REPRINT FROM

THE

ALIENIST AND NEUROLOGIST.

VOL. XXX. ST. LOUIS, FEBRUARY, 1909.

No. 1.

A FEW IMPORTANT POINTS IN REGARD TO NERV-OUS AND MENTAL DISEASES.

By Charles F. Neu, M. D.,
Indianapolis, Ind.



A FEW IMPORTANT POINTS IN REGARD TO NERV-OUS AND MENTAL DISEASES.

By Charles F. Neu, M. D., Indianapolis, Ind.

HILE the principles of medicine in general are making noticeable advancement and progress, particularly in regard to the prevention of disease, and in the attempts being made to determine and devise means by which to enable Nature to combat and overcome pathological conditions, there is one branch that does not seem to be keeping apace, viz.: that part dealing with diseases of the nervous system. inclusive of the mental condition. In other departments of medicine it will be found that various measures which have for their object the elimination of those factors acting as causative agents in the production of diseased conditions are being continuously instituted and carried out. As a result we find that the ravages of many of the more virulent diseases are not only being lessened, but are becoming to some extent eliminated, viz., smallpox, yellow fever, malaria, tuberculosis, etc. It is unnecessary to go into detail to point out wherein the ravages of these diseases have lessened, and to a certain degree been eliminated, or to indicate the various means and methods utilized to bring about such results. Attention need only be directed to the interest that is being taken in one of them, namely, tuberculosis, to show what is being done. It is a condition engaging the vital attention not only of the patients affected, of the physician in charge, and of the immediate family, but also that of the surrounding community, of the local authorities, and of those in charge of federal and even international affairs. It is difficult to form even a relative estimate of the time, energy and money that is being spent in the endeavor to lessen and stamp out the ravages of just this one disease, so appropriately designated "the great white plague." Suffice to say it is occupying the time and brains of some of the best men of the world of to-day.

MORTALITY AND FREQUENCY.

If a disease carrying off annually on an average between 65,000 and 70,000 individuals in the United States alone demands so much attention, and will demand more and more so long as its ravages continue, should not another condition which carries off almost as great a number also demand a corresponding attention? The report of the United States government of the Bureau of the Census for 1904 gives the number of deaths annually from tuberculosis as averaging over 65,000 for the five years preceding, and the deaths from diseases of the nervous system as averaging over 60,000. It must also be taken into consideration that for a disease which blots out the lives of this number annually, there must be some ratio in regard to the average number afflicted who are either partially or wholly incapacitated from earning either their own livelihood, or providing for those who are dependent upon them, and as a consequence must be taken care of and thus become a burden. The same government report gives the enormous number of 199,773 as suffering from diseases of the nervous system and who are in institutions devoted to their care and treatment. In addition, there must also be taken into consideration those who, because of inherited mental deficiencies or of acquired mental weaknesses, are burdened with a constitution which renders them incapable of taking part in the struggle for existence from the first, and thus, also must be taken care of. According to the same report, there are of this number 17,000 given as being in and requiring institutional care and support. The cost of this care and maintenance amounts to about \$25,000,000 annually. While there is this large number directly under institutional management and control, it must be remembered that this is by no means all that are thus afflicted, since it can be readily ascertained that there is just as large a number who are being taken care of either by private resources or eke out a parasitic existence as tramps, vagabonds, charlatans, criminals, etc.

S

IMPORTANCE OF SUBJECT INDICATED.

Recognizing these facts, it becomes at once evident that this is a question which deserves more attention than is being given it, and that it is not receiving the close study that its seriousness demands. The solution of the problem is unfortunately a most difficult one, more so probably than in any other branch of medicine, as there are so many different factors that come into consideration as causative agents. It is only too true that in such a disease as tuberculosis the active causative agent is vastly different from those in the subject under consideration, for in the one we have the invasion of the living body by a living organism, while in the other it depends more upon the action of outside agencies acting upon a constitution whose power of resistance is limited, or which possesses a susceptibility to those influences. But just as there are means being devised, measures being instituted and methods carried out which have for their object, and, as a matter of fact, succeed in lessening the ravages of tuberculosis and many other diseases of a kindred nature, so, also, can the lessening of the horrors of this condition be accomplished by the institution and adoption of proper measures. In order to indicate the probable and possible factors that will have to be taken into consideration in bringing about a solution of this problem, it will scarcely be necessary to go into details, but reference will be made to only a few of the more important ones.

