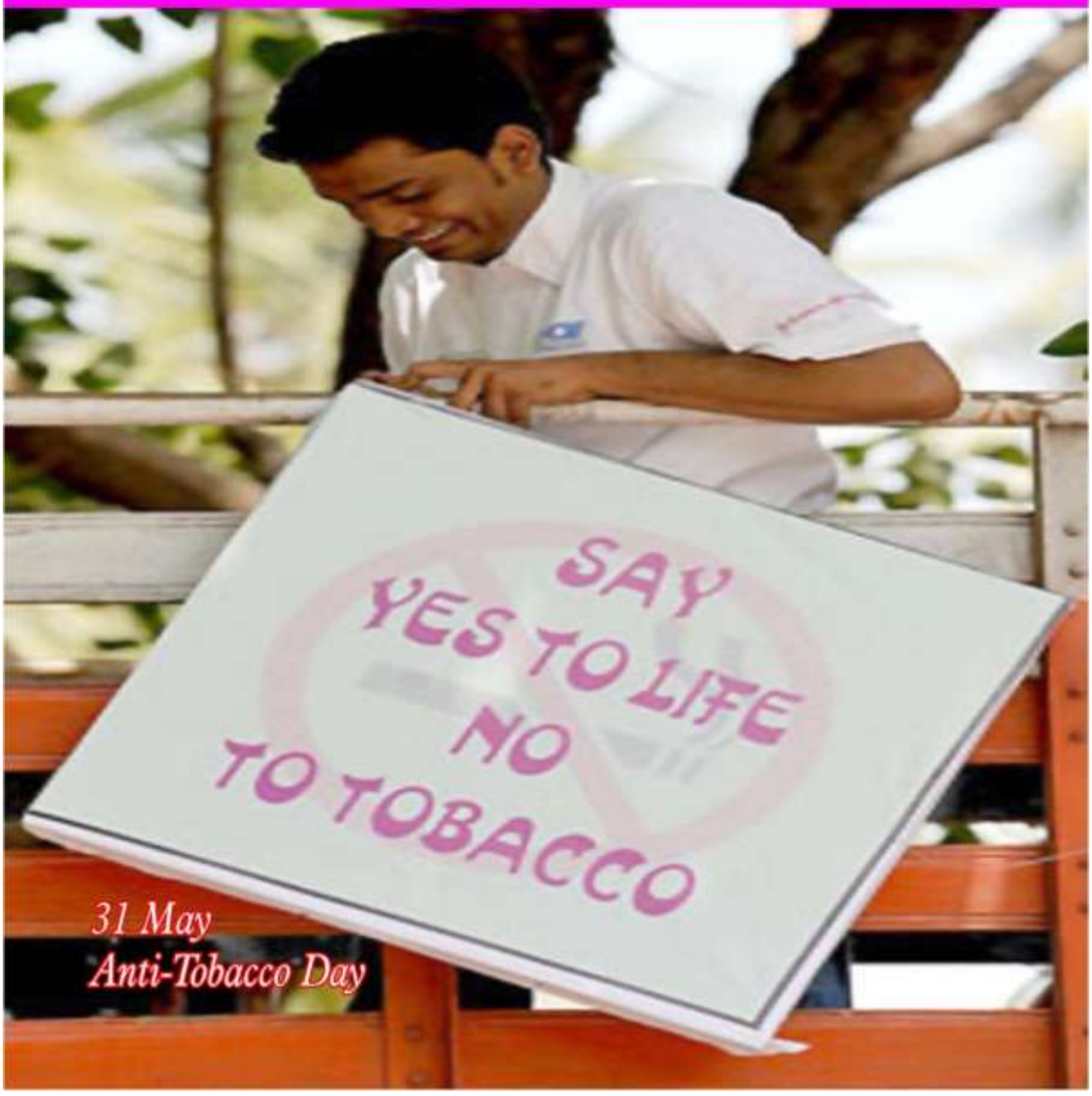
CHIEF EDITOR DR. SYED MUBIN AKHTAR

KARACHI PSYCHIATRIC HOSPITAL

BULLETIN MAY2011



Karachi Psychiatric Hospital, Karachi Addiction Hospital organized a
Free Medical Camp at Madina Colony Quaidabad.

Mr. Younus Barai ex MNA at the occasion of a Free Medical Camp at Safoora Goth
organized by Karachi Psychiatric Hospital.

Tehreek-e-Nifaz-e-Urdu organized a discussion "Urdu Ka Nifaz Kiyoon"
Speaking on the occasion are Admiral (R) M.I. Arshad, Asad-ullah Bhuto (J.I.), Dr. Arif Alwi (P.T.I.),
Dr. Syed Mubin Akhtar Patron Nifaz-e-Urdu, Shakil Adil Zada, Shahnawaz Farooqi, Mazhar Hashmi and others.

KARACHI PSYCHIATRIC HOSPITAL

Vol. 34 Issue No. V | May, 2011 | Regd. No. SS -237

MONTHLY BULLETIN

(Psychiatric Research Articles)

جہاد

حضرت سہل بن سعدؓ نے کہا کہ رسول اللہ ﷺ نے فرمایا "اللہ تعالیٰ کی راہ میں ایک دن (جہاد کے) صبح پر رہنا ساری دنیا اور جو کچھ دنیا میں ہے اس سے بہتر ہے اور کسی کا کوڑا رکھنے کے برابر جنت میں جگہ مل جانے تو ساری دنیا اور جو کچھ دنیا میں ہے اس سے بہتر ہے اور تم میں کوئی آدمی اللہ تعالیٰ کی راہ میں چلے یا صبح چلے تو وہ ساری دنیا اور جو کچھ دنیا میں ہے اس سے بہتر ہے۔"

(صحیح بخاری)

Readers are requested to send their articles, comments & suggestions.

Doctors who desire to get the bulletin should send their address, contact number and email to:

Address: B-1/14, Nazimabad # 3, Karachi-74600
Phone:111-760-760
Fax: 36681610
Email: editor@kph.org.pk
Email: support@kph.org.pk

CONTENTS

PSYCHOSOCIAL INTERVENTIONS FOR DRUG MISUSE

Introduction

This guideline makes recommendations for the use of psychosocial interventions in the treatment of people who misuse opioids, stimulants and cannabis in the healthcare systems. The patterns of use vary for these drugs, with cannabis the most likely to be used and opiods the next most commonly used drug, followed by other stimulants such as cocaine amphetamine. Opioids, presenting the most significant health problem, are used most commonly. A large proportion of people who misuse drugs are poly drug users and do not limit their use to one particular drug.

Opioid misuse is often characterised as a long-term, chronic condition with periods of remission and relapse. Abstinence may be one of the long-term goals of treatment, it is not always achieved.

Pharmacological approaches are the primary treatment option for opioid misuse, with psychosocial interventions providing an important element of the overall treatment package. Pharmacological treatments for cannabis and stimulant misuse are not well developed, and therefore psychosocial interventions are the mainstay of effective treatment.

Key workers have a central role in coordinating a care plan and building a therapeutic alliance with the service user.

Person - centred care

Treatment and care should take into account service users' needs and preferences. People who misuse drugs should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals.

Good communication between staff and service users is essential. Treatment and care, and the information service users are given about it, should be culturally appropriate. It should also be accessible to people with additional needs, such as physical, sensory or learning disabilities, and to people who do not speak or read English or Urdu.

If the service user agrees, families and carers should have the opportunity to be involved in decisions about treatment and care. Families and carers should also be given the information and support they need.

Key priorities for implementation

Brief interventions

Opportunistic brief interventions focused on motivation should be offered to people in limited contact with drug services (for example, those attending a needle and syringe exchange or primary care settings) if concerns about drug misuse are identified by the service user or staff member. These interventions should:

- normally consist of two sessions each lasting 10-45 minutes
- explore ambivalence about drug use and possible treatment, with the aim of increasing motivation to change behaviour, and provide non-judgemental feedback.

Contingency management

Introducing contingency management

Drug services should introduce contingency management programmes to reduce illicit drug use.

Principles of contingency management

Contingency management aimed at reducing illicit drug use for people receiving maintenance treatment or who primarily misuse stimulants should be based on the following principles:

- The programme should offer incentives (usually vouchers that can be exchanged for goods or services of the service user's choice, or privileges such as take-home doses) contingent on each presentation of a drug-negative test (for example, free from cocaine or non-prescribed opioids).
- The frequency of screening should be set at three tests per week for the first 3 weeks, two tests per week for the next 3 weeks, and one per week thereafter until stability is achieved.
- If vouchers are used, they should have monetary values that start in the region of Rs.200/- and increase with each additional, continuous period of

abstinence.

- Urinalysis should be the preferred method of testing but oral fluid tests may be considered as an alternative.

Contingency management to improve physical healthcare

For people at risk of physical health problems (including transmittable diseases) resulting from their drug misuse, material incentives (for example, shopping vouchers of up to Rs.1000/- in value) should be considered to encourage harm reduction. Incentives should be offered on a one-off basis or over a limited duration, contingent on concordance with or completion of each intervention, in particular for:

- hepatitis B/C and HIV testing
- hepatitis B immunisation
- chest X-Rays

Implementing contingency management

Drug services should ensure that as part of the introduction of contingency management, staff are trained and competent in appropriate near-patient testing methods and in the delivery of contingency management.

Contingency management should be introduced to drug services in the phased implementation programme, in which staff training and the development of service delivery systems are carefully evaluated. The outcome of this evaluation should be used to inform the full-scale implementation of contingency management.

Guidance

The following guidance is based on the best available evidence.

General considerations

Care of people who misuse drugs

To enable people who misuse drugs to make informed decisions about their treatment and care, staff should explain options for abstinence-oriented, maintenance-oriented and harm-reduction interventions at the person's initial contact with services and at subsequent formal reviews.

Staff should discuss with people who misuse drugs whether to involve their families and carers in their assessment and treatment plans. However, staff should ensure that the service user's right to confidentiality is respected.

People who misuse drugs should be given the same care, respect and privacy as any other person.

Supporting families and carers

Staff should ask families and carers about and discuss concerns regarding, the impact of drug misuse on themselves and other family members, including children. Staff should also:

- offer family members and carers an assessment of their personal, social and mental health needs
- provide verbal and written information and advice on the impact of drug misuse on service users, families and carers.

Where the needs of families and carers of people who misuse drugs have been identified, staff should:

- offer guided self-help, typically consisting of a single session with the provision of written material

Where the families of people who misuse drugs have not benefited, or are not likely to benefit, from guided self-help and/or support groups (unavailable in Pakistan) and continue to have significant problems, staff should consider offering individual family meetings. These should:

- provide information and education about drug misuse
- help to identify sources of stress related to drug misuse
- explore and promote effective coping behaviours
- normally consist of at least five weekly sessions

Identification and assessment of drug misuse

Asking questions about drug misuse

Staff in mental health settings (in which drug misuse is known to be prevalent) should ask service users routinely about recent legal and illicit drug use. The questions should include whether they have used drugs and, if so:

- of what type and method of administration
- in what quantity
- how frequently

In settings such as primary care, general hospitals and emergency departments, staff should consider asking people about recent drug use if they present with symptoms that suggest the possibility of drug misuse, for example:

- acute chest pain in a young person

- acute psychosis
- mood and sleep disorders

Assessment

When making an assessment and developing and agreeing a care plan, staff should consider the service user's:

- medical, psychological, social and occupational needs
- history of drug use
- experience of previous treatment, if any
- goals in relation to his or her drug use
- treatment preferences.

Staff who are responsible for the delivery and monitoring of the agreed care plan should:

- establish and sustain a respectful and supportive relationship with the service user
- help the service user to identify situations or states when he or she is vulnerable to drug misuse and to explore alternative coping strategies
- ensure that all service users have full access to a wide range of services
- ensure that maintaining the service user's engagement with services remains a major focus of the care plan
- maintain effective collaboration with other care providers

Healthcare professionals should use biological testing (for example, of urine or oral fluid samples) as part of a comprehensive assessment of drug use, but they should not rely on it as the sole method of diagnosis and assessment.

Brief interventions and self-help

Brief interventions

Brief interventions can be used opportunistically in a variety of settings for people not in contact with drug services (for example, in mental health, general health and social care settings, and emergency departments) and for people in limited contact with drug services (such as at needle and syringe exchanges, and community pharmacies).

During routine contacts and opportunistically (for example, at needle and syringe exchanges), staff should provide information and advice to all people who misuse drugs about reducing exposure to blood-borne viruses. This should include advice on reducing sexual and injection risk behaviours. Staff should consider offering testing for blood-borne viruses.

Opportunistic brief interventions focused on motivation should be offered to people in limited contact with drug services (for example, those attending a needle and syringe exchange or primary care settings) if concerns about drug misuse are identified by the service user or staff member. These interventions should:

- normally consist of two sessions each lasting 10-45 minutes
- explore ambivalence about drug use and possible treatment, with the aim of increasing motivation to change behaviour, and provide non-judgemental feedback

Opportunistic brief interventions focused on motivation should be offered to people not in contact with drug services (for example, in primary or secondary care settings, occupational health or tertiary education) if concerns about drug misuse are identified by the person or staff member. These interventions should:

- normally consist of two sessions each lasting 10-45 minutes
- explore ambivalence about drug use and possible treatment, with the aim of increasing motivation to change behaviour, and provide non-judgemental feedback

Self-help

Formal psychosocial interventions

A range of psychosocial interventions are effective in the treatment of drug misuse; these include contingency management and behavioural couples therapy for drug-specific problems and a range of evidence-based psychological interventions, such as cognitive behavioural therapy, for common comorbid mental health problems.

Contingency management

Contingency management is a set of techniques that focus on changing specified behaviours. In drug misuse, it involves offering incentives for positive behaviours such as abstinence or a reduction in illicit drug use, and participation in health-promoting interventions. For example, an incentive is offered when a service user submits a biological sample that

is negative for the specified drug(s). The emphasis on reinforcing positive behaviours is consistent with current knowledge about the underlying neuropsychology of many people who misuse drugs and is more likely to be effective than penalising negative behaviours. There is good evidence that contingency management increases the likelihood of positive behaviours and is cost effective.

For contingency management to be effective, staff need to discuss with the service user what incentives are to be used so that these are perceived as reinforcing by those participating in the programme. Incentives need to be provided consistently and as soon as possible after the positive behaviour (such as submission of a drug-negative sample). Limited increases in the value of the incentive with successive periods of abstinence also appear to be effective.

