the excitement of gambling for high stakes. As a personal indicator to me of the change in impact of the word "grant" during the past decade, I find it has now become a trigger word. When I find myself dozing through a non-stimulating sermon and the preacher says, "Grant us, O Lord," I snap to attention, pen-in-hand and ready for pursuit.



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identity problems may require surgery for sexual reversal. However such radical irreversible procedures should always be preceded by pharmacotherapy with sex hormones to determine whether a satisfactory adjustment will be made to a sex reversal.

Sexual dysfunction can occur secondary to another disease, such as myocardial infarction, hypertension, diabetes, benign prostatic hypertrophy, parkinsonism, and a host of others. Therapy of the basic disease if successful will improve the sexual adjustment but even if the basic disease is untreatable some sexual counselling is useful. Many drugs used for the treatment of medical conditions have side effects that impair sexual functioning (Money and Yankowitz 1967, Mann 1968, Story 1974). For example, guanethidine impairs erectile potency and ejaculatory ability in men. Similar effects have been noted from thioridazine and other phenothiazine and, in fact, all agents that have sympathetic blocking actions. But all agents that produce nonspecific dysphoric toxic effects can be expected to reduce sexual desire and impair sexual performance.

Aphrodisiacs

Throughout history there has been a search for aphrodisiacs, drugs purported to enhance sexual activity. When demand exceeds supply, entrepreneurs will attempt to meet the demand by hook or crook. Nor surprisingly, most aphrodisiacs have been obvious placebos, including substances such as powdered rhinoceros horn and ginseng root.

One of the best known pharmacologically active aphrodisiacs is cantharides or Spanish fly. It is prepared from a species of beetle, which is dried and powdered and then may be taken orally. Components ultimately reach the urinary tract and produce irritation, particularly of the urethra. It has rubefacient vesicant properties when applied to the skin. Although its use has been widespread, its efficacy is questionable, it is hazardous, and deaths have occurred from its use (Sollmann 1936, Goodman and Gilman 1975).

Yohimbine, an alkaloid obtained from West Africa, has complex pharmacologic actions including adrenergic and serotonergic blocking effects. There are no controlled studies confirming its long reputation as an ingredient in nux vomica where it has been promoted as an aphrodisiac. Again there are no controlled studies; however, there might be some rationale for its use. Strychnine has a disinhibiting action on the spinal cord, which could indeed result in enhanced sexual performance. However, to date, it has been used in humans in homeopathic doses and effects are due solely to suggestion. More research is needed before it could be safely prescribed to man (McGaugh 1973). Other analeptic drugs have been noted to result in convulsions, which often are accompanied by erection and ejaculation. Obviously subconvulsive preparations would have to be used, even though convulsive-type brain activity has recently been measured in the human electroencephalogram during sexual orgasm.

The actions of representative drugs on sexual behavior, for which there is some information in the literature, even though very scanty, will now be considered.

Effects of Drugs on Sexual Function

Opioids

The opioids in general have been found to depress sexual functioning. Such drugs as morphine, heroin, and methadone almost universally produce a depression in sexual activity. However, under special circumstances they may enhance certain aspects of sexual activity. For example, in India opium has been used as a means of prolonging erection and delaying orgasm. Many of the opioids have been noted to reduce testosterone levels. This may have a deleterious effect upon sexual activity as well as sexual anatomy (Mendelson et al 1974a). There is some controversy over whether tolerance develops to the sexually depressing effects of opioids.

Sedative-Hypnotic Drugs

Shakespeare in Macbeth noted that alcohol "provokes the desire but takes away the performance." Other sedative agents, such as the barbiturates, the benzodiazepines, and meprobamate, can depress the sexual reflex while at the same time their central disinhibiting actions, so useful in treating anxiety, may allow the individual to take sexual actions he would otherwise suppress. There is ample evidence in animals that alcohol impairs sexual reflexes (Beach 1967, Merari et al 1973). Alcoholics are frequently impotent and the anxiety from such impotency often leads to a vicious cycle of drinking to reduce the anxiety.

Many of the sedative-hypnotic drugs in the low-dose excitement stage have a paradoxical effect that could conceivably stimulate sexual performance (Winters 1975). There are anecdotal reports among street users of drugs that methaqualone (quaalude) has sexually arousing effects, but these reports are unconfirmed and implausible.