HEREDITY AS A FACTOR.

It can hardly be denied that of all the factors which take part in the development of this condition heredity is the most important, not in that it directly transmits the pathological conditions manifested, although even that can be shown to be true in some cases, but in that it transmits an endowment, taint or predisposition which renders the individual particularly susceptible to outside deleterious influences or agencies. Here, perhaps, more than in any other class of patients, one is able to perceive the enormity of the sentence imposed upon mankind when it was decreed that the sins of the parents should be visited upon the children even unto the third and fourth generations.

It is unfortunately impossible to give an accurate cstimate of the frequency with which a direct here litary connection can be established, for as yet no reliable methods have been generally adopted to place it upon a statistical basis, but its importance must be paramount when it is recognized that all authorities maintain it to be a predominant predisposing factor. Another condition that makes it difficult to ascertain the frequency of hereditary connection is the fact that only too often when inquiry is being made to obtain the hereditary history of a patient, instead of giving what information can be given, an attempt is made, not only by the patients themselves, but also by those in a position to furnish such, to refute any possibility of it, under the mistaken idea that a more favorable aspect of the case will be presented, or from some other motive unknown to the examiner. Broadly speaking, it may safely be said that from 60 to 65 per cent. possess such hereditary transmission.

DRUG ADDICTION AS A FACTOR.

Probably the second most important factor taking part in the generation and production of nervous and mental disturbances is drug addiction, the most prominent of which are alcohol, opium and cocain.

Of all the exciting causes it seems probable that the injudicious and excessive use of alcohol takes the lead. But one must not lose sight of the fact that it is not always possible to determine definitely whether this drug addiction is to be regarded as a causative factor or as a partial manifesation of the disturbance, for it has been definitely proved that in many patients the latter is the condition existing. It is a well-established fact that the nervous system appears to be especially sensitive to the influence of alcohol, and in many cases suffers to a much greater degree than the other tissues from the effects of habitual and prolonged use. But even here heredity must be taken into consideration, for the tendency to drink is often inherited. Its relation to occupation, social status and personal surroundings is only too manifest to require any detailed discussion. It is impossible to give any reliable estimate as regards the frequency of its existence in this class of diseases, for it is a notorious fact that the

statements of those addicted to its use are, as a rule, wholly unreliable, and also because of the fact that some of those so addicted are able to conceal it from their surroundings for years, and it only becomes evident from some casual incident. But the seriousness of the effects of the prolonged or habitual addiction to drugs, particularly alcohol, does not limit itself to the individuals themselves nor indirectly to their surroundings, but is also manifested in the offspring, for such has been shown to be if not the most prominent, at least one of the most prominent factors in the production of defective children, and in the transmission of a neuropathic or psychopathic condition.

is

be

X-

is-

n-

Si-

on

in

a

be

ny

les

177-

m,

est

ve

1ce

:he

VENEREAL DISEASES AS A FACTOR.

Another prominent factor taking part in the production of the diseases under consideration is one that hitherto has not received the attention that the seriousness of its effects demands, and one for which the medical profession in general is to be highly criticized and censured because of its apparent indifference and apathy in regard to it. The action and effects of venereal diseases are so far reaching and in some cases so disastrous that it makes one shudder at the thought of the suffering it entails. It is a well-recognized fact that gonorrhea is one of the most potent factors in the causation of diseases of women. It is a prominent factor in morbidly modifying the sexual life and functions of both sexes, to a degree as yet too little recognized and understood, and with too little attention given to it along that line. Morbid appetites and desires leading to morbid actions and habits.

To what extent syphilis is to be regarded as a causative agent it is difficult to say. So far as general paresis and tabes are concerned, we know that the great majority of cases are the result of syphilitic infection, and the frequency of these two conditions alone is sufficient to stamp it with the brand of the strongest condemnation and to demand the consideration of methods leading to its extinction. But its action does not stop at this. While at certain stages its toxins seem to have a special predilection for nervous structures, yet throughout its whole course there is no organ or tissue of the body that is immune to its action, and its action

is not confined to the individual infected, but is also manifested in the offspring. Its importance in this direction is at once evident when it is taken into consideration that at least 10 per cent. with certainty, and 15 or 20 per cent. probably, of imbeciles are the result of syphilitic infection in the parents.