A variety of incentives have proved effective in contingency management programmes, including vouchers (which can be exchanged for goods or services of the service user's choice), privileges and modest financial incentives.

Drug services should introduce contingency management programmes to reduce illicit drug use and/or promote engagement with services for people receiving maintenance treatment.

Drug services should introduce contingency management programmes to reduce illicit drug use, promote abstinence and/or promote engagement with services for people who primarily misuse stimulants.

Staff delivering contingency management programmes should ensure that:

- the target is agreed in collaboration with the service user
- the incentives are provided in a timely and consistent manner
- the service user fully understands the relationship between the treatment goal and the incentive schedule
- the incentive is perceived to be reinforcing and supports a healthy/drug-free lifestyle.

Contingency management aimed at reducing illicit drug use for people receiving maintenance treatment or who primarily misuse stimulants should be based on the following principles.

- The programme should offer incentives (usually vouchers that can be exchanged for goods or services of the service user's choice, or privileges such as take-home doses) contingent on each presentation of a drug-negative test (for example, free from cocaine or non-prescribed opioids).
- If vouchers are used, they should have monetary values that start in the region of Rs.200/- and increase with each additional, continuous period of abstinence.
- The frequency of screening should be set at three tests per week for the first 3 weeks, two tests per week for the next 3 weeks, and one per week thereafter until stability is achieved.
- Urinalysis should be the preferred method of testing but oral fluid tests may be considered as an alternative.

Contingency management to improve physical healthcare

For people at risk of physical health problems (including transmittable diseases) resulting from their drug misuse, material incentives (for example, shopping vouchers of up to Rs.1000/- in value) should be considered to encourage harm reduction. Incentives should be offered on a one-off basis or over a limited duration, contingent on concordance with or completion of each intervention, in particular for:

- hepatitis B/C and HIV testing
- hepatitis B immunisation
- chest X-ray

Implementing contingency management

The implementation of contingency management presents a significant challenge for current drug services, in particular with regard to staff training and service delivery systems. The following recommendations address these two issues.

Behavioural couples therapy

Behavioural couples therapy should be considered for people who are in close contact with a non-drug-misusing partner and who present for treatment of stimulant or opioid misuse (including those who continue to use illicit drugs while receiving opioid maintenance treatment or after completing opioid detoxification). The intervention should:

- focus on the service user's drug misuse

- consist of at least 12 weekly sessions.

Cognitive behavioural therapy and psychodynamic therapy

Cognitive behavioural therapy and psychodynamic therapy focused on the treatment of drug misuse should not be offered routinely to people presenting for treatment of cannabis or stimulant misuse or those receiving opioid maintenance treatment.

Evidence-based psychological treatments (in particular, cognitive behavioural therapy) should be considered for the treatment of comorbid depression and anxiety disorders.

Residential and inpatient care

Inpatient and residential settings

The same range of psychosocial interventions should be available in inpatient and residential settings as in community settings. These should normally include contingency management, behavioural couples therapy and cognitive behavioural therapy.

Residential treatment may be considered for people who are seeking abstinence and who have significant comorbid physical, mental health or social (for example, housing) problems. The person should have completed a residential or inpatient detoxification programme and have not benefited from previous community-based psychosocial treatment.

People who have relapsed to opioid use during or after treatment in an inpatient or residential setting should be offered an urgent assessment. Offering prompt access to alternative community, residential or inpatient support, including maintenance treatment, should be considered.

THE ETHICS OF INVOLUNTARY TREATMENT

Prepared by CH Cahn, MD

This paper was prepared for the Professional Standards and Practice Council, chaired by Dr N el-Guebaly, and approved by the Board of Directors of the Canadian Psychiatric Association in May 1981.

This paper deals primarily with the medical treatment of the mentally ill in the absence of a valid consent given by the patient. Consideration is given to certain central issues, such as the semantics of "involuntary" and of "treatment", the attitude of concerned persons, the notion of "dangerousness", and the setting where the treatment takes place. It also deals with certain paired concepts that are frequently discussed as one opposed to the other: detention versus treatment, least intrusive versus most effective treatment, effective treatment in exchange for loss of freedom, the right to treatment versus the right to refuse treatment, emergency versus definitive treatment, the psychiatrist's obligations to the patient as against his duties to the rest of society, and "judicialization" versus "psychiatrization".

Some other issues that are related to the subject are considered beyond the scope of this paper, such as the involuntary treatment of children and of moribund patients, behaviour control, the sterilization of the mentally retarded, involvement of patients in psychiatric research without their personal consent, and the involuntary treatment of political dissidents in certain other places.

Brief Historical Note

The issue of the involuntary treatment of the mentally ill has come into much sharper focus as a result of several historical trends: the patients' rights movement; the much greater availability of potent treatment methods; the changing role of psychiatric hospitals; the greater interest in the subject by the legal profession; and the increased emphasis on the quality of life in general and of handicapped persons in particular. Some would add the "anti-psychiatry" movement to this list.

During the past 200 years one may say that not a decade has gone by without major publicity having been given to alleged abuses of the mentally ill: patients being put in strait-jackets, secluded for long periods of time, "put away" in "lunatic asylums," patients treated against their will for insufficient reasons, patients forgotten and rejected by their families and society in general, and patients being discriminated against because of their mental illness.

Let us return for a moment to one of the most important developments in psychiatry during the last 50 years: the introduction of active psychiatric treatments. Some of these such as coma insulin, lobotomy and continuous narcosis at first appeared to be most promising, but because of side-effects and sometimes serious complications are now seldom used. Others, such as ECT and pharmacotherapy, are still held to be controversial by some, but are very effective, have undergone many refinements and continue to be evaluated carefully.

Definitions

ETHICS: The Oxford Dictionary defines ethics as "the science of morals and rules of conduct," and the word "moral" is defined as "concerned with character or disposition, or with the distinction between right and wrong." The Canadian Medical Association's Code of Ethics is a guide to the ethical behaviour of physicians and contains 49 clauses. Two of these are particularly relevant to our subject: "An ethical physician will recognize that the patient has the right to accept or reject any physician and any medical care recommended to him" and "an ethical physician will, when the patient is unable, and an agent unavailable, to give consent, render such therapy as he believes to be in the patient's interest." These two clauses when considered together imply that the attending physician fully respects the right of the patient to accept or refuse the treatment offered, but intervenes therapeutically when the patient is unable to give or refuse consent, for whatever reason. Another position paper on "Consent in Psychiatry" deals with the

various aspects of the consent process, including the psychiatrist's role in determining whether or not the patient is capable of giving a valid consent. Whenever a physician overrules the objections of a mentally ill person to receiving a certain treatment, the physician is faced with an ethical dilemma.

INVOLUNTARY: Other words used to describe restrictions placed on mentally ill patients are"commitment", "formal admission," all of which are covered by the various provincial mental health acts. In addition, there are lieutenant-governors' warrants and other court orders according to which restrictions are imposed on patients under the Criminal Code of Canada. These laws are concerned primarily with involuntary admission to designated facilities, and do not usually distinguish clearly between "involuntary admission" and "involuntary treatment."

In other provinces, such as Ontario, the law makes a distinction between control of dangerous behaviour due to mental illness by drugs in an emergency situation (which is permitted without the patient's consent), and definitive psychiatric treatment, for which the patient's consent is required. This is so even if the chemical substance remains the same as the patient passes from the emergency to the non-emergency situation. Further provisions are made for situations in which the patient is not able to give his valid.

TREATMENT: We are here primarily concerned with the psychiatric treatment of patients by physical or chemical means. Psychotherapy is not included in this discussion, as it is hard to conceive of "involuntary" psychotherapy (the subject "Ethics of Psychotherapy" is thoroughly covered in an article by T.B. Karasu in the American Journal of Psychiatry, Volume 137, pages 1502-12, December 1980, with 79 references), in the usually accepted meaning of these words. Behaviour therapy and its varieties are not considered here, and as already stated above the involuntary application of behaviour modification techniques are beyond the scope of this paper; it will be the subject of another paper.

INVOLUNTARY TREATMENT: It should be pointed out that the notions of voluntary and involuntary are not like white and black, but that there are many shades of grey. In fact there is a continuum of voluntary to involuntary, which could be described as follows: active cooperation, passive cooperation, ambivalence, silent objection, irrational opposition, rational refusal. A patient may move along this continuum in either direction during the course of his illness. Furthermore, the patient may accept some treatments but not others, or may change his mind. Another fact to be considered is the non-psychiatric medical or surgical treatment of the mentally ill; general practitioners, surgeons and other medical specialists to whom patients with physical problems are referred are involved in the decision-making process, and, depending on the urgency of the situation, may have to intervene without the patient having given or being able to give a valid consent.

Attitudes of Concerned Persons

THE PUBLIC: There are still many misunderstandings and misperceptions as to the power of psychiatrists to take away the freedom of persons because of mental illness. The public still grossly overestimates the number and percentage of involuntary patients in psychiatric hospitals. Civil libertarians, certain lawyers, and the "anti-psychiatry movement" contribute to this negative image. Stone has stated: "The rich admixture of science and humanism that diffuses the discipline and the idiom of psychiatry all too often arouse the antipathy of the sceptical, tough-minded lawyer who is trained to demand and expect precision."

PSYCHIATRISTS: Some psychiatrists are more permissive, others more authoritarian in their approach to involuntary treatment. Psychiatrists at either end of the scale are more likely to be criticized than the ones in the middle. The literature in recent times focuses more on the interventions by "over-zealous psychiatrist" while, as discussed below, in the minds of the relatives of patients, psychiatrists often do not go far enough. Psychiatrists as members of the medical profession have a long tradition of being committed to placing the patient's well being and longevity above all else and in using their own judgment in decision-making rather than that of others. Physicians have often felt that patients were too ignorant to make decisions on their own behalf and that it was better to treat the patient promptly, without inducing new fears and reinforcing unwise decisions on the part of the patient. Nowadays increasing demands are put on the physician to enter into a meaningful dialogue with the patient and to

obtain from the patient a valid consent insofar as this is possible.

PATIENTS: Relatively few patients are skillful in articulating well their stand with regard to involuntary treatment. Many who express negative opinions have delusions or impaired judgment. The majority of patients do not express any opinion at all; very few raise valid objections, but when this happens, psychiatrists and other mental health authorities are sometimes strongly criticized. "Let one paranoid patient bleat but once about his mistreatment, and 15 members of the Civil Liberties Association make headlines with it for a year".

RELATIVES: Relatives of mentally ill patients far more often wish involuntary treatment than any other group of interested persons. In the present atmosphere, where the rights of the individual have encroached so heavily on the rights of others, relatives frequently suffer the most from threatening, frightening, and/or annoying behaviour of the mentally ill. In the past, when paternalism was more acceptable it was easier to take the problems caused by patients out of the hands of relatives by having the patient hospitalized, sometimes for long periods of time. Nowadays, with paternalism often being equated with excessive authoritarianism, and with the shorter duration of stay in hospital, patients are more likely to be repeatedly troublesome to their relatives. The latter can sometimes obtain comfort and support from organizations such as the Association of Relatives and Friends of the Mentally Ill.

Dangerousness

This subject has been debated extensively and a great number of papers have been written on it. Where there is actual or obvious danger to self or to others due to a patient's mental illness, few would argue that involuntary treatment is required; the arguments start when one considers what kind of treatment is indicated, and also when the danger is less obvious. This is one of the most complex issues psychiatrists are facing today. As long as it is proved statistically that psychiatrists are no better than others in predicting dangerousness it is likely that the law will not or will no longer permit psychiatrists to restrict the liberty of patients to refuse treatment on the basis of potential danger alone. It would seem that only in cases of patients who repeat the same pattern of dangerous behaviour which responds favourably to psychiatric treatment but recurs when the patient discontinues such treatment may there be justification in treating a patient against his will on a preventive basis. However, we must not forget that criminal recidivists are not placed in preventive detention in countries where human freedoms are as highly prized. Therefore, whenever possible, a psychiatrist should have a frank and full discussion with a patient who has recovered from an episode of mental illness with dangerous behaviour, hoping that the patient will cooperate with continued psychiatric treatment on a voluntary basis.

In the case where a patient never does achieve this sort of insight and repeatedly breaks off therapy, it may be better to utilize the Criminal Code, that is, the patient, having been charged with an offense is acquitted by reason of insanity and is then placed under "Lieutenant-Governor's Warrant"; if such a patient refuses treatment, the Provincial Review Board may authorize psychiatric treatment. A patient under "L.G.W.", having been hospitalized may be discharged and followed as an outpatient in a way similar to a convicted criminal discharged from a detention centre being helped by a probation officer to keep the peace.

Detention Versus Treatment

Psychiatric hospitals, whatever the previous title (lunatic asylum or mental institution) have a long history of functioning as quasi- jails for persons who have had to be admitted involuntarily ("committed") or who had been charged as criminals but found to be too mentally ill to be cared for in prisons or other detention centres. Only in recent times have other psychiatric treatment facilities been included in accepting involuntary patients. This seems eminently fair, as it tends to diminish the stigma attached to psychiatric hospitals, and fits better with modern concepts of community psychiatry. But there is still the problem of the use or perhaps abuse of psychiatric facilities for the detention of persons considered mentally ill by the public, the police, or judges as an alternative to imprisonment, even for people with personality disorders for whom psychiatrists have no adequate treatment. For such individuals the hospital serves primarily as a detention centre. Psychiatrists are reluctant to allow hospital beds to be occupied for

long periods of time by such individuals, especially when there are waiting lists for psychiatric patients for whom treatment is more successful. However, the public tends to regard hospitalization as a treatment in itself; in fact, before the days of active psychiatric treatment, and even today, psychiatrists may themselves regard admission to hospital as the most important treatment for the patient. In the hospital, the patient is taken care of, that is, he receives food, clothing, shelter, nursing care, and a program of structured activities, which for many patients improves the quality of their life as compared with the life they led in the community. Whether a patient benefiting from being in the hospital under these circumstances should in addition have to undergo involuntary psychiatric treatment, because the psychiatrist has a treatment that he thinks should be given in the belief that it will further improve the patient's mental condition, remains a controversial issue. This issue is causing a good deal of friction between psychiatrists of the more traditional type and patients' rights advocates of the more activist type.