Centrally Acting Sympathomimetics

Cocaine and amphetamine effects are discussed in another portion of this book. There is considerable controversy as to whether either class produces facilitation of sexual performance in man. Residents of the Haight-Ashbury district in San Francisco gave high grades to both amphetamine and cocaine as aphrodisiacs, but needless to say these were uncontrolled reports (Gay and Sheppard 1973). There is no question that both of these families of drugs relieve fatigue, and by this action can facilitate sexual performance. One might guess that other central stimulants, such as caffeine, might have similar effects. The brightening of mood produced by these drugs may have a secondary facilitating action on sexual performance.

Tobacco

Smoking cigarettes and other tobacco products has a wide variety of effects on physiologic functioning and health, which may influence sexual performance. The chronic health-impairing properties of cigarette smoking will surely reduce sexual activity. Individuals suffering from can-

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cer, emphysema, or heart disease will obviously have impaired sexual responses. The main pharmacologic acute effects developing from smoking can be attributed to nicotine, with perhaps a small effect from carbon monoxide. The sexual reflexes certainly involve nicotinic synapses as well as postganglionic adrenergic endings, which can both be stimulated or depressed by nicotine. When heavy smokers stop smoking there are frequent reports of increased well-being due to improved respiratory function, increased appetite, diminished susceptibility to infection, and often increased sexual responsiveness. Heavy smokers will precede and follow sexual activity with smoking. One of the appeals to teen-agers to stop smoking is that smoking impairs sexual ability. However, there is, as yet, no valid evidence for such claims.

LSD-Like Drugs

Many of the hallucinogens resembling LSD (lysergic acid diethylamide), such as psilocybin, dimethyltryptamine, and mescaline have been used as aphrodisiacs, but their use is not entirely rational. There have been conflicting reports about the sexual effects of LSD. In some users it may be aphrodisiac and in others the opposite (Gay and Sheppard 1973). Since the use of LSD as a street drug has declined and its use in research has become practically nonexistent, it will be difficult to determine what sexual effects has, if any. Since it appears that 5-hydroxytryptamine (serotonin, 5HT) does play some role in sexual functioning and since LSD both mimics and blocks 5HT there is a theoretical basis for its action (Chase and Murphy 1973). In one animal study LSD was reported to enhance sexual activity (Bignami 1966).

Cannabis (Marihuana and Hashish)

There is no question that marihuana is the drug that has the widest reputation for improving sexual performance (Gay and Sheppard 1973, Klein 1972). Opinion surveys indicate that most marihuana users report that it improves sexual performance and enjoyment (Robbins and Tanck 1973, Koff 1974). Both sexes report that marihuana seems to improve orgasmic experience, and some women claim that they never had an orgasm until they started using marihuana (Lewis 1970). Again, as with other drugs, objective studies of the effects of marihuana are lacking. Marihuana has a street reputation for enhancing sexual activity (Gay and Sheppard 1973), so it is hard to find a naive subject to test it on. There are several reports that marihuana use lowers testosterone (Kolodny et al 1974), whereas Mendelson (1974b) failed to find an effect on serum testosterone. Marihuana is still an illegal drug. The practicing physician could not legally advocate its use for sexual dysfunction, even if the evidence for its effectiveness were better.

Amyl Nitrite

Amyl nitrite is a vasodilator used to alleviate the pain of angina pectoris. Its use as an aphrodisiac is not listed in the standard textbooks of pharmacology. In recent years it has achieved popular use for this purpose. It supposedly potentiates the orgasm or produces an orgasm in individuals unable to have one without it (Hollister 1975, Everett 1972). These reports have not been verified in controlled studies. The drug produces marked tachycardia and may be dangerous because of its ability to produce orthostatic hypotension.

Local Anesthetics

Local anesthetics such as cocaine and procaine and its congeners have been applied to the genital region in creams or ointments with the aim of reducing sensation and therefore prolonging the preorgasmic phase of sexual activity. Again, although there appears to be some rationale to this theory, controlled studies have not been done.