FAULTY TRAINING AND EDUCATION OF CHILDREN.

In the faulty training and education of children is also found a most important factor in the production of an unstable nervous and mental constitution. When we take into consideration the impressionability of the nervous system of children and their susceptibility both physically and mentally to external impressions and influences, it is not surprising that the effects resulting therefrom are instrumental in shaping and moulding more or less definitely and permanently their physical and psychical make-up. The most powerful and most lasting impressions are, as a rule, those coming from the ones in direct control and care, particularly when parental. Unfortunately, only too often there is present in these parents a nature but ill-adapted to educate and train their offspring, due, on the one hand, to inefficiency and inadequacy and, on the other hand, to oversolicitousness and over-anxiety. Unconscious of their own weaknesses and defects, they all too readily instill the seed of an imperfect judgment into the organism which they are rearing and moulding. But this faulty education and training is found not only in the home or in the guardian, but also in the school. How frequently do we hear of certain children being stigmatized not only because they are in part out of harmony with their surroundings, but also because the teacher and fellow-pupils fail to understand their character and constitution? It is difficult to determine definitely to what extent such faulty education and training are instrumental in the production of an unstable nervous or mental constitution, but the frequency of such disturbances at this time of life attributable to such causes is such as to indicate the necessity for a serious consideration of the question.

CLASS OF IMMIGRANTS AS A FACTOR.

· Another condition which is regarded as a factor in this relationship is the class of immigrants that are being con-

ni-

at

ast

ly,

ts.

lso

ın-

ys-

not

ru-

nd

he

ile.

ar-

ten

to

to

er-

wn

of

are

in-

ilso

ren

of

ch-

and

hat

ntal

itu-

ces-

this

con-

tinuously dumped upon our shores. Just what is the relative proportion of such disturbances manifested as between those native born and those of foreign extraction is difficult to say, but Burgess, of Montreal, has shown that for Canada, at least, the proportion is decidedly higher in the foreign born, and it can be safely assumed that what is true of that country also holds true for the United States. And, furthermore, it is only too evident that the physical, as well as the mental status of so many of the class of immigrants that are being poured into the country is decidedly below the average.

THE STRUGGLE FOR EXISTENCE AS A FACTOR.

Still another factor, because of its prominence, deserves serious consideration, namely, the influence of the high pressure of so-called civilization, the overwhelming desire to acquire an imaginary sufficiency of this world's supplies, the inclination and tendency to live beyond the means at command, the impetuous ambitions to occupy the topmost heights in the social world, exert an influence which necessarily taxes to the utmost the mental and physical conditions of those engaging in the struggle. The struggle for existence is more strenuous and vigorous at present probably than at any other stage of this world's history, and in the struggle as between one with better endowments than the other, there is no question as to which will come off the victor.

There are many other factors which play a role either as predisposing or exciting causes in the production of this class of disturbances, such as prolonged illness, prolonged emotional strain, disturbed domestic relations, injuries, etc., but these come into consideration more in the domain of general medicine and are there dealt with: suffice to say that they only bring about the final breakdown.

CURATIVE AND PREVENTIVE CONSIDERATIONS.

In the consideration of the question as to how existing conditions can be remedied, or the agencies bringing about those conditions combated, it may be approached from two view points, the one a curative, the other a preventive one.

CURATIVE CONSIDERATIONS.

So far as curative measures are concerned, one must consider those applied before admission into institutional care and those administered afterward. In regard to the latter not much can be expected beyond what is being done at the present time. In this, as in every other form of illness, the best results are obtained the earlier curative measures are adopted, and in the great majority of cases they have passed beyond this early stage before the question of admission is considered.

PART PLAYED BY GENERAL PRACTITIONER.

Upon the family physician falls the opportunity of applying those measures or administering those remedies at the time when the best results are to be expected. Few persons seem to realize the responsibility that devolves upon the general practitioner. While this seems to be an age of specialism and of specialists, they may all yield the position of honor to the general practitioner. He is the one who is called upon to face and meet first all the diseases and ailments in their incipiency to which human flesh is heir. He is the one called upon to give first aid, and, as a rule, only when he fails to give relief do the patients resort to those engaged in a specialty, and that these frequently fail also is indicated by the numerous methods adopted by so many who, without any or very little preparation beforehand, endeavor to remove, and in some cases do, that which the physician fails in. These methods are not always such as appeal to what appears to be just and honest, and some to be anything but reasonable, but there are some patients who will yield to such measures when more rational ones fail to make an impression. Great public prominence is often given to such cases, but we rarely hear much comment concerning the scores who receive no benefit or are even made worse. The injury in these questionable methods is in that they are carried to an extreme, are applied to conditions where they do positive harm and can not possibly accomplish any good. Amongst the foremost of these is Christian Science and allied principles. That it does good in individual and properly chosen cases is unquestionable,