One of the most important functions of physicians is to relieve suffering; therefore, although psychiatrists may ardently wish to treat all the mentally ill who are treatable, there are certain patients such as simple or hebephrenic schizophrenics who do not appear to be suffering very much from their symptoms (judging from their facial expressions they may actually seem to be enjoying some of their symptoms). Certainly it is ethical to treat involuntarily patients who are in patent or overt distress because of the illness (such as patients with depressive or paranoid delusions). This does imply that some patients, especially certain chronic schizophrenics, will continue to have symptoms and may have to remain hospitalized or otherwise be looked after if they refuse active psychiatric treatment, even though the psychiatrist is convinced that with such treatment the patient would be greatly improved. The psychiatrist may feel perfectly justified in pursuing an objective of active treatment, in the belief that it will reduce chronicity, save money, or improve the hospital's discharge statistics. But the more ethical approach is for the psychiatrist to allow the patient to make some decisions for himself, or at least to have a continuing dialogue with the patient to try to persuade him to accept treatment on a voluntary basis.

Setting

Involuntary treatment may be given in hospitals, in detention centres, and also in some jurisdictions on an outpatient basis or even at home. The most frequent setting for involuntary psychiatric treatment is of course the hospital. It is in the hospital where the therapeutic team is working in familiar surroundings. Expert staff and up-to-date equipment are readily available, especially in emergencies. Patients can be treated involuntarily in other settings, but the desirable supportive services are less readily available there. For relatively uncomplicated treatment, such as bi-weekly fluphenazine injections, an outpatient setting or treatment in the patient's home is quite feasible.

DISCHARGING THE UNCOOPERATIVE PATIENT:

Physicians are generally the only group of professionals entitled to order the admission and discharge of patients. When a patient refuses the treatment offered, the attending physician often responds by discharging the patient from the hospital. The physician may wish to make the bed available to a more cooperative patient. The hospital may have a utilization review committee whose objective is to ensure that the duration of stay in hospital is not too long. Hopefully the patient will not be discharged prematurely by reason primarily of hostile reaction of the attending staff. Some patients wish to stay in hospital without necessarily accepting the treatment offered. More frequently, patients leave the hospital, but soon return because their mental condition becomes worse, or there may be more subtle reasons. Some patients have learned how to take advantage of their "mentally ill" status as a means to evade the law or other social responsibilities. For financial or political reasons there may be an overall policy to discharge chronic patients back into the community. If the patient is not properly prepared, there is the risk of "replacing back wards with back alleys." All these factors have to be considered carefully by the attending physician when deciding how a given patient is best managed. None of them singly seems to be sufficient to justify intrusive psychiatric treatment against the patient's will.

Least Intrusive Versus Most Effective Treatment

In psychiatry, as in much of medicine and surgery, the most effective treatment is often the most intrusive.

One could compare psychosurgery with the surgical removal of a brain tumour, or neuroleptic therapy for schizophrenia with insulin therapy for diabetes, or physically restraining a violent patient with the reduction of a dislocated shoulder. There are many similar examples, but the most important difference is that where there is no mental illness, a valid consent given by the patient to the intervention, no matter how drastic, can usually be readily obtained before the intervention is undertaken. Hence the vigorous search for effective psychiatric treatments with less intrusiveness and fewer side-effects. Psychosurgery has all but disappeared from the therapeutic armamentarium. ECT has been very much refined and more carefully controlled. Psychopharmacology researchers are constantly searching for new drugs with fewer side-effects. Greater effort is being made to evaluate the quality of treatment by means of medical audits and peer review.

Furthermore, the setting where the treatment takes place is constantly being improved: psychiatric hospitals have more and better staff than formerly, fewer patients are admitted involuntarily and for shorter periods of time, alternative settings for treatment such as departments of psychiatry in general hospitals, various outpatient clinics, day care, home care, and supervised community living are all being utilized much more than heretofore. The advantages of treating the patient in the least restrictive setting must be weighed against the disadvantages of not always being able to offer the most effective treatment; for example, it is more difficult to prevent the suicide of a severely depressed patient at home than in hospital.

Effective Treatment in Exchange for Loss of Freedom

The medical profession has always held that the patient has the right to receive the best available treatment. In the case of the mentally ill, physicians have above all wished to give their patients the maximum benefit of available treatments even if this meant that the patient, because of his mental illness, was not entirely free to decide for himself what should be done. This has given rise to the notion of "quid pro quo," which implies that the patient will receive effective and beneficial treatment in exchange for the loss of his freedom. What certainly is no longer acceptable is that patients be detained in hospitals "without more." The more the patient's freedom to move around as he pleases and to make his own decisions is restricted, the greater is the obligation on the physician and the hospital staff to provide effective and harmless treatment. It is very difficult to apply the equation with perfect fairness, but psychiatrists and other health professionals should always strive towards this ideal.

There are four possibilities which are illustrated in Table I (simplified for theoretical purposes; in reality the lines of demarcation are by no means clear cut).

Table 1

Conceptualization of the "Quid Pro Quo" Argument According to Traditional Medical Ethics

	Voluntary	Involuntary
Effective Treatment	Best	Second Best
No Treatment	Third Best	Worst

COMMENTS: "Effective Treatment" ideally is treatment that has been proven to be effective by scientific research methodology; but treatment may be effective in a given case without having been validated scientifically. "No Treatment" here means that the patient does not receive effective treatment. There may be four possible reasons for this:

- Effective treatment is not available; for instance, for Alzheimer's Disease.
- The patient refuses treatment - patients' rights advocates sometimes claim this comes above all other considerations; in extreme cases they would accord the right to refuse treatment even to the most psychotic patient.
- The treating physician may not yet have found the most effective treatment for the patient, or there may be a difference of opinion between one physician and another as to what is the most effective and up-to-date treatment. Whenever there are such doubts or other uncertainties the attending physician is advised to consult a colleague.
- The facility cannot afford to provide effective treatment - this should no longer be a major problem for scientifically validated effective treatments, but still may be a problem in the case

of other less well accepted methods of treatment; for instance, certain types of psychotherapy, and certain behaviour modification techniques may be very effective in given cases, but may require extra staff, extra time and extra expertise. Furthermore, there are psychiatric disorders with underlying physical causes which may require diagnostic services not readily available, and for which patients may have to be transferred to special treatment facilities. The "quid pro quo" problem also exists in certain facilities with maximum security for dangerous patients in need of psychiatric treatment.

Value judgments will continue to have to be made and priorities assigned before budgets are approved to spend the public's tax dollars for this category of patients. Although ideally the cost of treatment should not be a factor, in reality it will continue to be especially difficult to apply the above equation fairly to all mentally ill offenders inside maximum security facilities.

The Right to Treatment Versus the Right to Refuse Treatment

This is one of the most contentious issues in modern psychiatry. A paper by Redlich and Mollica in the American Journal of Psychiatry entitled "Overview: Ethical Issues in Contemporary Psychiatry" describes the historical, ethical, legal, as well as medical points of view in the United States. One of the statements these authors make is as follows: "With some shame we state that most of the changes in establishing patients' rights were not brought about primarily by psychiatrists but civil libertarians led by lawyers, and that the most important decisions were by enlightened judges." The authors of this paper discussed changing moral values at length and seemed to be rather critical of the American medical profession in general and psychiatry in particular.

Even in Great Britain where medical ethics reach further back in history than on the North American continent this matter has received increased attention - following a six-hour debate in the British House of Commons in February 1979 on the review of the Mental Health Act, the reporter for the British Medical Journal stated: "On the question of consent to treatment there were two safeguards for the patient in circumstances where staff had to override his wishes. Firstly, treatment should be imposed against the patient's wishes only if it is necessary to save life, to prevent violence, or to prevent deterioration in the patient's condition. Secondly, the Government had proposed that except in an emergency the patient's wishes should be overridden only when a concurring second opinion had been obtained."

From the above it is evident that psychiatrists have a growing obligation to evaluate, as objectively as possible, the patient's prognosis for behaviour dangerous to self or to others before subjecting the patient to involuntary treatment. In Britain it appears that the psychiatrist may still order involuntary treatment "to prevent deterioration in the patient's condition"; in the United States, the patients' rights movement seems to make this increasingly difficult, and only behaviour imminently dangerous may justify involuntary treatment. In Canada, as is so often the case, we seem to be somewhere in between the British and the American situation.

In true emergencies, that is, where a patient's behaviour due to mental illness is obviously dangerous to himself or to others, the medical profession has great leeway to intervene energetically with therapeutic and preventive motivation. In fact, society confers on the physician the obligation to treat the patient until the emergency is over. This may be a matter of minutes, hours, or days, but rarely longer than that. Of course the emergency may recur, especially if definitive treatment is not instituted.

There are also two related questions which are not always easy to answer: When is the emergency over? Who defines what is an "emergency"? The psychiatrist has to observe the patient closely for at least the period of time when he believes that the emergency still exists, and for some time afterwards, and he also has to take into account other people's opinions as to what constitutes an emergency even if he himself does not think there is one, or vice versa. In any case, the psychiatrist has to get to know the patient as quickly as possible, and dispel the uncertainties in his mind and that of those closely associated with the patient (family, friends, employers, police, hospital staff, and so on).

Once the psychiatrist has decided that emergency treatment is indicated, he has available a choice of measures including a forceful verbal approach to the patient, seclusion, manual or mechanical restraints, or various drugs administered orally or parenterally

("chemical restraint"). Fortunately, these measures are in most cases effective and relatively harmless.

The difficult ethical problem does not exist so much at the beginning of the emergency, but later on: at what point in time is the psychiatrist no longer justified in treating the patient without a valid consent? It is here that the psychiatrist's knowledge and skill have to be optimally applied; it is hoped that this paper will help the psychiatrist to weigh the various factors before proceeding with the treatment.

A comment concerning the emergency treatment given by non-psychiatric physicians to patients who have made suicidal attempts: it would appear to be more ethical for such physicians, especially those working in general hospitals with psychiatrists on the staff, to request a psychiatric consultation before sending the patient home than to omit this. This statement is not intended to question the ability of the non-psychiatric physician to handle emergencies occasioned by patients with mental disorders, but merely to point out an ethical aspect of the situation. It is suggested here that the medical staff by-laws of general hospitals with departments of psychiatry or psychiatrists on their staff include a consideration of this matter.

Psychiatrist's Duties to Patient Versus Duties to Society

The psychiatrist is often called upon to "wear two hats," one as the patient's therapist, when his allegiance is with the patient, and the other, when he has to communicate with third parties such as giving explanations to the patient's family or other interested persons, when he has to make reports to the courts, or declare the patient incompetent for one reason or another. In acting thus as a "double agent," the psychiatrist must always establish his own priorities in terms of his ethics, the reality of the situation, his relationship with the patient, and his responsibility to both the patient and the public. Since so many psychiatric patients are uncooperative or lack insight, the psychiatrist in making decisions may disregard the patient's present attitude to treatment for the sake of obtaining a good result later on. Does the end justify the means? In any case, the psychiatrist should inform the various parties concerned what action he or she is going to take.

Related to this issue is the question of the choice of therapist: does the patient have the right to choose his psychiatrist? There are many problems in the organization of psychiatric services in hospitals, and with the widespread shortage of psychiatrists, patients often do not have much choice, if any. Thus one patient may find himself with an attending psychiatrist who is rather authoritative, whereas another patient has one who is much more permissive. The first type of psychiatrist is more likely to prescribe involuntary treatment than the second. This is an ethical problem insofar as in the first case the patient is more likely to complain, while in the second case the relatives are more likely to complain about the psychiatrist's attitude, with the result that society accuses psychiatrists as a group of being inconsistent.

"Judicialization" Versus "Psychiatrization"

By "judicialization" is meant the excessive involvement of the legal profession in decision-making concerning the mentally ill just as the word "psychiatrization" implies the excessive involvement by psychiatrists in matters (sometimes remotely) related to mental health or mental illness. Redlich and Mollica have stated that: "Psychiatrists in general opt for medical informality rather than for legal formality and for flexible medical therapeutic action rather than bureaucratic and legal surveillance . . . The control of deviance - largely forced upon psychiatry by society - is more of a curse than a boon to our profession . . . we should be happy to leave it in the hands of the law for enforcement."

The history of the relationship between the legal and medical professions is lengthy and full of controversy, with the pendulum swinging from side to side insofar as ultimate authority is concerned. We now appear to be in a phase where the legal profession has the ascendancy, and psychiatrists, particularly in the United States, seem to be more affected by the phenomenon of "judicialization" than the legal profession is by the phenomenon of "psychiatrization". In Canada a similar tendency is discernible but to a lesser extent. One may assume that the excesses of the one side are a reaction to the excesses of the other; our primary goal should be to avoid such excesses.

Sharing of Decision-Making

If we are to conceptualize the doctor-patient relationship as a form of partnership, we must recognize that the degree of cooperation attainable between the two depends to a large measure on the patients mental condition: to the extent that the latter

precludes cooperation, third parties may be called upon to enter this relationship. A partial list of such "third parties" would include another physician; another health professional; relatives and friends; a guardian, trustee, or curator; an ombudsman; a citizen advocate; the clergy; and members of the legal profession. With such a variety of persons who may be involved in patient management, the subjective factor is bound to enter in, mistakes may occur and the art of public relations is very important. Psychiatrists are usually well trained in the dynamics of interpersonal relationships and are in a good position to control the degree of involvement of third parties. The psychiatrist can usually decide who should be involved, when, and to what extent, but there are many uncontrollable and unforeseeable situations where this is not possible. When decisions are made to treat a patient against his will, it becomes that much more important to have the other appropriate parties well briefed, and to make frequent reviews with them of the effectiveness of the treatment plan.

Returning to the issue of who should have the ultimate authority for instituting involuntary treatment, ideally this is a decision which should be shared by the attending physician and a judge according to "due process of law." For strictly practical reasons, medical decision-making saves a lot of time, and may save lives. (For instance, it was reported that a depressed patient jumped out of a window of a court house while the psychiatrists had to wait for the judge's decision.) In that sense, it is more ethical not to rely on the conventional legal system, because it tends to be unwieldy and slow. If a judge were readily available at the treatment centre, the problem might be solved; but this is an expensive arrangement, and has not been instituted anywhere as far as we know. In the meantime it will be necessary in most instances for the attending psychiatrist or other physician, as the case may be, to decide when a patient's objection should be overruled and when not. In any doubtful case, it is advisable to obtain the opinion of a colleague. In extreme cases, judicial opinion should be sought.