Hormones

It has long been known that the sex hormone testosterone is necessary for adequate sexual functioning in the male. It is perhaps less well-known that androgens of adrenal origin are also necessary for adequate sexual functioning in the female. Castration in the male results in marked diminution in serum testosterone levels and in sexual excitability, and causes atrophy of the penis. Nevertheless castrated male animals and humans do have some sexual functioning and may be able to produce an erection. Again, it is likely that the adrenal adrogens play an important role in such behavior. The use of testicular extracts to enhance sexual performance dates back to 1889 when Brown-Sequard reported his self-experiment (McGrady 1968). Modern endocrinologists feel that his injections were probably pharmacologically ineffective but had a strong placebo effect. Another famous (or infamous) dispenser of rejuvenation through testicular extracts was Voronoff (see McGrady 1968) whose "monkey glands" preparation became very popular and was certainly a placebo.

A great deal of well-controlled work in animals shows that testosterone regulates not only gonadal functioning but also influences the brain (Carter 1974). The androgens have virilizing and anabolic effects. Even in individuals with emaciating illness they may produce weight gain and renewed interest in sex.

There is also evidence that estrogens may be useful in enhancing sexual activity in castrated or postmenopausal women (Jarvik and Brecher 1975).

Anaphrodisiacs

The use of drugs to depress sexual functioning may have some applicability when sexual behavior is impossible or undesirable. Saltpeter (potassium nitrate) has had the reputation for hundreds of years of depressing sexual desire and was added to the diets of schoolboys, prisoners, sailors, and other institutional inmates. However, there is no evidence that it had any effect whatsoever upon libido. It does produce diuresis, and contrary perhaps to the expected effect, in some individuals a full bladder has a sexually stimulating effect.

Many of the antipsychotic drugs appear to produce decreased libido as a side effect. They have been tried in sexual criminals as an alternative to surgery or incarceration. Thioridazine has a greater reputation for producing

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impotence, due to inhibition of ejaculation, than do the other antipsychotic drugs.

The estrogens have been used as anaphrodisiacs. Competition occurs with the endogenous androgens, perhaps through an effect upon the hypothalamus and pituitary. Feminization is perhaps the most distressing side effect, although nausea and vomiting may occur.

The antiandrogenic drug, cyproterone, is very effective an antagonizing the actions of testosterone. It has demasculinizing and libido-reducing effects. It has been used therapeutically to treat sex offenders with some success and a great deal of controversy (Cooper et al 1972). However, it does not suppress sexual activity of adult male rats (Bloch and Davidson 1967).

The Role of Neurotransmitters

Increasing knowledge about the roles of neurotransmitters is also throwing some light on their action in sexual functioning. The automatic nervous system controls the activity of the sexual organs, including secretion, tumescence, and ejaculation and orgasm. Ganglionic blocking agents with their antinicotinic actions have long been known to produce impotence. Muscarinic blocking agents may impair secretions and prostatic functioning. Nicotine in low doses may facilitate sexual behavior and inhibit it in high doses (Soulairac and Soulairac 1975).

Dopamine seems to be a basic facilitator of sexual function though it inhibits lordosis in female rats. On the other hand, 5HT inhibits sexual activity, especially when an increase in brain serotonin is induced (Gessa and Tagliomonte 1974, Everett 1975). Based on these observations a number of substances have been suggested as sexual facilitators; these include levodopa, parachlorophenylalanine (PCPA), apomorphine, and monoamine oxidase inhibitors. Dopamine blocking agents, such as pimozide, have been shown to be sexual inhibitors. However, Whalen et al (1975) have cautioned investigators not to draw hasty conclusions about the role of neurotransmitters in sexual behavior.

Prostaglandins, first discovered in semen, have been found to have an amazing variety of effect upon diverse organ systems. Although they have important roles in reproductive physiology, there is as yet no evidence that they directly influence sexual behavior. Various other polypeptides, such as fragments of adrenocorticotrophic hormone (ACTH) and posterior pituitary hormones, may be potentially useful in the treatment of sexual dysfunction, but much more research needs to be done before these substances will be ready for clinical use.

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or biomedical stresses. Best said by A.R. Mitchell in *Psychological Medicine in Family Practice (Baltimore, Williams and Wilkins, 1971)*, "The psychosomatic approach is an attempt to see whole persons and to understand them in terms of this wholeness."

