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Contents	Page Number
• Editorial	86
• The Mahi-Baasher Heritage Sheikh Idris A Rahim	87
• Literature Review: Hypersomnia Abdelgadir Hussein Osman and Azza Nourani	98
• Psychological impact on child soldiers in Sudan Abdelghani Elshiekh, MRCPsych	107
• Factors associated with compliance with anti-schizophrenia drug therapy in Sudan Amira Mohamed Osman Hamid Haroun	113
• Second Generation Antipsychotics (SGAs) and metabolic disorders - A Short Visit Fath Al Alim Mohamed Abdel Rahim	119
• Case Report: Acute Persistent Tardive Dystonia Abdelgadir H. Osman	123
• Imam Mohammed Al—Ghazali Abul Gasim Saad	126
• Pick from the Abstract Book of the 11th. Pan Arab Conference	132
• Selected Bibliography on Psychiatry in Sudan	142
• Note to contributors	144

Editorial

During 8-12 December, 2010 two big psychiatric events took place in Khartoum. These were the eleventh Pan Arab Psychiatric Conference and the annual conference of Association of African Psychiatrists and Allied Professions (AAPAP). The conferences attracted participants from all over Arab and African countries and there were distinguished speakers from both regions. There was a noticeable presence and contribution of Sudanese psychiatrists, psychologists and social workers coming from abroad, from the Gulf region, United Kingdom and from as far away east as Malaysia. The social atmosphere was warm and friendly and the scientific discussions were lively until the last minutes of the last closing session.

The main themes of the two conferences were very similar indicating the similarities of the challenges and of the expectations. There seem to be many common areas where there can be fruitful discussions and collaboration between the two bodies. For example, drug and substance abuse figured prominently in the sessions in both conferences. Rapid and easy movement between countries seems to have made the challenges facing both Arab and African worlds very similar. Another topic of valid debate was traditional ways of treatment of mental disorders. Traditional healers have been there for a very long time and sufferers still resort to them for help. Some of these healers' ways of treatment lend themselves for study.

The two conferences were held in the same place with a gap of six hours between the closing session of the first conference and the opening ceremony of the second one. One hopes that in a near future this gap would be bridged and the two conferences will be held at the same time with joint leadership like the confluence of Blue Nile and Whit Nile at Khartoum,

The Mahi-Baasher Heritage

Sheikh Idris A Rahim*

* MBBS, PhD, FRCPsych,
Professor of Psychiatry, University of Dammam,
Consultant Psychiatrist, King Fahd Hospital of the University.

Correspondence:

Sheikh IA Rahim,
Department of Psychiatry.
King Fahd Hospital of the University.
POBox 40101,
Al-Khobar -31524,
Saudi Arabia.

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The Mahi-Baasher Heritage

Abstract

Introduction: Tigani El-Mahi (1911-70) was the first Sudanese and native African Psychiatrist. He introduced the first psychiatric facility in Sudan. He later became the first Mental Health Advisor in the East Mediterranean Regional Office of the World Health Organization. He was the first professor of psychiatry in Sudan. He became a president of the Sovereignty Council of Sudan. His disciple, Taha Baasher (1922-2008), shared and carried forward El-Mahi's visions and plans. Their joint contributions constituted the tenets of what has become known as the El-Mahi-Baasher heritage. Tenets: (1) Develop mental health services starting

from the base of the pyramid of the community, through outpatient facilities, to general hospital wards, to small-size short-stay psychiatric hospitals, to larger-size longer-stay therapeutic-rehabilitation hospitals. (2). Recruit, train, and coordinate multi-disciplinary mental health teams. (3) Involve, psycho-educate, and support the family as an essential partner in the prevention, treatment, and rehabilitation. (4). Incorporate mental health services in the general health program starting from the primary health care centre. (5). Collaborate with respectable traditional healers, especially in reputable and time-honored faith-therapeutic villages. (6). Encourage scientific research with emphasis on

epidemiology, psychopathology, therapeutics, socio-cultural and multidisciplinary studies. (7). Train and qualify future generations of mental health professionals in undergraduate, post-graduate, and continuous professional development. (8). Create and maintain active participation in local, regional and global professional organizations and activities.