Recommendations

Psychiatrists must consider carefully the semantics of "involuntary treatment" and help to explain to the public the difference between involuntary hospitalization ("commitment") and involuntary treatment. They are to evaluate carefully the equations "least intrusive versus most effective treatment" and "effective treatment in exchange for loss of freedom." The attending psychiatrist is to attempt to have a continuing dialogue with an objecting patient to try to persuade him to accept treatment on a voluntary basis. In emergencies, the attending psychiatrist is to carry out promptly all the necessary treatments, but when the emergency is over, he should carefully review with the patient what was done and what still remains to be done. It is therefore recommended:

1. That a patient's objection to treatment be respected when the patient is competent to give or refuse consent to treatment.
2. That psychiatrists continue to be allowed, under mental health legislation, to overrule patients' objections to treatment when it is obvious that the treatment is urgently needed; and that treatment may be continued as necessary when it will result in great improvement of the patient's condition.
3. That when acting in the interests of both the patient and a third party (relative, judge) the attending psychiatrist inform the patient of it and establish his priorities in terms of ethics, the reality of the situation, his relationship with the patient, and his responsibility to the patient and to the public.
4. That psychiatrists cooperate closely with general practitioners and other specialists with regard to the necessity for involuntary treatment of physical illness(es) that a mentally ill patient may have.
5. That psychiatrists continue to be allowed under mental health legislation to exercise their right to discharge from hospital uncooperative patients, taking careful account of the patient's actual mental condition and the alternatives available to the patient for continuing care and supervision.
6. That psychiatrists respect the due process of law as it exists and strive to influence for improvement provincial mental health legislation and regulation to ensure that their patients receive the best possible medical care.
7. That the attending psychiatrist involve an appropriate third (neutral) party or at least consult a colleague when a difficult decision has to be made to treat a patient involuntarily.

GUIDELINES FOR THE PREVENTION OF STROKE IN PATIENTS WITH STROKE OR TRANSIENT ISCHEMIC ATTACK: A GUIDELINE FOR HEALTHCARE PROFESSIONALS FROM THE AMERICAN HEART ASSOCIATION/AMERICAN STROKE ASSOCIATION

Furie KL et al. - Stroke 2011 Jan

About one in four strokes that occur annually are recurrent events. The American Heart Association/American Stroke Association has now updated its 2006 evidence-based recommendations for the prevention of stroke among survivors of ischemic stroke or transient ischemic attack (TIA). The guidelines include recommendations, rated by class (degree of treatment effect) and evidence level, for risk-factor control, antithrombotic therapies, interventional approaches for atherosclerotic disease, and treatment of unusual stroke mechanisms.

Several previous recommendations are reiterated with additional support from new research. For example, stenting is considered a viable alternative to endarterectomy for patients with symptomatic, severe carotid stenosis and low risk for endovascular complications, based on the Carotid Revascularization Endarterectomy versus Stenting Trial (Class I; Level of Evidence B).

New recommendations include the following:

- For patients with carotid artery stenosis and a TIA, optimal medical therapy should include antiplatelet therapy, statin treatment, and risk factor modification (Class I; Level B).
- Patients with a stroke or TIA caused by 50% to 99% stenosis of a major intracranial artery should receive aspirin (preferably at doses of 50-325 mg/day) and not warfarin (Class I; Level B); may "reasonably" have a blood pressure goal of <140/90 mm Hg and a total cholesterol goal of <200 mg/dL (Class IIb; Level B); and should not undergo extracranial/intracranial bypass (Class III; Level B).
- Stroke patients with the metabolic syndrome should be counseled on lifestyle modification. (Class I; Level C), and components of the syndrome that are stroke risk factors should be treated (Class I; Level A).
- For patients with atherosclerotic ischemic stroke or TIA and without known coronary heart disease, LDL cholesterol 100 mg/dL should be treated, with the aim of at least a 50% reduction or a target of <70 mg/dL (Class IIa; Level B).
- For atrial fibrillation patients at high risk for stroke who require brief interruption of oral anticoagulation, low-molecular-weight heparin, administered subcutaneously, can be used as bridging therapy (Class IIa; Level C).
- For atrial fibrillation patients with a hemorrhagic contraindication to warfarin, the committee advises using aspirin alone, rather than with clopidogrel, because the combination carries a bleeding risk similar to that of warfarin (Class III; Level B).

Comment: In general, these updated guidelines emphasize a more intensive, multimodal medical treatment approach to reducing recurrent stroke risk, especially for patients with histories of atherosclerotic stroke or TIA. The new guidelines were written before publication of trials of various novel stroke risk-reduction strategies, including direct thrombin inhibitors; interval recommendations incorporating such research are expected before the next major guideline update.

http://neurology.jwatch.org/cgi/content/full/2011/308/1

TRAINEE SAFETY IN PSYCHIATRIC UNITS AND FACILITIES

A Moscovitch, MD, GA Chaimowitz, MD, PGR Patterson, MD

This position statement was prepared by the Professional Standards and Practice Council, chaired by Dr Paul GR Patterson, and was approved by the Board of Directors of the Canadian Psychiatric Association on March 31, 1990.

Although the literature on assaultive behaviour against staff is quite limited, some early studies indicate that the problem warrants serious attention. In three frequently quoted studies (1-3), Tardiff reported that approximately ten percent of patients admitted to hospital had been assaultive prior to or at the time of admission. In another study of patients hospitalized for more than one month Tardiff established that assaults were five times as frequent as suicide attempts or self-destructive behaviour (4). Career rates of assaults against psychiatrists are reported to be in the range of 40% to 50% (5). Another survey of 101 psychotherapists (psychiatrists, psychologists, and social workers) reported 24% being assaulted during the previous year and 74% assaulted at least once in the past (6).

The issues of trainee safety and minimum security standards in training facilities have been discussed by the Residents' Section of the CPA over the past several years. In the limited literature dealing specifically with residents, Ruben reported that 48% of residents surveyed were assaulted during their training (7). In a more recent study by Fink and Dubin, 42% of psychiatric residents reported being subjects of assaults by patients (8).

Although initially lacking systematic data, we suspected the Canadian experience was not substantially different. Like all frontline workers dealing with potentially violent patients, residents are in a position of high risk for assault. Compounding the difficulties was the general feeling among residents that assaults were characteristically under-reported, an impression which is fairly well substantiated in the literature. Lion concluded that five times as many assaults occurred as were formally reported (9). According to anecdotal reports, concerns raised by residents are often minimized by other residents and the hospital administration, and at times blatantly ignored and rejected. Without elaborating at length, possible reasons for this may include defenses of guilt, self-blame, counterphobic attitudes, and fear of criticism and repercussion from hospital and/or departmental authorities.

To assess the magnitude of this problem among psychiatric residents in Canada, we recently surveyed all members-in-training registered with the CPA. The survey included 211 residents, and we obtained an overall response rate of 64.5%. Of the respondents, 40.2% reported being assaulted by a patient at least once, 12.5% twice and 3.3% three or more times during their training. Of the residents assaulted, only 73.6% reported the incident(s) formally to the hospital and/or departmental authorities. Close to 40% of the respondents reported making a presentation to hospital and/or departmental authorities requesting improvement of safety standards. However, less than one-quarter of those felt that the response to their concerns was acceptable. Only 51.5% of the respondents reported receiving training in dealing with violent patients, and less than 25% felt that residents were adequately trained in this area. Only 35.1% indicated that they felt that the facilities for interviewing patients in their hospitals were safe, and 83.3% indicated that they would like to see an improvement in physical settings. Almost 80% wanted improvement in education and training of staff, while 44.4% felt that they would like to see an improvement in staffing arrangements. An overwhelming 97.7% indicated that they would like to see CPA guidelines for minimum security standards in training facilities.

The following guidelines have been developed by the Residents' Section of the CPA and the Council on Education and Professional Liaison, and adopted by

the CPA Board of Directors. They are intended to provide a framework for minimal standards and act as guidelines that can be used for plans for improvements at the policy and organizational levels. The guidelines are based on the principle of creating an environment in which the safety of patients and staff can be assured while pursuing therapeutic goals. These guidelines address issues of education and training, physical setting, staffing and implementation. Each psychiatric training facility should have clearly developed policies that cover these aspects.

I. Training and Education

1. Residents should have comprehensive training in dealing with violent patients at the outset of their residency.
2. Nursing and security staff and mental health personnel should also receive training in proper methods of handling violent patients.
3. Further systematic studies should be conducted in the following areas:
   a) early recognition of potential for aggressive behaviour;
   b) appropriate management of violent patients;
   c) effectiveness of training in increasing safety;
   d) predisposing factors for violence against staff.

II. Physical Setting

1. The physical layout of facilities for interviewing and treating patients should be safe and secure:
   a) Psychiatric interviewing rooms in emergency departments should be located in close proximity to the nursing station to ensure the availability of immediate assistance, if required.
   b) Interviewing rooms should have an accessible, functional alarm system which if activated produces an immediate and adequate response.
   c) Rooms should be devoid of dangerous objects. Furniture ideally should be securely fastened to the walls and/or floor. Doors should open outwards or revolve, and should not be lockable from the inside, nor capable of being barricaded.
2. Ideally, interviewing rooms should have setups for visual and/or auditory monitoring.
3. Sleeping quarters and offices for residents need to be secure from unauthorized intrusions.
4. A clear policy for restraining practices should be available in each facility, and restraints should be available in areas where violence can potentially occur.
5. Each facility should have an easily-identifiable alarm code that indicates a potential or actual assault. An adequate number of staff, physically suited and trained, should be available for immediate response.

III. Staffing Arrangements

1. Appropriate security personnel should be available for assistance if the patient has a history of violence, or should the resident suspect the potential for aggressive behaviour.
2. Police officers who bring in assaultive patients should be requested to remain available until the assessment is completed or until hospital security personnel have taken over. Police officers or security personnel should be expected to remain in close proximity while such patients are in the interviewing room or the emergency department.
3. A sufficient number of personnel with appropriate physical attributes and training should be available to respond to assault alarms. 4. Provisions should be made for security staff to be available in those instances where it is deemed necessary. Proper coverage should be available either for interview situations or when staff is required to move about in unobserved areas of the hospital.

IV. Implementation

1. Each facility should have a clearly defined, recognized authority responsible for the local implementation of security guidelines, and for documentation, support and follow-up once an episode of violence against staff has occurred. In training facilities, such a committee should also report to the departmental Postgraduate Education Committee.
2. Prompt, formal documentation and reporting of assaults should be encouraged.
3. Clear guidelines should be available for follow-up and support of assault victims. Each incident should be dealt with in an open fashion, and the resolution thereof should be acceptable to all parties involved.
4. Mechanisms should be established whereby residents have further recourse if minimum safety standards have not been met.

5. Residents or any other trainees should not be assigned to facilities that have an ongoing history of inappropriate safety standards. While insuring patient care, staff safety should always be taken into serious consideration. Residents or any other trainees should not be coerced into seeing potentially violent patients unless appropriate steps have been taken to maximize their safety and reasonable safety standards have been implemented.

We strongly believe that further systematic studies, discussion and attention to these matters are required. Although trainee safety is not just a psychiatric issue, too little attention has been paid to date to the unique features of psychiatric training with respect to dealing with potentially violent individuals. Areas of particular concern to residents are reasonable safety standards in training facilities, quality of training regarding management of violent patients, availability of appropriate assistance and support and departmental and institutional support in this matter.

(1) University of Calgary, Calgary, Alberta.
(2) Assistant Professor, McMaster University; Staff Psychiatrist, Hamilton General Hospital, Hamilton, Ontario.
(3) University of Western Ontario, London, Ontario.

PAKISTAN PSYCHIATRIC SOCIETY

RESULT OF ELECTION 2010

Ballot papers been posted 238. Ballot papers been received 173.Ballot papers been returned 7.

A)	**President Elect**		**VOTES**
	1. Syed Muhammad Sultan		77
	2. Mazhar Malik		96**(ELECTED)**
B)	**Vice Presidents**		
	1. Nisar Hussain		91**(ELECTED)**
	2. S. Ajmal Kazmi		122**(ELECTED)**
	3. Nasir Sayeed Khan		75
	4. M. Qasim Brohi		21
	5. M. Ajmal Mughal		17
C)	**General Secretary**		
	(from Province of Khyber Pakhtoon Khwa by virtue of rotation)		
	1. M. Aziz Yousafzai		**(ELECTED UNOPPOSED)**
D)	**Provincial Secretaries/Chapter Chiefs (Punjab, Sindh, Baluchistan, Khyber Pakhtoon Khwa & AJK-Gilgit Baltistan).**		
	1. Khalid Mahmood Mughal	(Punjab)	90 **(ELECTED)**
	2. Imtiaz A. Dogar	(Punjab)	73
	3. Ghulam Rasool	(Baluchistan)	(ELECTED UNOPPOSED)
	4. Khawaja Hamid Rashid	(AJK - Gilgit)	(ELECTED UNOPPOSED)
	5. Qazi Rashad Hameed	(KPK)	91 **(ELECTED)**
	6. Wajid Ali Akhunzada	(KPK)	75
	7. Sohail Ahmed	(Sindh)	65
	8. Abdul Hameed Memon	(Sindh)	101 **(ELECTED)**
E)	**Treasurer**		
	(from Province of Khyber Pakhtoon Khwa by virtue of rotation)		
	1. Ashfaq Ali		**(ELECTED UNOPPOSED)**
F)	**Members of Executive Committee.**		
	1. Prof. (R) Muhammad Sharif Ch.		122 **(ELECTED)**
	2. Imran Ijaz Haider		82 **(ELECTED)**
	3. Muhammad Jamil Akhtar		83 **(ELECTED)**
	4. Khalid Masood Ahmad		64
	5. Mahmood Ali Shah		75
	6. Anwar Ul Haq		89 **(ELECTED)**
	7. Darya Khan Laghari		99 **(ELECTED)**
	8. Niaz Masood		53
	9. Majid Ali Abidi		68
	10. AltafQadir		80 **(ELECTED)**
	11. Col (R) Masood Ahmed		32
	12. Naveed Irfan		45
	13. Mian Iftikhar Hussain		46
	14. Mian Mukhtar ul Haq Azeemi		49
	15. Javaid Akhtar		16

Prof. Muhammad Riaz Bhatti
Election Commissioner PPS 2010 Date 22.11.2010

PERIPHERAL REDUCTION OF B-AMYLOID IS SUFFICIENT TO REDUCE BRAIN B-AMYLOID: IMPLICATIONS FOR ALZHEIMER'S DISEASE

J. Gregor Sutcliffe, & others Journal of Neuroscience Research

In the study, the scientists used a mouse model for Alzheimer's disease to identify genes that influence the amount of amyloid that accumulates in the brain. They found three genes that protected mice from brain amyloid accumulation and deposition. For each gene, lower expression in the liver protected the mouse brain. One of the genes encodes presenilin – a cell membrane protein believed to contribute to the development of human Alzheimer's.