This concept is exemplified in a category of pain symptoms unmentioned in the article: psychophysiological reactions. This group (tension headache, low back pain, spastic colon, and temporomandibular joint syndrome, for example) contains the bulk of painful syndromes with predominate psychosocial influence seen in primary care. It subsumes, in my opinion, all of the cases of "psychogenic pain" described in the article as "hysterical neurosis" and "unresolved grief reaction" and most of those under "a need to suffer" and "depression." Contrary to the article, of these patients, most *are* reassured by evaluation that indicates no serious disease. When combined, then, with the indications of psychosocial stresses, the more severe or protracted pain syndromes *can* be alleviated by behavioral modification counseling.

Plato said, "For this is the greatest error of the day that physicians separate the soul from the body." I am strongly supportive of the broad education for family physicians that this article reflects in *The Journal of Family Practice*. If the readers can continue to translate the specialists' perspective, comprehensive care will continue to develop in our domain.

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Drs. Zisook and DeVaul responded to the above letter as follows:

To the Editor:

We, too, are concerned with the holistic approach to patient care. We feel our paper is consistent with this approach as we have outlined some of the ways that psychological events interact with biological predispositions to produce symptomatic behavior. Our treatment recommendations are aimed at dealing with psychological, medical, and social interactions and warn against placing too great an emphasis on any one of these parameters. We have not tried to arbitrarily demarcate the boundaries of the psyche or the soma as this tends to obfuscate rather than clarify the clinical issues.

While claiming to take a more holistic approach to patient evaluation and care, Dr. Baker is, in actuality, suggesting a rather narrow view of symptom formation and treatment strategies. He attempts to subsume a large heterogeneous group of patients under the umbrella of "psychophysiologic reactions." But this category does not represent the variety of psychogenic-pain patients we discuss. The DSM-II defines psychophysiologic disorders as "characterized by physical symptoms that are caused by emotional factors and involve a single organ system, usually under autonomic nervous innervation."[1] For the most part, our categories do not include the autonomic nervous system but rather consist of pain complaints where there is no evidence of peripheral end organ involvement. Some of the examples Dr. Baker sites as psychophysiologic reactions (for example, spastic colon) are what Engel[2] calls somatopsychic-psychosomatic because of the role of organic factors in the primary predisposition and of psychological factors in the course. We agree with Dr. Engel that these are organic disorders and should not be classified as purely psychogenic. The category we have conceptualized as representing psychogenic pain does not have this primary organic component.

Dr. Baker suggests that most patients with psychogenic pain are reassured by evaluation that indicates no serious disease. While we agree that a comprehensive medical work-up is almost always indicated with an initial diagnostic work-up, we are not impressed that many psychogenic pain patients are reassured by negative findings. Unfortunately, they tend to seek further, more dramatic evaluatory pro-

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cedures, often evasive and potentially harmful, and implore the physician to treat the pain complaints with medical or surgical interventions. Because of the nature of the pain complaints, these interventions are bound to fail. It is the physician's task to take an extensive psychosocial history, rather than continue in the acute medical model, and help the patient face the emotional issues involved.

Dr. Baker suggests that protracted pain syndromes can be treated by reassurance and behavioral modification counseling. We are not sure what this means in individual cases. Certainly a patient who has a pain complaint secondary to unresolved grief requires different management strategies than the patient with pain as a symptom of depression or psychosis. Psychophysiologic pain, in turn, requires a far different approach. Our paper outlines specific management approaches for the various categories of patient types presenting with psychogenic pain. Each category requires relatively specific treatment interventions.

In summary, we share Dr. Baker's concern about holistic comprehensive patient care, but we fail to see how his comments contribute to such an approach.

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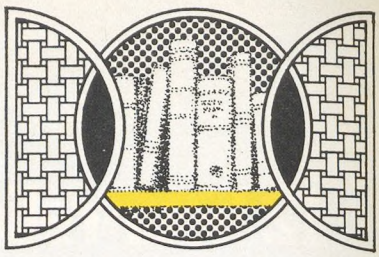
Book Reviews



Physical Examination of the Spine and Extremities. *Stanley Hoppenfeld, Appleton-Century-Crofts, New York, 1976, 276 pp., $16.50.*

In these days of high technology investigation in medicine, more errors in diagnosis are made by failure to examine the patient properly than from any other single cause. Any book that stresses the importance of clinical physical examination is, therefore, a welcome addition to the library of any family physician. This book is no exception, and the relationship it demonstrates between anatomical construction and physical ability is clearly stressed and very valuable. The book is amply illustrated by the frequent use of line diagrams which demonstrate both anatomical structures and methods of locating and examining their function. Its stated object is to "serve as a functional guidebook through which clinicians and students can rapidly assimilate the basic knowledge essential to physical examination of the spine and extremities."