but that it can nullify the action and effects of a tubercular infection, of a diphtheric infection, of a syphilitic infection, or, broadly speaking, of any disease in which there is a structural organic basis, is a condition beyond comprehension, and the danger attending the assumption that such is possible, and the treatment carried out accordingly, is fraught with such direful results that those guilty of such indiscriminate methods of treatment should be made to suffer the consequence.

PREVENTIVE MEASURES FROM AN EDUCATIONAL STANDPOINT.

To the realm of preventive medicine must we look, however, for the greatest beneficial results in lessening the frequency of those disturbances. From this standpoint, education must be the fountain head of our measures to combat these conditions. Just as education has been, and is, one of the predominant means utilized to inculculate the principles and conditions which, when put into action, have lessened the ravages of all infectious and contagious diseases, so well illustrated in the crusade being carried on against tuberculosis, so also must reliance be placed upon education of the masses, of the conditions tending to produce abnormal nervous constitutions, or abnormal functioning of an apparently normal one, and upon education in the measures to be carried out which will tend to lessen and limit the existence of those conditions, and when a proper conception of the gravity of existing conditions has been inculcated and appreciated more stringent measures can be readily instituted. The question of a more thorough education of those choosing the profession of medicine as a life work comes first into consideration along this line. Considering the frequency and seriousness of this class of diseases, on the one hand, and the limited time and attention devoted to their study in the educational institutions in which such fundamental knowledge is acquired, on the other, it is at once evident that one of the first steps to be taken is in that direction. The scientific study of psychology has not kept pace with that of other branches of medicine. Too little attention has been given to it, and as a consequence we know very little in regard to the normal mechan-

onal the eing orm

tive ases tion

aps at perthe e of tion tion is ailheir.

t to ntly pted tion do, are and here

rule.

hear nefit able

poshese good able, ism of the psychological processes; how can it, then, be expected that pathological processes will be any better understood, much less intelligently and scientifically treated? It is time that the institutions for medical education awaken to that fact and act accordingly. There are encouraging indications that some of these educational institutions are giving more time and attention to the study of psychology and psychological processes, both in the normal and abnormal, but still more is required.

As has already been stated, upon the family physician falls the responsibility of applying measures during the earliest stages of the disturbances, and to him must we also look for the diffusion of that education which must play an impor-

tant role in the realm of prevention.

He unconsciously becomes the family mentor. His knowledge of the physical and mental weaknesses and defects makes it possible for him to advise where another neither could nor dared. In his relation of confidential intercourse with the family he exercises an influence which but few, if any other, could reach. Consequently the necessity of being prepared to detect the danger signals, to advise and administer the proper preventive measures, is so evident as to need no further discussion.

TREATMENT OF HEREDITARY INFLUENCES.

In regard to the question of heredity, a close study of the situation reveals the fact that it is a most difficult problem to solve. It may seem harsh, unjust and even inhuman to resort to measures which will involve personal rights and liberties, but when it comes to a question that not only entails the welfare of the individual and of the community at large, but also the welfare of future generations, there should not be an over-consideration of those personal rights. While leniency can, and should be, shown to those unfortunates who possess constitutions that render them susceptible to such disturbances, for much can be done to prevent their development, to lessen their intensity, and to ameliorate their conditions, yet when it becomes evident that the propagation of the species means the propagation of beings whose physical or mental constitutions possess endowments and