This unexpected finding holds promise for the development of new therapies to fight Alzheimer's, this could greatly simplify the challenge of developing therapies and prevention. An estimated 5.1 million Americans have Alzheimer's disease, including nearly half of people age 85 and older. By 2050, the number of people age 65 and over with this disease will range from 11 million to 16 million unless science finds a way to prevent or effectively treat it. In addition to the human misery caused by the disease, there is the unfathomable cost. A new report from the Alzheimer's Association shows that in the absence of disease-modifying treatments, the cumulative costs of care for people with Alzheimer's from 2010 to 2050 will exceed $20 trillion.

A Genetic Search-and-Find Mission

In trying to help solve the Alzheimer's puzzle, in the past few years Sutcliffe and his collaborators have focused their research on naturally occurring, inherited differences in neurological disease susceptibility among different mouse strains, creating extensive databases cataloging gene activity in different tissues, as measured by mRNA accumulation. These data offer up maps of trait expression that can be superimposed on maps of disease modifier genes.

As is the case with nearly all scientific discovery, research builds on previous findings. Several years ago, researchers mapped three genes that modify the accumulation of pathological beta amyloid in the brains of a transgenic mouse model of Alzheimer's disease to large chromosomal regions, each containing hundreds of genes. The scientists used crosses between the B6 and D2 strains of mice, studying more than 500 progeny. Using the results from this study the reasearcher turned databases of gene expression to the mouse model of Alzheimer's, looking for differences in gene expression that correlated with differences in disease susceptibility between the B6 and D2 strains. This intensive work involved writing computer programs that identified each genetic difference that distinguished the B6 and D2 genomes, then running mathematical correlation analysis (known as regression analysis) of each difference. Correlations were made between the genotype differences (B6 or D2) and the amount of mRNA product made from each of the more than 25,000 genes in a particular tissue in the 40 recombinant inbred mouse strains. These correlations were repeated 10 times to cover 10 tissues, the liver being one of them.

A key aspect of this work was learning how to ask questions of massive data sets to glean information about the identities of heritable modifier genes. This was novel and, in a sense, groundbreaking work: we were inventing a new way to identify modifier genes, putting all of these steps together and automating the process. We realized we could learn about how a transgene's pathogenic effect was being modified without studying the transgenic mice ourselves.

Looking for a Few Good Candidates

Gene hunt offered up good matches, candidates, for each of the three disease modifier genes discovered by the Case Western scientists, and one of these

candidates -- the mouse gene corresponding to a gene known to predispose humans carrying particular variations of it to develop early-onset Alzheimer's disease -- was of special interest to his team.

The product of that gene, called Presenilin2, is part of an enzyme complex involved in the generation of pathogenic beta amyloid. Unexpectedly, heritable expression of Presenilin2 was found in the liver but not in the brain. Higher expression of Presenilin2 in the liver correlated with greater accumulation of beta amyloid in the brain and development of Alzheimer's-like pathology.

This finding suggested that significant concentrations of beta amyloid might originate in the liver, circulate in the blood, and enter the brain. If true, blocking production of beta amyloid in the liver should protect the brain.

To test this hypothesis, team set up an in vivo experiment using wild-type mice since they would most closely replicate the natural beta amyloid-producing environment. It was reasoned that if brain amyloid was being born in the liver and transported to the brain by the blood, then that should be the case in all mice, and one would predict in humans, too.

The mice were administered imatinib (trade name Gleevec, an FDA-approved cancer drug), a relatively new drug currently approved for treatment of chronic myelogenous leukemia and gastrointestinal tumors. The drug potently reduces the production of beta amyloid in neuroblastoma cells transfected by amyloid precursor protein (APP) and also in cell-free extracts prepared from the transfected cells. Importantly, Gleevec has poor penetration of the blood-brain barrier in both mice and humans.

This characteristic of the drug is precisely why we chose to use it. Because it doesn't penetrate the blood-brain barrier, we were able to focus on the production of amyloid outside of the brain and how that production might contribute to amyloid that accumulates in the brain, where it is associated with disease.

The mice were injected with Gleevec twice a day for seven days; then plasma and brain tissue were collected, and the amount of beta amyloid in the blood and brain was measured. The findings: the drug dramatically reduced beta amyloid not only in the blood, but also in the brain where the drug cannot penetrate. Thus, an appreciable portion of brain amyloid must originate outside of the brain, and imatinib represents a candidate for preventing and treating Alzheimer's.

http://www.sciencedaily.com/releases /2011/03/110303134435.htm

ULTRASENSITIVE HUMAN PRION DETECTION IN CEREBROSPINAL FLUID BY REAL-TIME QUAKING-INDUCED CONVERSION

Atarashi R et al. n. Nat Med 2011

When prion brain disease, such as Creutzfeldt-Jakob disease (CJD), is suspected, the only definitive diagnostic test is brain biopsy. However, this procedure can cause complications for the patient and risk for the medical team who must handle the biopsy tissue.

A Japanese team developed a test to detect very small amounts of human prion protein (PrPSc). They evaluated the test's accuracy using spinal fluid from several groups of patients with CJD and from control patients with non-prion neurodegenerative diseases. The test was 83% sensitive and 100% specific (i.e., no false-positives occurred) in an initial group of 18 CJD case patients and 35 controls from Japan. In spinal fluid from an additional 25 CJD case patients and 130 controls, the sensitivity was 88%, and the specificity was again 100%.

Comment: A spinal fluid test could be quite accurate in identifying CJD patients. Another test of spinal fluid - 14-3-3 protein - has been reported to have a similar sensitivity but also a substantial false-positive rate so this new test takes us a step forward. The report does not state how clinically advanced the disease was in the tested CJD cases, so whether the test is valuable for diagnosing CJD in its early stages is unclear.

http://general-medicine.jwatch.org/cgi/content/full/2011/217/7

NEURAL SYSTEMS PREDICTING LONG-TERM OUTCOME IN DYSLEXIA

Hoeft F et al_ PNAS 2010

Functional neuroimaging of the brain demonstrated greater than 90% accuracy for identifying children with dyslexia who would improve significantly over time, a small clinical study suggested.

The study, which involved 25 dyslexic children and 20 normal controls, showed that functional MRI (fMRI) and diffusion tensor imaging (DTI) were able to predict gains in reading among those with dyslexia during 2.5 years of follow-up.

In particular, two types of fMRI findings predicted significant gains in reading -- increased prefrontal activation during a reading task and increased white-matter organization in the right superior longitudinal fasciculus.

No behavioral measure, including widely used reading and language tests, has been able to predict future reading gains.

This gives us hope that we can identify which children might get better over time. More study is needed before the technique is clinically useful, but this is a huge step forward.

Dyslexia affects 5 to 17% of children, but some are able to compensate for their difficulty reading while other kids struggle to read and learn, according to background provided in the paper.

The reason this is exciting is that until now, there have been no known measures that predicted who will learn to compensate.

Functional neuroimaging in dyslexia has focused on identifying neural correlates of the condition but also has identified neural systems that could mediate successful remediation. Multiple reports in the literature have documented hypoactivation in children and adults with dyslexia during reading-related tasks, the authors noted.

Studies also have documented hyperactivation, most often in the left and right inferior frontal gyri. Hyperactivation might reflect compensatory processes to overcome dysfunction in left posterior cortical areas involved in phonological and orthographic processes, the authors continued.

Activation of the ventral inferior frontal gyri has been reported to increase with age in children with dyslexia "possibly a sign of developing compensatory abilities " but not in typically developing children (Biol Psychiatry 2002; 52: 101-110). The observation raises the possibility that children with dyslexia improve reading by relying on atypical involvement of inferior frontal gyri regions for reading.

This possibility can be evaluated prospectively by testing the hypothesis that greater involvement of the inferior frontal gyri in reading predicts future long-term gains in reading for children with dyslexia.

To test the hypothesis, investigators studied 25 children with dyslexia and 20 matched controls without dyslexia, all of whom were about 14 at enrollment. Each participant completed a battery of standardized tests of reading and language at baseline.

Neuroimaging consisted of fMRI and DTI. During fMRI assessment, participants performed a printed-word rhyme judgment task designed to invoke the phonological analysis of orthographic input, the presumed core deficit in dyslexia.

The participants repeated the reading and language tests 2.5 years later. Investigators evaluated the change from baseline in the participants' test performance and compared the results with the baseline neuroimaging. The change in reading performance was determined by means of a standardized measure of single-word reading accuracy.

None of the reading or language tests predicted improvement in reading during follow-up. In contrast, single-word reading improvement in the dyslexia group correlated significantly with activation of the inferior frontal gyri (P=0.04) seen on fMRI. Moreover, the right inferior frontal gyri region was the only area that showed a positive correlation with reading gains

when the whole brain was examined.
No region of the brain showed a significant negative correlation with reading performance in the dyslexia group.
Baseline DTI also predicted future improvement in reading. Change in single-word reading performance correlated with baseline fractional anisotropy values in the right superior longitudinal fasciculus (P=0.03). The fractional anisotropy values correlated significantly with brain activation in the right inferior frontal gyri on functional MRI (P=0.04).
The median value for the change in reading performance was 1.65 units per year. In the dyslexia group, participants who had values above the median exhibited significant improvement in single-word reading and reading comprehension, but participants with values below the median did not.
Investigators performed whole-brain multivariate pattern analyses to determine whether whole-brain activation patterns could distinguish study participants in the dyslexia group by change in reading ability. They correctly classified the participants with 92% accuracy.
Adding other measures to the imaging results did not improve classification accuracy but instead reduced the accuracy to the range of 48% to 80%, depending on the measure applied.
None of the neuroimaging parameters predicted change in reading ability in the control group.
The findings have two key implications for the education of children with dyslexia.
First, it appears that gains in reading for dyslexic children reflect, at least in part, different neural mechanisms and pathways than those that support gains in reading for typically developing children.
This finding encourages consideration of intervention approaches that capitalize on alternative reading strategies in addition to current interventions that building on typical reading instruction.
Second, although functional MRI is typically viewed as a research tool that has little practical implication for an individual with dyslexia, the present studies ... suggest that brain measures may already better predict long-term outcomes in reading development than available behavioral measures.

http://www.medpagetoday.com/24011

EFFICACY OF PHYSIOTHERAPY INTERVENTIONS LATE AFTER STROKE: A META-ANALYSIS

Ferrarello F et al.. J Neurol Neurosurg Psychiatry 2011 Feb

Physiotherapy is usually provided in the first months after a stroke; its effectiveness in the chronic phase is uncertain. The authors of this article conducted a systematic review and meta-analysis of randomized clinical trials to evaluate motor and functional recovery outcomes when physiotherapy is provided late after stroke. They identified 15 published studies with a total of 700 patients randomized to an active, conventional lower-extremity physiotherapy intervention, compared with placebo or no intervention, at least 6 months after a stroke.
The meta-analysis of primary outcomes from the studies showed a significant effect of active intervention on short- and long-distance walking tests (weighted mean difference from baseline for both measures, 8%). The activities of daily living score improved nonsignificantly in the intervention groups.
Comment: These findings have valuable clinical and public health implications. As a rule, general rehabilitation centers for stroke deliver more-intensive therapy during the initial phase after stroke, with a gradual decrease thereafter. Physical therapy is usually not provided 6 to 12 months after the stroke because patients appear to reach a plateau at that point and fail to respond to prolonged treatment. The magnitude of the improvements observed in this study is not that impressive clinically. Nonetheless, these findings challenge the concept of the plateau, which might actually stem from delivery of less-intensive therapy. Analyses of cost-effectiveness and identification of predictors of recovery would help healthcare systems and clinicians make decisions about therapy duration and intensity. Unfortunately, robust evidence is lacking for the effectiveness of many prevalent poststroke rehabilitation interventions.

http://neurology.jwatch.org/cgi/content/full/2011/222/2

AGE-RELATED REDUCTION IN DAY TIME SLEEP PROPENSITY AND NOCTURNAL SLOW WAVE SLEEP

Dijk DJ, et al _ Sleep 2010

Compared with 20-somethings and seniors, middle-age adults are less likely to suffer daytime sleepiness when they don't get a good night's sleep.

When three groups of healthy adults -- young (20 to 30 years old), middle-age (40 to 55) and older (66 to 83) -- were studied over four nights, slow wave sleep decreased and the number of nocturnal awakenings progressively increased with age.

As the likelihood for eight hours of uninterrupted deep sleep decreased with age, there was no increase in the likelihood of daytime sleepiness, which led to conclude that as people age there may be a change in the sleep (duration and depth) required to maintain alertness.

Based on that observation, it could be argued that an eight-hour episode rich in [slow wave sleep] is insufficient for young adults but that an eight-hour sleep episode with less slow wave sleep] is sufficient for older adults.

As a result, middle-age and older adults are less likely to build up "sleep debt" during the daylight hours, so they manage with less time in deep sleep at night, less homeostatic sleep pressure.

The authors hypothesized that this apparent need for less sleep may be a factor in age-related insomnia.

If older adults are unaware of the need for less sleep, their self-selected time in bed, which provides an input to the sleep homeostat, may become maladaptive and lead to reduced sleep consolidation and associated complaints.

44 young adults, 35 middle-age adults, and 31 older adults were recruited for the study. All were healthy at baseline and all were initially assessed for an eight-hour nocturnal sleep episode.

They were then randomized to two nights of either selective short wave sleep interruption by acoustic stimuli or sleep without disruption, followed by one night of recovery sleep.

Two standardized measurement tools, the Multiple Sleep Latency Test (MSLT) and the Karolinska Sleepiness Scale (KSS), were used to assess objective and subjective sleep propensity.