The younger generations of mental health professionals are increasingly facing new challenges associated with the ongoing processes of urbanization, desertification, rural impoverishment, socioeconomic inequities, expatriation, civil strife, cultural invasion, and personification of lifestyles. These challenges are apt to accelerate the dispersal of the extended family, individuation of economic pursuits, loosening of communal interdependence, fragility of marital bonds, rising age of marriage, increasing rates of spinsterhood, noncommittal sexual activity, one parent families, home violence, and sexual abuse. Adhering to the El-Mahi-Baasher heritage is apt to enlighten efforts to deal with these challenges.

The Mahi-Baasher Heritage

Background:

Neither the Kitchener army invading Sudan in 1898¹, nor the subsequent colonial administration, contemplated introducing any mental health component in their Military Medical Corps or in their later Sudan Medical Service². Neither had the established 1924 Kitchener School of Medicine (KSM)³ include any didactic or clinical instruction in mental health. No

wonder that none of the first generation of Sudanese graduates from KSM expressed any interest in dealing with mental patients. The singular exception was a 1935 graduate who, after twelve years of reputable general practice, stunned his relatives and colleagues by his crazy decision to forfeit the then prestigious and potentially lucrative general medicine in favor of a career thitherto exclusively monopolized by faith healers, Zar conductors, exorcists, and sheer quacks.

That was none but Dr Tigani El-Mahi – a survivor of that rare creed of doctors, whom Abu Alhassan Al-Tabari characterized a millennium earlier as “the doctor who is a philosopher”⁴. Yet El-Mahi was more than just a ‘doctor who was also a philosopher’. His insatiable bibliophilic quest of knowledge prevailed over a broad spectrum of disciplines including psychology, sociology, anthropology, mythology, theology, history, geography, archeology, linguistics, poetry, fine arts, folklore, and politics.

El-Mahi belonged to a generation of pioneer nationalist intellectuals who were born and raised in the fervent struggle against the colonial rule. El-Mahi’s birth in 1911 occurred in the aftermath of the heroic Wad Habboba Revolt against British hegemony⁵. His adolescence witnessed the 1924 Revolution⁶. In college years he participated in the first student strike. His graduation coincided with the triggering spark of the anti-imperialist General Congress of Graduates⁶. In the year of Independence he wore military form and rushed to Suez to join the resistance to the 1956 Tri-partite British-

French-Israeli invasion of Egypt⁷. In 1959 he became the first Arab Regional Mental Health Advisor, EMRO, WHO for nearly a decade. In 1961 he was proclaimed “Father of African Psychiatry” in the first Pan-African Psychiatric Conference⁸. In 1964 he became an alternating Chairman of the Supreme Sovereignty Council of Sudan. In 1966 he was elected president of the Union of Sudanese Doctors. In 1969 he became the first professor of psychiatry in Sudan - a post which he occupied till his early passing away on exactly his 59th birthday.

Witness Evidence⁹:

“The audience was captured by Tigani El-Mahi MD when he addressed a scientific meeting of the MPS in 1958.”... “He represented the World Health Organization.”... “His talk was on psychiatry in Africa.”... He “was a deeply learned man and a profound scholar.”... “He discovered that patients from African communities were far more satisfied under the care of traditional healers.”... “A great deal of mutual respect developed between El Mahi and traditional healers as they worked together in treating the same patient.”...

“As Dr. El Mahi’s approach became widespread in Africa, he became known as the Father of African Psychiatry”⁹.

The London experience:

El-Mahi arrived in London in 1947 for a two-year postgraduate scholarship in psychiatry. The mental health field in post-war Europe was abounding with conflicting psychological orientations - psychoanalytic, psychodynamic, psychobiological, existentialist, gestalt,

behavioral, and other ‘schools’ or ‘sub-schools’ impeding the development of a common language in psychopathology, nomenclature, diagnosis, management, or research. However, he was lucky to find himself assigned to the predominantly eclectic British school of ‘borrow from all, stick to none’. He enthusiastically joined the training program upgrading his knowledge, skills, and attitudes, as well as creating close relationships with his tutors and colleagues. In his free time he kept shuttling between public libraries, bookstores, conference halls, museums, exhibitions, antiquity auctions, and other cultural settings. His participation in those activities introduced him to intellectual communities where he delivered invited lectures on such oriental topics as history, philosophy, spirituality, sociology, anthropology, folklore, and traditional medicine⁹⁻¹⁰. By the end of his scholarship he successfully passed the then highest British postgraduate qualification in psychiatry - the Diploma of Psychological Medicine (DPM), being the first native African to obtain it.