stigmata which must render them incapable of competing in

the struggle for existence, and consequently make them a

be ler-It ken ging are ogy

eian arliook

His dether arse 7, if eing inis-

the lem n to and en-

heir rate opahose

and

ates

burden not only to themselves, but also to their environment, the question of sacrificing those rights should be seriously considered. Viewing this question from an impartial or as nearly impartial as it is possible standpoint. so to do, does it not seem more just and humane to all concerned to limit the suffering and sorrow to the individual rather than permit it to be transmitted to those who unfortunately must bear the curse of their inheritance whether or not? To those who may feel justified in thinking otherwise, let them consider the hordes of tramps, vagabonds, criminals, etc., scattered broadcast over the land; let them visit the halls and corridors of our charitable institutions, of our institutions of correction and of penal punishment, and let them remember that at least 60 per cent. of this class have inherited a constitution which is responsible in a great measure for such a condition of affairs; then, perhaps, they will take a different view of the situation and be willing to admit that, at any rate, something should be done to lessen and abolish such human sorrow and affliction. There is no state in the Union but has some form of law to regulate the marriage act, rude though they be in some of them, but more stringent measures are necessary. Too many are permitted to enter the marriage state whose propagation can not fail to produce anything but creatures who are a burden to themselves and a curse to the community. Some states have established institutions for the custodia care of the feebleminded, and these unquestionably are a great blessing to humanity, and, on the whole, a source of public economy, but their number is far below what is required, and their influence is far too restricted. This custodial care and the question of the propagation of the species should not only include the feeble-minded and defective, but should also extend to those who have acquired a constitution or condition that must inevitably transmit its baneful influences to the offspring.

PREVENTIVE TREATMENT OF DRUG ADDICTION.

What has been said of heredity applies almost equally to the question of drug addiction. Alcoholism, the most prominent and extensive of these, is receiving probably more attention than any other condition active in the production of nervous and mental disturbances, but not for this reason.

An active propaganda is being carried on in various channels, having for its object the lessening and abolition of its use. Various methods are being utilized in an attempt to disseminate a conception of the baneful influences and dire results following excessive or prolonged consumption. Various legislative measures are being enacted, tending to lessen and prohibit its distribution, but more stringent measures still are necessary. When it becomes evident that an individual has so far lost the personal respect to his environment. when morbid appetites and desires have grown beyond control, it is only humane and just that they, too, should be placed under custodial care, which would exercise a supervision which can not be procured otherwise. This necessity is still further warranted in that too many are unable to control their ungovernable appetites even in spite of the personal remorse, in spite of the heartaches and suffering that they cause to others, and in spite of the imposition of fines and even imprisonment temporarily.

But there is another point to consider in this connection. It can not be doubted but that to the offspring of individuals whose bodies are continuously saturated with and bathed in alcoholic beverages, or other drugs, whose minds are dulled and stupefied, rendering them incapable of recognizing and realizing the curse they are not only to themselves, but also to their procreation, is transmitted a constitution which is far below the average, and which so frequently manifests itself in the form of some neuropathic or psychopathic derangement, or even imperfect development. Bourneville has shown that in 1,000 cases of imbecility, alcoholism was present in the parents in at least 624. No comment is necessary in regard to the conclusion to be drawn, or the preventive measures that are indicated. It is sufficient to ask the question, Whether or not such creatures, for the mere grati-

fication of their passions, should be allowed to propagate their species, which must inevitably bear the consequences and suffer the penalty of such an inheritance?

TREATMENT OF VENEREAL DISEASES.

The relation of venereal diseases in regard to causation has already been pointed out, and so far as treatment is concerned, but little can be expected, more than is being done at the present time. There should, however, be more active steps taken, more energetic measures instituted leading to the prevention of its dissemination and to its abolition. It is time that the members of the medical profession were aroused from their apparent indifference and apathy, and goaded to the education of the laity as regards the injurious actions and horrible consequences resulting from this evil. Its very insidiousness and privacy endow it with a relative degree of danger. Why should this class of cases be exempt from publicity or quarantine any more than tuberculosis, smallpox, diphtheria, etc., for it is just as infectious, and, although the immediate effects are not, perhaps, so directly dangerous to life, yet its ultimate effects are many fold more productive of constitutional disturbances, and these, in turn, must involve the neuropsychical. It is time that the mantle of this false sense of modesty and secrecy be thrown aside and the condition placed upon its proper basis.

RELATION OF ILLEGITIMACY.