Total sleep time per eight hour time in bed decreased significantly and progressively across the age groups such that older adults slept approximately 20 minutes less than middle-aged, who slept 23 minutes less than young adults.

The reduction in total sleep time was primarily related to an increase in the number of awakenings and the duration of wakefulness after sleep onset, rather than an increase in latency to sleep onset.

As a result, sleep efficiency decreased significantly from 92.1% for the youngest group, to 82% for the older group (effect of age, $P<0.0001$).

The subjective sleep propensity tests revealed that young people were significantly sleepier than the middle-age people, who were the least sleepy of the three groups. Daytime sleepiness for the oldest group "fell in between the other two groups and was not significantly different from either."

All three groups, regardless of age, demonstrated increased daytime sleepiness following a night of experimental disruption of slow wave sleep, but when the participants had an uninterrupted eight hours of deep sleep it was only the youngest group that was drowsy during the daytime hours.

It was noted that although there was less daytime sleepiness among middle-age and older adults in this study, sleep propensity was not measured during the evening hours, so it was possible that the age-related difference might diminish at twilight.

http://www.medpagetoday.com/18221

BRAIN SCANS OF THE FUTURE

Psychologists Use fMRI To Understand Ties Between Memories And The Imagination

Psychologists have found that thought patterns used to recall the past and imagine the future are strikingly similar. Using functional magnetic resonance imaging to show the brain at work, they have observed the same regions activated in a similar pattern whenever a person remembers an event from the past or imagines himself in a future situation. This challenges long-standing beliefs that thoughts about the future develop exclusively in the frontal lobe.

Remembering your past may go hand-in-hand with envisioning your future! It's an important link researchers found using high-tech brain scans. It's answering questions and may one day help those with memory loss.

For some, the best hope of 'seeing' the future leads them to seek guidance -- perhaps from an astrologist. But it's not very scientific. Now, psychologists at Washington University are finding that your ability to envision the future does in fact goes hand-in-hand with remembering the past. Both processes spark similar neural activity in the brain.

"You might look at it as mental time travel--the ability to take thoughts about ourselves and project them either into the past or into the future," says Kathleen McDermott, Ph.D. and Washington University psychology professor. The team used "functional magnetic resonance imaging" -- or fMRI -- to "see" brain activity. They asked college students to recall past events and then envision themselves experiencing such an event in their future. The results? Similar areas of the brain "lit up" in both scenarios.

"We're taking these images from our memories and projecting them into novel future scenarios," says psychology professor Karl Szpunar.

Most scientists believed thinking about the future was a process occurring solely in the brain's frontal lobe. But the fMRI data showed a variety of brain areas were activated when subjects dreamt of the future.

"All the regions that we know are important for memory are just as important when we imagine our future," Szpunar says.

Researchers say besides furthering their understanding of the brain -- the findings may help research into amnesia, a curious psychiatric phenomenon. In addition to not being able to remember the past, most people who suffer from amnesia cannot envision or visualize what they'll be doing in the future -- even the next day.

BACKGROUND:

Researchers from Washington University in St. Louis have used advanced brain imaging techniques to show that remembering the past and envisioning the future may go hand-in-hand, with each process showing strikingly similar patterns of activity within precisely the same broad network of brain regions. This suggests that envisioning the future may be a critical prerequisite for many higher-level planning processes in the brain.

WHAT IS fMRI:

Magnetic resonance imaging (MRI) uses radio waves and a strong magnetic field rather than X-rays to take clear and detailed pictures of internal organs and tissues. fMRI uses this technology to identify regions of the brain where blood vessels are expanding, chemical changes are taking place, or extra oxygen is being delivered. These are indications that a particular part of the brain is processing information and giving commands to the body. As a patient performs a particular task, the metabolism will increase in the brain area responsible for that task, changing the signal in the MRI image. So by performing specific tasks that correspond to different functions, scientists

can locate the part of the brain that governs that function.

ABOUT THE STUDY:

The researchers relied on fMRI to capture patterns of brain activation as college students were given 10 seconds to develop a vivid mental image of themselves or a famous celebrity participating in a range of common life experiences. Presented with a series of memory cues -- such as getting lost, spending time with a friend, or attending a birthday party -- participants were asked to recall a related event from their own past; to envision themselves experiencing such an event in their future life; or to picture a famous celebrity (specifically, former U.S. president Bill Clinton) participating in such an event.

WHAT THEY FOUND:

Comparing images of brain activity in response to the 'self-remember' and 'self future' event cues, researchers found a surprisingly complete overlap among regions of the brain used for remembering the past and those used for envisioning the future. The study clearly demonstrates that the neural network underlying future thoughts is not only happening in the brain's frontal cortex. Although the frontal lobes play an important role in carrying out future-oriented operations -- such as anticipation, planning and monitoring -- the spark for these activities may be the process of envisioning yourself in a specific future event. And that's an activity based on the same brain network used to remember memories about our own lives. Also, patterns of activity suggest that the visual and spatial context for our imagined future is often pieced together using our past experiences, including memories of specific body movements: data our brain has stored as we navigated through similar settings in the past.

EFFICACY OF ESCITALOPRAM FOR HOT FLASHES IN HEALTHY MENOPAUSAL WOMEN: A RANDOMIZED CONTROLLED TRIAL

Freeman EW et al. - JAMA 2011

Nonhormonal management of menopausal vasomotor symptoms (VMS) continues to garner interest; however, study results have shown that such approaches have had only moderate efficacy, and hormone therapy remains the only FDA-approved treatment for this indication. Investigators randomized 205 perimenopausal or postmenopausal women (age range, 40-62) with 28 weekly bothersome hot flashes or night sweats to receive the selective serotonin reuptake inhibitor (SSRI) escitalopram (Lexapro; 10 mg with escalation to 20 mg as needed) or placebo daily for 8 weeks.

At 8 weeks, mean daily hot-flash frequency had declined from 9.8 at baseline to 5.3 in the escitalopram group and 6.4 in the placebo group (P<0.001). No serious treatment-related adverse events requiring study withdrawal occurred. Patient satisfaction with treatment was 70% and 43% in the escitalopram and placebo groups, respectively (P<0.001).

Comment: Several trials of SSRIs for managing vasomotor symptoms have involved breast cancer survivors who have VMS associated with antiestrogen therapy. Although the authors of this well-conducted study have demonstrated convincingly that escitalopram is more effective than placebo in treating healthy menopausal women with VMS, I expect that its efficacy would not approach that of hormone therapy in a direct comparison. Given the modest efficacy of nonhormonal treatments for VMS, I agree with the perspective voiced by the authors of a recent meta-analysis of such options: "These therapies may be most useful for highly symptomatic women who cannot take estrogen but are not optimal choices for most women."

http://womens-health.jwatch.org/cgi/content/full/2011/210/1?q=etoc_jwpsych

ALZHEIMER'S SCOURGE HANGS OVER ILL-PREPARED ASIA

By Tn Ee Lyn

Asia's fast-ageing population will make up more than half of the world's dementia patients in 40 years, with China shouldering the biggest chunk.

With very few skilled nursing homes, day-care facilities or plans to build many more, health experts say the region is ill-prepared to tope with the sharp increase in patients needing such specialized and intensive care.

"Asia will bear the; burden because of the ageing population in China ... figures in China will be tremendous," Dr David Dai, coordinator of the Hong Kong Alzheimer's Disease Association.

"We are not prepared. The whole of southeast Asia is not prepared," gerontologist Dai said in an interview.

More than 35 million people suffer from Alzheimer's disease (AD) and other forms of dementia, a number expected to almost double by 2030 and pass 115 million by 2050, according to Alzheimer's Disease-International (ADI).

Alzheimer's, the most common form of dementia, robs people of their memory and thought processes and, eventually, bodily functions.

In Asia, 13.7 million people had Alzheimer's or other forms of dementia in 2005. That is ex-pected to grow to 23.7 million by 2020 and 64.6m by 2050. China alone will have 27 million sufferers by 2050 and India 16m according to ADI.

About 10 per cent of those in their 70s can expect to have dementia, and 30 per cent of those in their 80s.

"Everyone will experience this, every family. It is now common to live to your 80s," said Peter Yuen, director of the Public Policy Research Institute at the Hong Kong Polytechnic University.

In the United States, the annual amount spent by the government, private insurance and individuals to care for people with AD, is projected to jump more than six-fold lo $1.08 trillion by 2050, according to the Alzheimer's Association. The costs are just as substantial elsewhere.

Yuen, whose mother has Alzheimer's, told a recent AD symposium in Hong Kong that four years of day-care and two years of residential care in a general nursing home in Hong Kong would cost HK$540,000 (US$69,000) per patient. But even that is an underestimate for 82-year-old Aw Beksum, whose children have had to fork out 11015,000 (US$1,920) each month to take care of her since she was diagnosed with Alzheimer's four years ago. The sum covers day-care, visits to the doctor, a domestic helper and household expenses.

"It's devastating for families with AD patients. There is just not enough support," Yuen said lie proposes long-term financing or some form of pooled insurance for patients who are chronically ill so that services will be made available once the ability to pay is assured.

Dedicated facilities for AD patients are scarce in Asia. Hong Kong has 110,000 patients but only 299 places in four day-care centres and not a single residential care facility. Many end-stage sufferers are put into general nursing homes where staff are not trained to care for them.

In Malaysia, an estimated 50,000 people suffer from dementia. China has up to S million dementia patients, but very few hospitals in the country, have independent dementia units. By 2030, one in every four Chinese will be over 60.- Reuters

MRI FINDINGS MAY TRACK RISK OF COGNITIVE IMPAIRMENT IN HEALTHY SENIORS

Lisa Silbert, MD - Neurology

Progression of white matter lesions detected with MRI may predict the risk of developing mild cognitive impairment, a possible precursor to Alzheimer's disease or other types of dementia.

Healthy older individuals with the greatest growth in white matter hyperintensities were most likely to develop persistent cognitive impairment.

However, baseline burden of these lesions was not associated with risk of developing problems with cognition.

There is need to determine factors that can decrease the accumulation of white matter hyperintensities over time, also need to determine how to identify those who are vulnerable to this accumulation so they can be targeted for potential early prevention or treatment methods.

White matter changes seen as bright spots on MRI scans are commonly seen in older individuals, the researchers said, and they have been associated with cognitive changes and conversion to mild cognitive impairment.

To explore the association between the progression of white matter hyperintensities with the risk of developing impaired cognition,.

They followed 49 participants who were at least 65 years old (mean age 84) and were free from cognitive impairment at baseline.

Through an average follow-up of 9.5 years, all participants had at least three brain MRI scans and annual cognitive and neurological assessments. None was taking medication that affected cognition.

During the study, 24 subjects developed persistent cognitive impairment, which is a potential precursor to Alzheimer's disease and vascular dementia.

After adjusting for age, those who lacked the apolipoprotein E4 allele were less likely to develop persistent cognitive impairment (HR 0.61, 95% CI 0.45 to 0.84).

In an analysis adjusting for age, incident hypertension, apolipoprotein E4 status, intracranial volume, baseline cognitive status, baseline hippocampal volume, baseline ventricular cerebrospinal fluid volume, and baseline MRI volume for each region of interest, increased progression (every 1 mL/year) of total white matter hyperintensity volume (HR 1.84, 95% CI 1.3 to 2.7) and periventricular white matter hyperintensity volume (HR 1.94, 95% CI 1.3 to 3.1) was associated with a greater risk of cognitive impairment.

After controlling for the rate of change in these areas of damage over time, baseline white matter hyperintensity volume was not a predictor of risk.

Of those who developed cognitive impairment, died during follow-up, and underwent a brain autopsy, 70% received a pathologic diagnosis of Alzheimer's disease and 13% had evidence of vascular dementia. Almost all showed signs of cerebrovascular disease.

Noting that the subjects "had few cerebrovascular risk factors at entry, and -- perhaps related to this -- the small volume of subcortial WMH, that it might be difficult to generalize the findings to other populations, which was a limitation.

---

http://www.medpagetoday.com/Geriatrics/GeneralGeriatrics/15077?userid=133652&impressionId=1247634515676&utm_source=mSpoke&utm_medium=email&utm_campaign=DailyHeadlines&utm_content=Group1

LONGITUDINAL EFFECTS OF MILD TRAUMATIC BRAIN INJURY AND POSTTRAUMATIC STRESS DISORDER COMORBIDITY ON POSTDEPLOYMENT OUTCOMES IN NATIONAL GUARD SOLDIERS DEPLOYED IN IRAQ

Polusny MA et al. Arch Gen Psychiatry 2011 Jan

Symptom overlap complicates the assessment of post-traumatic stress disorder (PTSD) after traumatic brain injury (TBI). Researchers suggest that PTSD, more so than mild TBI (mTBI), may account for neuropsychiatric symptoms in returning soldiers. The current investigators longitudinally assessed symptoms through questionnaires that included items on combat exposure and current psychiatric symptoms.

The Time 1 evaluation involved 2677 National Guard soldiers 1 month before they returned home; 9.2% reported concussion or mTBI, 7.6% met criteria for probable PTSD, and 9.3% met criteria for probable depression.

One year later (Time 2), 953 soldiers returned in-depth questionnaires. All diagnosis rates increased at Time 2 (self-reported concussion/mTBI, 22.0%; probable PTSD, 13.7%; probable depression, 18.2%). Postconcussive symptoms were common. Compared with the mTBI-only group, the PTSD-only group reported more memory problems, balance problems, difficulty concentrating, irritability, and depressive or nonspecific somatic symptoms. Symptoms were not different between the mTBI+PTSD and PTSD-only groups. After adjustment for PTSD, Time 1 concussion/mTBI did not predict Time 2 depressive symptoms, nonspecific somatic complaints, social function, or quality of life.