Though generally satisfied with his received training, El-Mahi experienced several disappointments. Most distressing was the poverty of social support for mental patients. While working in emergency rooms or in outpatient departments El-Mahi noticed that too few patients were accompanied by family members or friends; the bulk were alone or brought by social or law-enforcing agencies. Similarly, few hospitalized patients received regular visits in the allotted time. This contrasted sharply with its counterpart in Sudan where visiting

relatives, in-laws, neighbors, friends, and workmates transform the otherwise grim ward environment into a carnival of empathy, concern, reassurance, and gifts. More deplorable was the plight of institutionalized mental patients destined to virtually lifelong incarceration in shanty, congested, unhealthy, dehumanizing, and deskilling environments. To El-Mahi this contrasted sharply with the homely, tranquil, and salutary religious-therapeutic villages as Um Dawan Ban, Shikainiba, Kadabas, Al-Zareeba, and many others in Sudan where generation after generation of revered religious patrons, together with their disciples and aides, run cohesive village-size 'mega-families' consisting of interdependent Quran pupils, teachers, peasants, shepherds, craftsmen, woodcutters, housekeepers, nurses, and mental patients with or without accompanying relatives. In due time, many initially disturbed, withdrawn, aggressive, or substance-abusing patients gradually regain insight, self-esteem, and socio-occupational rehabilitation to a degree allowing their return home to pursue normal life frequently with non-resident follow-up visits as advised or needed. Those religious-therapeutic villages anteceded for centuries the less comprehensive milieu therapeutic models^{11, 12}, including Fountain Houses^{13,14} or Aro Village¹⁵⁻¹⁶.

Back in Sudan:

With these visions El-Mahi made his journey home in July 1949. His main orientation was to plan the development of mental health services starting from

the base of the pyramid – the community. He managed to secure the necessary approvals and budgets for opening a walk-in psychiatric outpatient facility in a roomy state-rented house in a strategic location in Al-Amlak lane in Khartoum North. He received from the Ministry of Health the necessary manpower including medical assistants, nurses, laboratory technicians, dispensers, office employees, drivers, porters, guards, housekeepers and others.

At first, only sporadic cases were received - mostly from neighboring whereabouts. But gradually attendance increased as some favorable therapeutic responses spoke for themselves. Many faith healers started referring patients, particularly psychotic or severely depressed ones for whom ECT gave rapid and dramatic response. For less severe disorders, in that pre-psychopharmacological era, therapeutic interventions were limited to barbiturates, amphetamines, herbal and mineral sedatives, physical restraint, and moral therapies.

Orientations:

El-Mahi's tenure in the Clinic for Nervous Disorders lasted from 1949 to 1957. That period laid the foundations for a discernible Sudanese School of Psychiatry blending the state-of-the-art achievements of contemporary psychiatry with the time-honored traditional healing practices in a socio-culturally sensitive setting.

The basic orientations of this school were being (1) theoretically eclectic, (2) clinically biomedic, (3) therapeutically

multi-disciplinarily, (4) community-based (5) socio-culturally sensitive.

Master Plan:

El-Mahi formulated a thoughtfully arranged and logistically prioritized master plan of partially overlapping phases of mental health service development in the country. The main components of this master plan are:

- (1) Introducing the discipline to policy-makers, health administrators, medical profession, stakeholders, mass media, and others;
- (2) Establishing the facilities in terms of location, premises, facilities, staffing, equipments, pharmaceuticals, logistics, transport, etc.;
- (3) Involving patients' families in all stages of prevention, treatment, and rehabilitation by psycho-education, reassurance, treatment adherence, psychosocial rehabilitation, moral and material facilitation;
- (4) Recruiting and in-service training of psychiatric nurses, psychiatric medical assistants, psychiatric social workers, clinical psychologists, and auxiliary staff;
- (5) Recruiting material and moral support for mental patients from community leaders, social activists, trade unions, student organizations, charity donors, mass media, etc.;
- (6) Collaborating with respectable faith healers by mutual visits, transfer of expertise, two-way referral arrangements, conjoint activities, etc.;
- (7) Stimulating and supporting scientific research with emphasis on local mental health problems, psychiatric epidemiology, observational and

interventional investigations, socio-cultural and cross-cultural studies, etc;

- (8) Planning and implementing vertical expansion of mental health services in terms of optimal increase in the numbers of qualified mental health professionals;
- (9) Establishing full mental health services all over the country beginning as a first step with major regional cities;
- (10) Initiating and maintaining bilateral and multilateral international collaboration, and active membership in regional and global mental health organizations with aim of regular exchange of expertise, promotion of common language, and participation in cross-cultural research.