Closely allied to this class of cases is another group of unfortunates who, while victims of the results of the gratification of their own passions, yet, on the whole, are deserving of more leniency and generosity than is, as a rule, meted out to them. It is a condition which involves not only the young and ignorant just entering upon that stage of life wherein they are brought to a realization of a special element in their nature but it also involves those of maturer years, who, because of their knowledge and experience, should have exercised better judgment. It is a condition that will exist so long as there are individuals of the two sexes. It is a condition which is not to be countenanced, but condemned from every standpoint, and yet it is a condition which, when it does arise, is deserving of at least some consideration. The poor unfor-

tunate who, in response to one of the most powerful forces in her nature, steps beyond the threshold of virtue and morality, becomes disgraced and shunned by all society, except, perhaps, a few vultures who hover about her only to feast upon her misfortune or intensify her misery, is called upon not only to suffer the pangs of hell herself, but also to propagate a being who throughout life must bear the stigma of illegitimacy. Is it to be wondered at that this is also a source of many admissions to our charitable institutions, or the source of many a degenerate, physically, mentally or morally? Here likewise education fails to accomplish what is desired. In spite of the fact that the principles of morality and virtue are inculcated into their minds from earliest childhood, in spite of the fact that the evil consequences which are almost inevitable should the step be made beyond the threshold of those principles, are observed day after day, month after month and year after year, yet its existence and frequency have not lessened; consequently it is a problem which must be taken into consideration in the measures instituted for the lessening of the disturbances under consideration.

DEFECTIVE IMMIGRANTS.

So far as the question of defective immigrants is concerned, it is gratifying to note that the requirements for admission into the country are being raised higher year after year, and it is only a question of time until a standard is reached which will place them upon a basis equal to that of the native born.

SOCIAL CONDITIONS.

In the various causative factors that have hitherto been considered, the conditions have been such that remedial measures were not only possible, but quite probable, for sooner or later public opinion will become alive to the necessity of exercising more energetic and stringent means to lessen such a source of sorrow and suffering to humanity. But there is another condition, so complex and so far reaching, involving so many different elements, that it is most difficult to determine which of those elements are the most dominant, or how they are to be regulated. It is the condition of affairs participating in the struggle for existence. Among the more

prominent of these elements may be mentioned the continued high tension, physically and mentally, of those engaged in the struggle to keep abreast of, or to supersede their fellow, the increasing participation of the female sex in vocations and occupations which formerly were limited to members of the opposite sex, the high nervous and emotional tension due to the increasing demands of the social whirl. the baneful influences resulting from the conditions leading up to and terminating in divorces, and many other closely allied conditions. Of these there is one class particularly which deserves the severest criticism and censure. This is a class that is unwilling to exercise the care and attention that the fulfillment of the marriage vow entails, who resort to every means conceivable to prevent or interrupt the process of conception even at the risk of their own lives, a fatal termination of which is only too frequent. No one but the medical profession knows how many otherwise healthful lives are sacrificed annually, either directly or indirectly, from this cause, upon this altar of imaginary self-protection. Failing in the attempt to prevent, they chafe under its continuance, they shrink from the duty and care that it will necessitate, and too often they nurture an unkindly feeling toward the offspring, and too often place it into the hands of an entire stranger to nurture, at a time when nothing is so essential to its healthful development as its natural nourishment and protection. Is it any wonder that under such circumstances there is brought into existence a being possessing a constitution but poorly supplied with the forces capable of withstanding the influences against which it must struggle?

These are only some of the more important factors instrumental in the production of nervous and mental disturbances, which, as yet, do not receive the attention from this standpoint that their importance demands, and the consideration of which must concern the question of the lessening of this scourge of human health and happiness.

DISCUSSION.

Dr. G. W. McCaskey, of Fort Wayne: I will not take up any time in criticism, but will limit myself to the discussion of two or three points that will bear emphasis. One of the questions which the Doctor has emphasized very particularly is that of heredity. We all of us understand the influence of bad heredity on children and the different disease per se which is usually transmitted, but the hereditary tendency, some condition embryonic in its origin, some condition of the nervous system or other organs which makes that individual more susceptible to disease. More particularly is this true of nervous diseases, and that is what we are now considering, and we would like to impress the position which the medical profession should feel and exercise toward the unfortunate class of society, because we know if we could control these conditions during the development, during the prenatal period, much could be accomplished. Oliver Wendell Holmes said: "Our education begins a century before we are born." It certainly begins several months before, and the early months and years are certainly important in the development of the nervous diseases and venereal diseases and a large class of other diseases, and I want to emphasize our obligation. We should feel our obligation on this question and do our part to educate the public and make them understand the importance of the prevention of these diseases. The question of drug addiction is an old and timeworn one. We do not understand the phenomena of it. We understand its far-reaching importance and we are perhaps doing what we can. It is true with drug addicts and with those suffering from venereal diseases we meet with the progeny suffering from disordered nerves. We may feel the desire for gratification of those tastes and passions implanted in us by Nature; however, I believe it is our duty to press along these lines and educate the public up to the point of a reasonable degree of control being extended over society in these things which are undoubtedly a menace and which are producing disastrous results upon the body.