Comment: This study confirms that psychiatric disorders affect outcomes in TBI patients. PTSD has a greater impact than TBI on health and quality of life in soldiers with both disorders and better predicts postconcussive symptoms. I am more intrigued, however, by the increased rates of self-reported PTSD, depression, and mTBI after 1 year. Although PTSD may take time to develop, the precipitating events probably occurred more than 1 month before end of service. What explains the doubled rate of concussion? My guess is a retrospective attribution of symptoms ("If I feel these postconcussive symptoms, then I must have had a concussion"). Perhaps, the repeated exposure to battlefield events, directly or via the media, and the readjustment to civilian life produce "false" recollections. These findings emphasize the importance of early and accurate documentation of TBI: Retrospective recollections may change with time.

http://psychiatry.jwatch.org/cgi/content/full/2011/214/3

TEMPOROPARIETAL HYPOMETABOLISM IN FRONTOTEMPORAL LOBAR DEGENERATION AND ASSOCIATED IMAGING DIAGNOSTIC ERRORS

Womack KB et al._ Arch Neurol 2011

Previous research has shown that clinicians may make significant errors in distinguishing frontotemporal lobar degeneration (FTLD) from Alzheimer disease (AD) based on visual inspection of preprocessed neuroimages. To examine the source of these errors, researchers used a previously compiled data set of fluorodeoxyglucose positron emission tomography (FDG-PET) scans of 45 patients with autopsy-confirmed FTLD (14 patients) or AD (31 patients). In this study, 10 neurologists and 2 psychiatrists, blinded to clinical history and interpretations of other raters and with varying degrees of expertise in interpreting FDG-PET brain scans, reviewed the scans. Six of the raters also received training highlighting the association of hypometabolism in the posterior temporoparietal and posterior cingulate cortices with AD and hypometabolism in the frontal, anterior temporal, and anterior cingulate cortices with FTLD. The six raters then categorized these five regions as normal or abnormal in each scan.

The raters' interpretations were unanimous and correct for only 50% of the FTLD scans, compared with 87% of the AD scans. Of the five evaluated regions, interrater reliability was least robust for the anterior cingulate and anterior temporal lobes (kappa statistic <0.5), known to be associated with FTLD. Additionally, temporoparietal hypometabolism was evident in 50% of the FTLD scans, rendering this region sensitive but not specific for AD and suggesting it as the source of the diagnostic errors in the FTLD cases. The combination of temporoparietal hypometabolism with either anterior cingulate or anterior temporal hypometabolism was more likely to occur in patients with FTLD than in those with AD.

Comment: As FDG-PET scans become more readily available and disease-modifying therapies for AD and FTLD are developed, distinguishing their underlying pathologies in vivo will become increasingly important. These new findings reflect the well-known overlap in the clinical symptoms of FTLD and AD and demonstrate a potentially confounding overlap in regional hypometabolism seen on FDG-PET scans. These results serve as a guide to clinicians who currently use this diagnostic tool. Future investigations should be larger and should consider the laterality of affected regions as well as the clinical and pathological subtypes of FTLD.

http://neurology.jwatch.org/cgi/content/full/2011/405/5?q=etoc_jwneuro

MIGRAINE AND WEATHER: A PROSPECTIVE DIARY-BASED ANALYSIS

Zebenholzer K et al _ Cephalalgia 2011 Mar; 31

Patients with migraine who are asked about their headache triggers often mention weather change as a factor. However, the literature on weather and migraine is scarce, and the results are inconsistent. In this prospective study, 238 patients with diagnoses of migraine or probable migraine completed daily headache diaries for almost 90 days, thus providing about 20,550 patient-days of data. In the diaries, patients answered 59 questions that addressed occurrence and duration of headache and other features, including descriptions that allowed specific identification of migraines; 7 of the questions were related to weather perception. The authors obtained objective local weather parameters, including 11 individual meteorologic parameters and 17 synoptic conditions (weather patterns).

The authors identified trends suggesting that ridges of high pressure influenced occurrence of headache and that lower daily mean wind speed or changes in daily sunshine duration increased risk for migraine attacks in particular. They also found a trend suggesting that an increase in minimum air temperature reduced the risk for migraine persistence. However, after correction for multiple comparisons, no individual or synoptic weather factor significantly affected the risk for headache or migraine occurrence or persistence. Patients' perceptions of weather conditions did not correlate with either headache or migraine occurrence or persistence. The authors conclude that the influence of weather on headache and migraine is marginal and that patients' self-reports of headache triggers may be unreliable.

Comment: This elaborate work addresses a common clinical question that is exceedingly difficult to study. Weather patterns are influenced by various factors, many of which are not well understood. Climatic factors fluctuate even within short periods, and studies can only broadly address this issue. Therefore, even if it is unproven by objective means, one has to accept the subjective, almost unanimous patient perception that weather affects migraine. I doubt that more studies on single weather factors or situations will clarify the issue. We must first better understand migraine pathophysiology and trigger mechanisms by studying more-reliable and experimentally applicable triggers (e.g., nitroglycerin or alcohol) before going back to triggers such as weather with more-specific hypotheses. Focusing on modifiable triggers also seems to be a reasonable research strategy.

http://neurology.jwatch.org/cgi/content/full/2011/405/7?q=etoc_jwneuro

USE OF FLORBETAPIR-PET FOR IMAGING B-AMYLOID PATHOLOGY

Clark CM et al.- JAMA 2011 Jan 19

A hallmark pathology of Alzheimer disease (AD) is the amyloid-beta (A?) plaque, which could not be detected during life until recently. Advances have permitted its detection in cerebrospinal fluid and with positron emission tomography (PET) scanning using the [11C]Pittsburgh compound B. However, this compound's short half-life requires local cyclotron production, so it is not clinically useful. Several companies are developing PET amyloid imaging agents labeled with [18F] that could be transported long distances to hospitals and clinics.

For this partially manufacturer-funded study, investigators recruited patients with terminal diseases. Patients were scanned using the PET amyloid imaging agent [18F]florbetapir within 1 year of death; 74 younger, healthy controls were also scanned. Blinded investigators evaluated the images both quantitatively and with visual ratings. Autopsies, performed on 35 of the case patients, included both A? measurement with quantitative immunohistochemistry and rating of tissue slides for neuritic plaques.

Regardless of the method used for analysis of the PET and postmortem data, PET image findings obtained during life correlated strongly with the degree of pathology seen at autopsy.

Comment: These findings put PET amyloid imaging on a strong footing as a diagnostic tool for AD by showing that it can detect the "gold standard" of pathology required for diagnosis. The participants in this study tended to fall into strongly positive or strongly negative zones; it is unclear whether results might be less accurate in patients with intermediate amounts of A?, who would be more typical of individuals seen in clinical practice. Recently, the FDA reviewed the application for approval of this PET radiopharmaceutical, and it seems likely to be approved if clinician interpretation of the images can be shown to be reliable. This imaging modality will provide clinicians with a means of identifying A? in living patients. In combination with a careful clinical evaluation, this tool could prove useful in many cases when making the diagnosis is difficult.

http://neurology.jwatch.org/cgi/content/full/2011/222/1

AN ELECTROCLINICAL CASE-CONTROL STUDY OF SUDDEN UNEXPECTED DEATH IN EPILEPSY

Lhatoo SD et al - Ann Neurol 2010 Dec

Does electrocerebral suppression lead to central apnea and fatal respiratory failure in patients with epilepsy? To explore this important issue, researchers conducted a case-control study, comparing 10 patients with confirmed sudden unexplained death in epilepsy (SUDEP) who had undergone video electroencephalography (EEG) monitoring and 30 matching control patients who had at least one seizure recorded during monitoring. The cases included one patient who died while being monitored. In this patient, prolonged diffuse electrocerebral suppression following a seizure led to apnea and, eventually, death. The researchers therefore examined the risk for SUDEP associated with duration of postictal generalized electroencephalographic suppression (PGES).

PGES >50 seconds was significantly associated with SUDEP, both before and after adjustment for pertinent independent variables (e.g., duration of epilepsy, etiology, seizure frequency). The risk increased exponentially with PGES >80 seconds. In three of the SUDEP case patients, PGES with complex partial seizures (CPSs) was observed (as opposed to generalized motor seizures), but exclusion of these patients in the analysis greatly increased the effect-size estimates. The authors conclude that prolonged and profound postseizure electrocerebral suppression may cause SUDEP.

Comment: These findings provide a valuable contribution toward understanding the mechanism(s) of SUDEP. The authors include an excellent review of what little is known from other observations, and they build a strong case against primary cardiac-related mechanisms. However, the study raises some important questions. Why would CPSs be expected to cause any significant PGES? Also, what is the incidence of prolonged PGES, whether or not confined to generalized motor seizures? Nonetheless, these findings are compelling because they reveal not only a possible marker for SUDEP risk but also a possible mechanism. As seen on EEG, postictal electrical suppression can be dramatic and often appears virtually identical to the electrocerebral silence seen in brain death recordings. Reversal of such suppression is even more dramatic. Unfortunately, the assumption that it will always reverse is highly likely to be wrong.

http://neurology.jwatch.org/cgi/content/full/2011/301/3

VERY EARLY PREDICTORS OF ADOLESCENT DEPRESSION AND SUICIDE ATTEMPTS IN CHILDREN WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

Andrea Chronis-Tuscano, PhD & Colleagues - Arch Gen Psychiatry. 2010

Context Major depression and dysthymia in adolescence are associated with substantial disability, need for mental health services, and risk for recurrence. Concrete suicidal ideation and attempts during adolescence are particularly associated with significant distress, morbidity, and risk for completed suicide.

Objectives To test the hypothesis that young children with attention-deficit/hyperactivity disorder (ADHD) are at increased risk for depression and suicidal ideation and attempts during adolescence and to identify early predictors of which young children with ADHD are at greatest risk.

Design Prospective follow-up study.

Setting Chicago, Illinois, and Pittsburgh, Pennsylvania.

Patients A cohort of 125 children who met DSM-IV criteria for ADHD at 4 to 6 years of age and 123 demographically matched comparison children without ADHD were prospectively followed up in 7 structured diagnostic assessments of depression and suicidal behavior in assessment years 6 through 14, spanning 9 through 18 years of age.

Main Outcome Measures DSM-IV criteria for depressive disorders and suicidal behavior.

Results Children with ADHD at 4 to 6 years of age were at greatly increased risk for meeting DSM-IV criteria for major depression or dysthymia (hazard ratio, 4.32) and for attempting suicide (hazard ratio, 3.60) through the age of 18 years relative to comparison children. There were marked variations in risk for these outcomes among children with ADHD, however. Within the ADHD group, children with each subtype of ADHD were at risk but for different adverse outcomes. Girls were at greater risk for depression and suicide attempts. Maternal depression and concurrent child emotional and behavior problems at 4 to 6 years of age predicted depression and suicidal behavior.

Conclusions All subtypes of ADHD in young children robustly predict adolescent depression and/or suicide attempts 5 to 13 years later. Furthermore, female sex, maternal depression, and concurrent symptoms at 4 to 6 years of age predict which children with ADHD are at greatest risk for these adverse outcomes. Identifying high-risk young children with ADHD sets the stage for early prevention trials to reduce risk for later depression and suicidal behavior.

http://archpsyc.ama-assn.org/cgi/content/abstract/67/10/1044

PREDICTING CONVERSION TO MILD COGNITIVE IMPAIRMENT: SOME ERROR IS THE PRICE OF MUCH TRUTH

Elias MF and Davey A - Neurology

Patients complaining of memory problems are generally most concerned about whether these are signs of early dementia. In fact, many individuals with amnestic mild cognitive impairment (aMCI), which is characterized by impairments in episodic memory, go on to develop Alzheimer disease (AD). These researchers attempted to predict the time to conversion to aMCI in 241 cognitively healthy elders who were enrolled as controls in a longitudinal memory disorder study and who had at least two study visits (baseline mean age, 72).

The researchers performed both subjective and objective cognitive assessments, including examinations of orientation, comprehension, expression, recent memory, remote memory, learning, abstract thinking, perception, praxis, attention, and calculation.

During the 20-year follow-up, 91 of these enrollees (38%) converted to aMCI. Of the administered tests, only expression and learning significantly predicted the conversion time to aMCI; age (in 5-year increments) was also a predictor. With a baseline age of 70, the probability of conversion in less than 5 years was 7% for the highest-scoring group and 28% for the lowest-scoring group. The authors provide a table of conversion probabilities based on expression and learning scores.

Comment: The ability to predict who may develop aMCI (and then AD) is important. However, readers must keep in mind several caveats. As the editorialists discuss, this cohort was relatively high functioning, and many cardiovascular risk factors, including diabetes, were not reported in the analysis. The test scores were not based on routine office-based cognitive assessments or on the Mini-Mental State Exam. The learning and expression scores were derived from combined scores on multiple tests. Therefore, this approach may not be practical for routine use, but could prove valuable for research or in specialized-care settings.

LIFE-THREATENING DANGER AND SUPPRESSION OF ATTENTION BIAS TO THREAT

Bar-Haim Y et al. - Am J Psychiatry

When lives are genuinely threatened, individuals might be expected to show increases both in vigilance to the sources of threat and in stress-related symptoms. In this first-of-a-kind study, Israeli investigators examined individuals' reactions to threat during the height of an actual conflict. The researchers recruited subjects from Israeli cities that varied in distance from Gaza (i.e., participants were outside rocket range or had 15 seconds, 30-45 seconds, or 60 seconds of time to seek safety [alert time]). During 6 days of frequent incoming rockets, researchers assessed participants' biases toward or away from threat (i.e., reaction times to threat or neutral words on a computer-based task) and post-traumatic stress disorder (PTSD), anxiety, and depression symptoms.

PTSD, depression, and state anxiety symptoms were highest among those with the shortest alert time and lower in individuals with longer alert times. Among those with 15 seconds of warning, 21% and 52% scored in the clinical ranges for PTSD and depression, respectively. As to attentional bias, those with the least alert time had a delayed recognition (5-12 milliseconds) of threat compared with neutral stimuli. Those outside rocket range showed a 5-millisecond bias toward perceiving threat. For those within rocket range, distress symptoms correlated positively with relative lag time in recognizing threat stimuli.

Comment: That participants with the least alert time had the strongest distress symptoms is understandable, but that they also showed the greatest delay in seeing threatening stimuli is counterintuitive, contrary to the researchers' hypotheses, and intriguing. Overall, these results suggest that for some individuals, severe threats may delay attentional mechanisms and that increased distress may accompany these derailments. The delay and the distress may be tied to dissociative protective mechanisms occurring after severe psychological trauma.