Then came Baasher:

The progressive increase in help-seekers required more psychiatrists. El-Mahi's insistent appeals for recruits remained unheeded till 1954, when Dr Taha Baasher, an outstanding 1948 KSM graduate, was sent to London for two years by the end of which he passed his DPM and returned home. He immediately joined the clinic sharing duties with El-Mahi and learning from him. However, this apprenticeship did not last for long, as El-Mahi soon left in external commitments which ended in his becoming the Regional Mental Health Advisor in EMRO-WHO. Baasher had to carry the whole load of rapidly increasing attendants singlehandedly.

The Man

Taha Baasher was born in 1922 in Sawakin, the charming town in the summit of the Red Sea Hills. His later childhood was spent at school in Port

Sudan, with its rapidly growing multiethnic, socio-culturally assorted, yet peacefully interacting community. Presumably, there were sown the seeds of his later traits of tolerance and respect to the other. His joining the college in 1945 coincided with the end of Second World War and the rise of the global national independence movements interwoven with the Cold War. In the college the student movement was dominated by the two extremes of the left-wing “Democratic Front” and the right-wing “Islamic Direction”. Despite his unconcealed affiliation to the former, he maintained warm and friendly relationships with many colleagues from rival groups. When, in his final college year, the 1948 massive anti-“Legislative Assembly” demonstrations broke out, he was to be seen in the midst of the roaring enthusiasts. On graduation he became an active member of the Sudanese Medical Society. During his scholarship in London he was an enthusiastic participant in various Sudanese, Arab, and African nationalist activities. On returning home he immediately took his place in various political, medical, cultural, and social activities. When the October Revolution broke out in 1964, Baasher was among the frontline free-lance activist. And, when the conventional “one-man-several –million-votes” majority parties violated their own Constitution to expel democratically elected leftist members of parliament on unverified hearsay accusations, he, the impartial defender of democratic rights, denounced that pseudo-democracy to the extent that, when it was toppled by the Nimairi Coup,

he, the previously militant fighter against the Abboud military regime, found himself paradoxically welcoming and even serving as a minister in it, but only to become once again disillusioned and to quit not only the ministerial job, but also the whole scene. So, that was Baasher – the professionally outstanding, organizationally competent, socially amicable, ethically uncompromising, yet politically credulous.

The takeover:

For the recently arriving Baasher, replacing El-Mahi was like climbing Mount Everest. El-Mahi had established the facility from scratch. He had been running it for seven years. He developed working contacts with various concerned parties, including decision-makers, health administrators, medical professionals, faith healers, community activists, as well as patients and their caregivers. The challenge was enormous; and the handover was too brief for assimilating the whole experience. He had to depend on his own resources - that he did, and those he had.

The first problem to face him was the adamant rejection of clients to be consulted by any doctor other than El-Mahi personally. To convince them otherwise was fruitless. Many of them disappointedly returned from the gate on knowing of El-Mahi’s departure. Those who did enter the clinic did so reluctantly. To Baasher, who has always been professionally and personally popular, this dejection was so painful that, as he later intimated to younger colleagues, he would have deserted the job had it not

been for his loyalty to his absent mentor. Fortunately this picture soon started to change - With time the picture changed – at first slowly, then rapidly. His professional and social popularity spread so widely, that his surname became used as a synonym of his specialty, his clinic, and the conditions he treats.