The book does have some weaknesses and inaccuracies which it is hoped might be improved in subsequent editions. From its title one could assume that the examination of the spine would be dealt with first. However, the first subject is the examination of the shoulder. There are two sections dealing with the examination of the spine; the first, relating to the neck, appears in the middle of the book and the important area of examination of the lumbar spine is relegated to the last pages. While the approach to the examination of any particular area is logical and laid out carefully, the arrangement of the whole subject matter seems to lack this process. On numerous occasions throughout the text, there seem to be discrepancies between the text itself and the captions under the many illustrations. For example, on page 7 where the text suggests that the patient should be asked to flex and extend his shoulder several times, the caption under the appropriate illustration suggests that palpation of the acromioclavicular articulation is easier if the patient rotates his arm. This single example could be multiplied on many pages of the book.

There are also some surprising omissions. In the otherwise excellent chapter on the examination of the shoulder, it is surprising to note that there is no reference to the "painful arc syndrome" associated with inflammation or injury of the supraspinatus tendon. However, apart from these minor reservations, this book would provide a useful source of information for the practicing physician, and in particular for those who are engaged in the training of residents in family practice programs.

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Obesity: Its Pathogenesis and Management. *Trevor Silverstone. Publishing Sciences Group, Inc., Acton, Massachusetts, 1975, 240 pp., $15.00.*

Obesity is our most widespread nutritional disease; this book cites its incidence in US adults at 30 percent. Even though the conclusions of these authors confirm that there is no route to weight loss other than decreased calories and increased exercise, it is always worthwhile for practitioners to be well informed about common problems.

Despite the fact that much of the research and morbidity data cited is European, summarizes research on rats, and insufficiently emphasizes the importance of exercise, there is still much of interest for American physicians. In a chapter entitled "The Experimental Psychology of Obesity," Orland and Susan Wooley, both from the Department of Psychiatry at the University of Cincinnati Medical School, review experimental data (71 references) on satiety and the difference in eating habits between the fat and the lean. For example, given bad-tasting ice cream and good-tasting ice cream, overweight persons ate more of both. The placement of high calorie desserts in either first or last position in a cafeteria display influenced obese persons more than thin ones. "The saliency of external food-related cues" is the psychologic jargon for this type of experiment.

The most important statements in A. N. Howard's chapter on the dietary treatment of obesity are the cold facts of the numbers game: maximum weight loss, assuming a requirement of 2,500 kcal per day, can be no more than 2 kg (4.4 lbs.) per week. The impressive weight losses during the first weeks of dieting represent diuresis of water, not melting of ugly fat. Howard supplies references to confirm that weight loss varies only with caloric deficit, and it makes no difference whether the ingested calories include a high proportion of carbohydrates, fat, or protein. He does feel current evidence suggests that the provision of 15 gm protein and 30-45 gm of carbohydrate (200-350 kcal) per day achieves the best sparing of nitrogen and thus of muscle loss during weight loss. He is not too proud or professionally chauvinistic to admit that the record of what he terms "commercial slimming clubs" is "considerably more successful than that usually achieved" in outpatient treatment.

Henry Jordon, presently at the University of Pennsylvania, advocates a behavioral approach to the modification of eating habits in the obese. However, it seems that the overall results in getting overweight patients to lose have not changed much in the past 15 years or so. It should be noted with disquietude that when Stunkard, who preceded Jordon at the University of Pennsylvania, reviewed the effectiveness of dietary programs he found that attrition rates from dietary programs ranged from 20 to 80 percent, while only 25 percent of those who stayed in therapy lost as much as 20 pounds, and only five percent as much as 40 pounds.

Reading this makes it easier to approve of the innate wisdom of thin persons who refuse desserts and drink diet drinks only; obesity once established is likely to be incurable despite remissions.

The long-term results after weight loss are even worse. Of 27 patients who lost more than 25 pounds (one lost 138!), only five were able to hold their weight loss for 14 years and 19 of the 27 were back to within ten percent of their starting weight when reviewed 15 years later – truly a discouraging prospect for the dieter or diet advocate.