(http://dx.doi.org/10.1176/appi.ajp.2009.09070956)

LONG-TERM POSTTRAUMATIC STRESS SYMPTOMS AMONG 3,271 CIVILIAN SURVIVORS OF THE SEPTEMBER 11, 2001, TERRORIST ATTACKS ON THE WORLD TRADE CENTER

DiGrande L et al- Am J Epidemiol

The tragic events of September 11, 2001, created a natural laboratory for studying the prevalence and course of, and the contributors to, subsequent post-traumatic stress disorder (PTSD) in an unselected population. This cross-sectional study, conducted 2 to 3 years after the attack, used computer-assisted telephone (94.5%) or personal (5.5%) interviews with 3271 English-speaking escapees from the Twin Towers of the World Trade Center (approximately 21% of the estimated tower survivors; 59% men; 92% aged 25-64; 68% white; 66% with college or postgraduate degrees; 60% earning i$75,000 annually).

Almost all survivors (96%) had some PTSD symptoms, most commonly hyper vigilance and being easily startled; 15% screened positive for PTSD. Risks for PTSD were elevated for women (adjusted odds ratio, 1.67) and for Hispanics (AOR, 1.80) and blacks (AOR. 1.54) compared with whites. PTSD risk was especially high among those earning less than $25,000 annually compared with those earning at least $100,000 (AOR, 8.45). PTSD risk increased with severity of exposure; factors related to severity included witnessing horror, injury, exposure to the dust cloud, being on a floor above rather than below the impact zone, and later rather than earlier evacuation. Each factor was associated with increased risk for developing PTSD (AOR for each, 2.09).

Comment: The authors note that prevalence of PTSD in these evacuees 2 to 3 years later is lower than in survivors of other mass terror bombings possibly because many evacuees did not understand their danger during evacuation. Other post-9/11 studies have suggested that pre trauma psychological disorders, ancillary stressors, lack of social supports, and low help-seeking are associated with increased PTSD risk. Follow-up studies of these populations are needed to ascertain PTSD chronicity and survivors' needs for services. Clinicians are reminded that individuals with fewer economic or emotional resources have the highest PTSD risk, as do those with greater direct exposure to traumatic events. Post disaster planning programs should take these factors into account.

http://psychiatry.jwatch.org/cgi/content/full/2011/131/2

WRITING ABOUT TESTING WORRIES BOOSTS EXAM PERFORMANCE IN THE CLASSROOM

Ramirez G and Beilock SL _ Science

Emotional writing may alleviate post-traumatic stress, and stress interferes with working memory. Therefore, investigators performed a multipart study to examine the effect of expressive writing on anxiety before test taking.

First, 20 college students were given a math test in the laboratory, were presented with a high-risk scenario (e.g., a money award would be given, based on their performance within pairs, and their partners had already performed well), and were then assigned to 10 minutes of expressive writing about examination worries or sitting quietly (control) before retaking the test. Another trial involving 47 students used the same paradigm, but a third group was assigned to write about anything. Performance significantly improved in students who wrote expressively about their test anxieties and significantly declined in students who sat quietly or wrote about anything. Finally, 106 high schoolers underwent a pretest assessment of anxiety and were assigned to expressive writing or to a control condition before taking a real-world exam. Students who wrote expressively about their test anxiety performed significantly better than controls. Only students with high pretest anxiety scores benefited from expressive writing. Overall, after the researchers controlled for the number of anxiety-related sentences and words in the writings, groups did not differ in accuracy on the tests.

Comment: These results are consistent with findings that examination anxiety decreases dorsolateral prefrontal cortex activation. This relatively simple, brief intervention, with no discernible adverse effects, may seem almost too good to be true, and thus the study deserves replication. Incorporating these findings into clinical practice may first require testing whether imagining one's anxieties would be as effective as writing them down.

http://psychiatry.jwatch.org/cgi/content/full/2011/214/57?q=etoc_jwpsych

SMOKING IN PREGNANCY LINKED TO MENTAL HEALTH PROBLEMS

Goodwin et al - Obstet Gynecol

The researchers analyzed data based on interviews with 1 516 pregnant women participating in the 2001-2002 National Epidemiological Survey on Alcohol and Related Conditions.

In all, 21.7% of the pregnant women smoked and 12.4% were nicotine dependent.

At least one mental disorder was diagnosed in 45.1% of pregnant women who smoked and in 57.5% of those with nicotine dependence.

Women who were nicotine dependent were 3.3 times more likely than pregnant women who did not smoke to have any mental health disorder and 2.5 times more likely to have any mood disorder in the past year.

Nicotine dependence also increased the risk for major depression or panic disorder with odds ratios of 2.07 and 3.1, respectively.

Non-dependent cigarette use did not contribute independently to an increased risk of mental health disorders.

"Our results are troubling from an intervention perspective because previous results show that anxiety disorders and depression are associated with less success in quit attempts among smokers.

They recommend the need for nicotine dependence treatment and mental health outreach programs to be indicated in conjunction with prenatal care, especially in underserved areas.

The potential importance of these efforts cannot be underestimated as both untreated nicotine dependence and mental disorders may lead to undesirable consequences for both the mother and fetus.

SEXUAL ABUSE AND LIFETIME DIAGNOSIS OF SOMATIC DISORDERS

Zirakzadeh A, et al.- JAMA 2009

Sexual abuse is associated with an increased risk of somatic disorders, in which patients report physical symptoms or complaints with no clear underlying cause, a review of nearly two dozen studies concluded.

Patients with a history of sexual abuse, as children or adults, were more likely to experience gastrointestinal disorders (OR 2.43; 95% CI 1.36 to 4.31), nonspecific chronic pain (OR 2.20; 95% CI 1.54 to 3.15), psychogenic seizures (OR 2.96; 95% CI 1.12 to 4.88), and chronic pelvic pain (OR 2.73; 95% CI 1.73 to 4.30).

Building greater awareness of the association between sexual abuse and somatic disorders may lead to improved health care delivery and outcomes for sexual abuse survivors. As a group, survivors of abuse have higher medical care use and incur greater costs compared with the general patient population.

Surveys have determined that the incidence of sexual violence in the United States is 2.5% for women and 0.9% for men, according to the review, and researchers have estimated that one in 15 adults has experienced forced sexual intercourse. Studies have also estimated that 16% of men and 25% of women in the United States are survivors of childhood sexual abuse.

"To date, research on the long-term effects of sexual abuse has primarily focused on mental health outcomes," wrote Zirakzadeh and his coauthors. "Strong evidence supports a link between childhood sexual abuse and multiple psychiatric sequelae. However, studies investigating the association between sexual abuse and somatic outcomes have been less definitive."

The authors conducted a systematic literature search of electronic databases from January 1980 to December 2008, identifying 23 longitudinal studies that reported somatic outcomes in 4,640 people with and without a history of sexual abuse.

The researchers categorized sexual abuse into two major groups. "Rape" was defined as penetration with a body part or foreign object, while "All forms of sexual abuse" captured the wide variety of definitions used to characterize sexual violence.

While analysis from the data in the studies indicated a relationship between sexual abuse and some somatic disorders, the researchers found no significant association between sexual abuse and a lifetime diagnosis of fibromyalgia, obesity or headache.

However, when they restricted the analysis to rape victims, they found a higher risk of fibromyalgia diagnosis (OR 3.35; 95% CI, 1.51 to 7.46). Like those classified under "all forms of sexual abuse," rape victims were also more prone to chronic pelvic pain (OR 3.27; 95% CI 1.02 to 1.53) and functional gastrointestinal disorders (OR 4.01; 95% CI 1.88 to 8.57).

The principal limitation of the study, according to the authors, was the inclusion of data susceptible to bias. Only two of 23 studies met at least 8 of the 10 maximum points of the Newcastle-Ottawa criteria for study quality. They also noted that their findings may not apply to men, since sixteen of the 23 studies in the review included only female subjects.

However, they also noted that the review used an exhaustive and reproducible search strategy and attempted to avoid bias by careful selection and extraction of data.

They also pointed out that sexual abuse remains prevalent and that doctors commonly encounter survivors in general medical practice.

They speculated that sexual abuse may be an early insulting environmental factor in a multistep process that culminates in physical dysfunction, and that the neuroendocrine system may mediate the connection between sexual abuse and the development of somatic dysfunction.

Increasingly, it has been shown that survivors of sexual abuse face a spectrum of often challenging health outcomes, resulting in greater health care use and cost and significant morbidity. Recognition of this association may have important clinical implications for patients coping with these disorders and their clinicians.

http://www.medpagetoday.com/OBGYN/DomesticViolence/15594?userid=133652&impressionId=125074388724&utm_source=mSpoke&utm_medium=email&utm_campaign=DailyHeadlines&utm_content=Group1

SCIENTISTS SETTLE CENTURIES-OLD DEBATE ON PERCEPTION

By Marlowe Hood

Researchers said they had solved a conundrum about human perception that has stumped philosophers and scientists alike since it was first articulated 323 years ago by an Irish politician in a letter to John Locke.

Imagine, William Molyneux wrote to the great British thinker, that a man blind from birth who has learned to identify objects - a sphere and a cube, for example - through his sense of touch is suddenly able to see.

The puzzle, he continued, is "Whether he Could, by his Sight, and before he touch them, know which is the Globe and which the Cube?" For philosophers of the time, answering "Molyneux's question," as it was known ever after, would resolve a fundamental uncertainty about the human mind.

Empiricists believed that we are born blank slates, and become the sum total of our accumulated experience.

So-called "nativists" countered that our minds are, from the outset, pre-stocked with ideas waiting to be activated by sight, sound and touch.

If a blind man who miraculously recovered his sight could instantly distinguish the cube from the globe it would mean the knowledge was somehow innate, they argued.

More recently, this "nurture vs. nature" debate has found its counterpart in modern neuroscience.

"The beauty of Molyneux's question is that it also relates to how representations are formed in the brain," said Pawan Sinha, a professor at MIT in Boston and the main architect of the study.

"Do the different modalities, or senses, build up a common representation, or are these independent representations that one cannot access even though the other modality has built it?" he asked in a phone interview. Recent studies have suggested that the mental images we accumulate through sight and touch do, in fact, form a common pool of impressions that can be triggered and retrieved by one sense or the other.

But until now, no one has been able to design a definitive experiment.

The problem was finding subjects. They would have to have been blind at birth and then have had their sight restored, but not until they were old enough to reliably participate in tests.

Most forms of curable congenital blindness, however, are detected and cured in infancy, so such individuals are extremely rare.

More precisely, they are rare in rich countries. So in 2003, Sinha set up a programme in India in cooperation with the Shroff Charity Eye Hospital in New Delhi.

Among the many patients he treated, he found five - four boys and one girl, aged eight to 17 - who met the criteria for surgery that would almost instantly take them from total blindness to fully seeing.

Once bandages were removed, researchers had to first be sure that the volunteers could see well.

Viewing objects that looked like Lego building blocks, they showed the ability to discriminate visually between similar shapes. The subjects scored nearly 100 percent.

They scored nearly as well when it came to telling the difference by touch alone.

For the critical test, however, in which the children first felt an object and then tried to distinguish visually between that same object and a similar one, the results were barely better than if they had guessed.

"They couldn't form the connection," said Yuri Ostrovsky, also a researcher at MIT and a co-author of the study.

"The conclusion is that there does not seem to be any cross-modal" -- that is, from one sense to the other - representation available to perform the task," he said by phone. The answer to Molyneux's question, then, appears to be "no": the data blind people gather tactically that allows them to identify a cup and a vase, and to tell them apart, is not accessible through vision.

At least not at first.

"From a neuro-scientific point of view, the most interesting finding is the rapidity with which this inability was compensated," said Richard Held, and emeritus professor at MIT and lead author of the study.

"Within about a week, it's done - and that is very fast. We were surprised," he said by phone.

The overall results suggest that the human brain is more "plastic," or malleable, longer into childhood that previously thought, the researchers said. "This challenges the dogma of 'critical periods,' the idea that if a child has been deprived of vision for the first three or four years of life, he or she will be unable to acquire any visual proficiency," Sinha said.-AFP Dawn 11.4.11

Question on addiction, sex, psychiatric or the possession syndromes

First fold here

Second fold here

Remarks about the bulletin

Third fold here

Remarks about the bulletin

_____

_____

_____

_____

_____

_____

_____

_____

From

Stamp not necessary in mailed in Pakistan Postage will be paid by addressee

THE EDITOR

KARACHI PSYCHIATRIC HOSPITAL

B-1/14, NAZIMABAD # 3,

KARACHI, PAKISTAN-74600

Staple or stick with tape

KARACHI PSYCHIARTIC HOSPITAL

B-1/14, Nazimabad No.3 Karachi

Email : support@kph.org.pk Web Site: http:// www.kph.org.pk Phone : 111-760-760 , 36612187 Fax: 36681610

قائد آباد

021-35013533 , 35016532

کراچی نفسیاتی ہسپتال

شعبہ خواتین

021-36684503 , 36607801

شمالی ناظم آباد

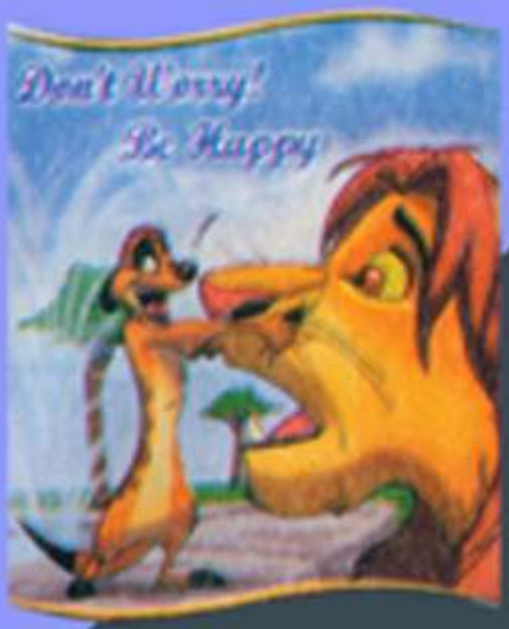
021-36646648 , 36644842

کراچی نفسیاتی ویلفیئر ہسپتال حیدر آباد

022-3818333

کراچی منشیات ہسپتال

021-32720414 , 32721504



Produces Tranquility

So A Great Companion

The Alprazolam
a world accepted
swift & safe
Tranquilizer for....

- Anxiety disorder
- Panic disorder
- Depression
- Social Phobia
- Pre-menstrual syndrome

Mazolam®

Alprazolam

Tablets 0.25 mg, 0.5 mg & 1 mg