The Doctor mentions the responsibility of the general practitioner in the early recognition and treatment of nervous diseases. I would like to emphasize this point, also. As the Doctor has said, practically every case of nervous disease first falls into the hands of the general practitioner, and it is often true that it goes on perhaps because the physician fails to recognize the disease in its incipiency. It is true of the heart, lungs, etc. as well as of the nerves and mental diseases. After the case has developed into insanity the problem is a very different one, and it is astonishing how many cases of severe insanity could be successfully treated by timely measures. Those slight deviations from the normal mental state of the individual should have more importance attached to them by the family physician than has before been done, and the family physician should see that they do not go on to pronounced cases of insanity.

I agree with the Doctor in a general way that the integrity of the social body is more important than the individual. It is a fundamental principle of our government, "the greatest good to the greatest number." We must restrain individual liberties in order to get best results for the general public, so I believe there is a limited class in which this is profitable. I think it is a little premature, perhaps, to press this, other than to attempt to educate up to the point where they will recognize its importance and take the measures to effect their control. The same is true of venereal diseases. The whole problem is of a difficult character and I fear it will be several generations before the profession can be anything like a unit, and still longer before the public can be made to see the necessity of the public dealing in this way.

The whole subject of nervous and mental diseases is extremely interesting, is the necessary result of the extremely strenuous life we are living, and we see it on every hand; nervous systems breaking down and people suffering from overstrain because of the strenuousness of modern life, and while we see things that ought to be done we have got to move slowly. This means almost a revolution, so we must move slowly, educate the profession first and the public at the same time, if possible, because they need it.

Dr. Albert E. Sterne, Indianapolis: I want to corroborate the propositions which the essayist has set forth, but

I want to emphasize in particular two things. The first of these deals with the popular idea that mental diseases particularly arise from natural causes. That is especially true in the beginning of mental diseases. When a mental disease arises it has a basis. It makes no difference whether or not there is in that disease an organized pathology; there is a physical basis from which this case arises, and it is our duty to recognize that, and it is a delusion that mental diseases are heaven-sent or hell-sent, as the case may be. Another question of extreme importance I want to speak of. There is no doubt at all that heredity and hereditary influences play a considerable role in the manifestation of disease. At the same time we should recognize that there can be no doubt of the fact that by preaching this doctrine of heredity, pure and simple, we as a profession, are doing a great deal of harm. We should recognize heredity, but we should be very careful of impressing too strongly upon the progeny that he or she will suffer by a disease because the parents suffered from that disease. I am thoroughly convinced that many a man and woman has committed suicide because the idea was engraved on their minds that because some ancestor has committed suicide that he must have that tendency. And, gentlemen, we must understand that diseases are not actually hereditary.

No disease is hereditary. That is, if we understand the proper derivation of the word "hereditary," namely, that such a disease exists from the prenatal conception. We have a tendency, but no disease is hereditary as such, not even syphilis. When syphilis exists in the ovum it is acquired syphilis, and there is a vast difference between congenital diseases and inherited diseases. I want to emphasize these things particularly, because we can do a great deal of damage in putting too much stress on heredity. We must educate the people, but we can accomplish a great deal of harm by the tactless use of our knowledge about the true aspect of this question.

Dr. F. B. Wynn, of Indianapolis: The great thing in medicine at the present day is prevention. We are prone to think of prevention as applied to such diseases as are of known germ origin—diphtheria, tuberculosis and such dis-

eases—and the sanitarians are certainly accomplishing a great work in this line. Now it appeals to me that there are other fields in which prevention is just as possible, and I should place preventive medication under three heads: First, the prevention of communicable diseases; second, the prevention of social conditions-improvement of social conditions, educational development and the like, and, third, I should make it apply particularly to those diseases from the use of various insanitary articles which are used either as drugs or medi-That is a good thing, and all concede that the future of medicine is along the line of prevention, and the doctor of fifty years in the future will be a very different man, because he will be paid really for preventing disease rather than to cure it. I just want to refer to the third thing, namely, the question of drug addiction. I came near missing this meeting, because just before I started I was visited by a lawyer who requested that I should go and talk to a man who was a subject of the cocain habit, having acquired the habit by the use of an atomizer or something of that sort. I am afraid he is a ruined man.