Perhaps the most important chapter to conscientious family practitioners is the last one, by editor Silverstone, a London psychiatrist. After review of the existing literature and some clinical research of his own he concludes, unlike many recent American advisors, that "anorectic drugs can be used with benefit to help obese patients, but they should neither be the sole nor the

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initial treatment." This category of therapeutic agents is presently in disfavor. The BNDD rules regarding their prescription have recently been made more stringent and the prescribing directions emphasize that they are to be used for short-term periods only. Yet in 1973 Dr. Louis Lasagna, the University of Rochester's pragmatic clinical pharmacologist, found a whopping 78 percent of US physicians prescribing anorectic drugs and one quarter of those who did extended their prescriptions beyond three months.

Practitioners concerned with providing medical management for overweight patients should, after a close reading of this book, be helped to make informed therapeutic decisions.

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Interpretation of Diagnostic Tests: A Handbook Synopsis of Laboratory Medicine (2nd Edition). *Jacques Wallach. Little, Brown, Boston, 1974, 529 pp., $7.95.*

This book is presented in four parts, Part I: Normal Values; Part II: Specific Laboratory Examination; Part III: Diseases of Organ Systems; Part IV: Effect of Drugs on Laboratory Test Values. The purpose of the book as stated by the author is: "to help the physician achieve the least amount of: (1) duplication of tests; (2) waste of patient's money; (3) overtaxing of laboratory facilities and personnel; and (4) loss of physician's time."

Reviewing this book is somewhat like reviewing the dictionary as it is not something that one sits down and reads from cover to cover. I used it in relation to my practice with specific problems as they arose but was disappointed in the amount of help it offered. However, I did find that the section on normal values and alteration of laboratory tests by drugs more useful than other sections.

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Family Structure and Effective Health Behavior: The Energized Family. *Lois Pratt. Houghton Mifflin Company, Boston, 1976, 230 pp., $6.95.*

As the title suggests, this book is relevant to family practice. It presents valid reasons why the family is the unit of health care. It further describes a research project which demonstrates clearly the increased effectiveness of the energized family in promoting their own health. An energized family (a new term to me) is one in which the members interact a great deal, both within the family and with outside groups, generating ideas and learning to cope with the pressures and demands of contemporary society.

The book is divided into three parts: part one (four chapters) describes the inadequate health functioning of the traditional family and presents the problems in the structure of the medical care system and the deficiencies in its services; part two (four chapters) presents the results of the research project which documented the better personal health practices of the energized family and its increased proficiency in utilizing professional health services; part three (two chapters) examines the family and medical care as two social systems and suggests changes which would result in more effective health behavior.

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Many of the suggestions offered for improving health care are precisely what we family physicians have been advocating, promoting, and then developing and teaching for over a decade. In spite of this, only one paragraph in the entire book (page 173) presents outdated information about family practice, concluding, "This specialty is not yet well-established, however, and it has not achieved full acceptance from other specialists such as pediatricians and internists."

The readership suggested by the author in the preface is limited: "This book can be a useful supplement for courses in sociology of the family, medical sociology, and courses offered in departments of health education, health administration, maternal and child health, and within schools of public health." I believe the audience should be expanded to include all of us in the family practice movement, if only to alert us to publicize more widely what we do and teach in order that families, regardless of structure or function, will know where to obtain effective health care.

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Basic and Clinical Immunology. *HH Fudenberg, DP Stites, JL Caldwell, JV Wells (eds.). Lange Medical Publications, Los Altos, California, 1976, 653 pp., $12.50.*

The editors of this new book on immunology state in their preface that this field has been "marked by rapid advances in all medical and technological fields pertaining to it so that now this branch of medical science clearly ranks as a specialty discipline." I would echo this and in reviewing this book I find it difficult to criticize its content. It is well written, thorough, and is a great compendium of information about immunology. This highly complex and important subject has taken on added importance over the past several years because of our increasing knowledge about transplantation, tumor therapy, and the control of infectious diseases. The final section is an organ-system-by-organ-system approach to the significance of immunology in those fields.

This book should be useful for medical students in the first two years of medical school. It will be useful also for those who go into the "special discipline" of immunology, for this book clearly summarizes the field to date. However, it probably will be used little by the family physician, family pediatrician, or general internist, despite the fact that it is an excellent reference book for all of these clinicians. The contributors can be justly proud of their achievement and this book will gain wide acceptance in the scientific community.

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