I believe as practitioners we should take that home with us, because we are prescribing cocain and morphin and because in one way or another we have been in part responsible. I know that it is true that these habits are acquired through the use of patent medicine, but how often do we prescribe remedies for cough in which there is opium, and our patients get the prescription refilled again and again, and so without our knowledge these habits are being formed. I never prescribe morphine without I give it myself. I believe you ought to prescribe these things yourself and not write prescriptions for people to have filled over and over again, and so with cocain.

Dr. F. F. Hutchins, of Indianapolis: There is another feature in the mental and nervous diseases that it does not seem to me has been touched upon. It is true there is a physical basis, but I do not believe that physical basis is a diseased one. The patient may be a man of genius perhaps; it may be that he began wrong, was badly trained. If that is it, this trouble lies in the hands of our educational frater-

nity, the early educators in the schools, but that ought to be combined with the physician's influence, because in this environment lies the situation at the present time. If there is one thing we need in these cases of neurasthenia it is the old-styled faculty of common sense—it is good common horse sense. We have these cases coming to us with distorted ideas and opinions which seem to us ridiculous. What is the thing at fault? It is simply the inability to see themselves as they are. If, instead of trying the various forms of hypnotism, sending them off on trips—if we would simply take these patients and on the idea that "a little knowledge is a dangerous thing," work the thing out on a sensible basis, and say to them if you have this idea you must give a reason for it. Have them reason out these ideas and see that these reasons bear the light of investigation.

If they can not do that in the conversation, have them keep a book, a ledger, and have them keep an account of every idea and have them present the reasons for and against and then go to some person and sit down and reason it out with them on the ground of common sense. Many of these brains are simply twisted—warped—and if we have hereditary strain we can not help that. We can not take that strain off of these people, and we will have to train up these brains to meet it and that can only be done by developing the reasoning faculties.

Dr. George T. McCoy, of Columbus: I just want to speak one word. The question of heredity has been brought out very fully but the question of early training has only been hinted at. I believe that the early training of the child has much to do with its history thereafter, and at the risk of being called an old fogy I will say that I am opposed to the kindergarten for that reason. You educate the mental, and I would much rather that my children spend their time making mud pies and wading the creek than attending kindergarten.

Dr. G. W. H. Kemper, of Muncie: There has been something said in the paper, and very particularly too, in regard to the alcoholic question. And I notice that heredity in this day always hits the boys and not the girls; so I am inclined to think that with the man inclined to the habit, that it is the example he sets for his sons. He takes his boys to the saloon. He does not take his daughters. We talk a great deal about the alcoholic question—and I am not a Prohibitionist, never voted the Prohibition ticket—but in the last few years I am wonderfully down on the saloon and I want to see the day come when the saloon is banished. It is one of the vents of hell for the habit of intemperance and for every other vice and crime that has been mentioned in these papers here today. God help us to vote it down!

Dr. A. C. Kimberlin, Indianapolis: Some one has said that if parents would buy skates for their children instead of books they would have a much happier family. There is a story of a certain king in whose family there was a tendency to insanity. The king had one son. He educated this son separate and independent from any one who was predisposed to insanity and did everything that medical skill could devise to protect his son. He kept him away until he reached his maturity, when he was suddenly seized with insanity. Certainly we have to stand aside for heredity. Drug addictions, etc., become causes. Everything that plays with the powers of reason is most disastrous, but, as Dr. Hutchins has emphasized, the victims are those who have been well trained. of good social standing, and we have to go back to a family evidence of an unbalanced mind, and there is a predisposition that we must take account of. Yet we should be exceedingly careful in making representations to the case. They respect you and they esteem you as their friend, and what you say is not manifest then, but we find the influence of it later.

Dr. Charles F. Neu: I have nothing in addition to add to what has been said. As mentioned in the paper, the com ing thing is prevention, and the first step is the question of education. I quite agree with Dr. Sterne that it would be most injurious to impress upon any individual the influence of heredity. The first point is educating the physicians themselves. That is where it should begin in order that we may be in position to recognize the progression of these more marked things which are to follow.