The “Chemical Revolution”:

At the time of Baasher’s took over, an epoch-making breakthrough in the history of psychiatry was just around the corner. That second half of the 1950s witnessed the introduction of the first generation of psychotropic drugs, namely antipsychotic, antidepressant, anxiolytic, and anticonvulsant drugs. Their clinical application not only brightened the course and outcome of most serious mental disorders, but also facilitated the management of such patients in the community instead of their long-term institutionalization. The latter shift paved the way toward adopting community mental health services and their incorporation in the general health program with services spanning from domiciliary and outreach services, to primary care centers, to psychiatric emergency and outpatient services, to psychiatric wards in general hospitals, to small-size medium-stay psychiatric hospitals, to community-based socio-occupation rehabilitation programs. Such visions and orientations have been expressed in the scientific contributions of El-Mahi¹⁷⁻¹⁸ and Baasher¹⁹⁻²¹, decades ahead of their formal endorsement by the international community in the

Declaration of Alma-Ata²² and in its subsequent elaborations²³⁻²⁵.

Horizontal Expansion:

Till 1965 there was only one psychiatric outpatient facility (CND – KN). By 1968 the number of psychiatric outpatient facilities rose to 5 with the addition of Omdurman, Port Sudan, Medani, and El-Obaid. Over the next four years three more clinics were opened in of Kosti, Kassala, and Atbara. By 2009 the number of clinics reached 17, six of which were exclusively for children²⁶.

Regarding in-patient psychiatric facilities, the first one was Kober Forensic Institution which was opened in 1957 as a joint venture between the psychiatry department and the Prisons Department of the Ministry of Interior. The first civil inpatient psychiatric facility, the Psychiatric Ward in Khartoum Teaching Hospital²¹, was opened in 1965. The next step was the opening in 1972 of Tigani El-Mahi Psychiatric Hospital (TMPH) in Omdurman.

It is noteworthy that 7 years had lapsed between the opening of the first community-based walk-in psychiatric clinic to the first full-fledged outpatient clinic neighboring a major general hospital (CND_KN); and 5 years passed between the latter and the opening of the first psychiatric ward in a general hospital (The Psychiatric Ward in Khartoum Teaching Hospital); and 7 years passed between the latter and the opening of an independent specialized mental hospital (Tigani El-Mahi Teaching Hospital). This sequence of developing the mental health services gradually from the base of the

pyramid (the broad community), through hospital-neighborhood independent, psychiatric outpatient facility, to inpatient psychiatric ward in a general hospital, to a completely independent specialized psychiatric hospital demonstrates the keenness of El-Mahi and Baasher to stick to their adopted strategy of stepwise developing mental health services from the base to the apex of the pyramid¹⁷.

Vertical Expansion:

When El-Mahi moved to EMRO, he left Baasher alone. Soon others started returning from their scholarships. By 1967 the total number of Sudanese psychiatrists was eleven – 8 in the country, 2 in Britain, and one in EMRO. With the inauguration of the local postgraduate MD program in 1991 the rate of increase progressively to reach 65 by 2009, only 14 percent of them were stationed outside the national capital²⁶. Many senior psychiatrists who had returned from expatriation are currently actively involved in clinical and academic psychiatry.

Involving the Family:

The family is the basic and universal nucleus of social organization. One's family is one's primary source support and interdependence. A central tenet of the El-Mahi-Baasher heritage is the involvement of the family in all stages of patient management. The best nurse is a caring family member. When treating the patient requires being away from home, an accompanying family member is commendable. El-Mahi and Baasher used to provide free accommodation for

patients from distant abodes together with their accompanying family member(s) in government-rented dwellings in the neighborhood of the clinic. Later, when the psychiatric ward KTH was opened, relatives were allowed to stay in their vicinity. And, when TMPH was opened, relatives of patient were allowed staying near them throughout their inpatient stay. The company of relatives reflects empathy, provides support, and serves logistics. The acquired psycho-education enables the relative's monitoring of domiciliary treatment.

Faith Healing:

Collaboration with reputable faith healers remains an important component of El-Mahi-Baasher heritage. In major religious-therapeutic villages there is what might truly be named "community mental health team". An example of this partnership is Um Dawan Ban village which lies about 30 kilometers east of KN. The team is composed of a resident psychiatric nurse attached full time to the village dispensary and a weekly-visiting team from CND-KN composed of a senior psychiatric medical assistant with two nurses and a lab assistant. The team settles in the village dispensary and there undertakes the follow-up examination and treatment instructions as prescribed by the psychiatrist, and on their back journey they take with them any new or unstable cases for consultant evaluation and management.

With the expansion of modern psychiatric services into other regions of the country, some flexible replication of Um Dawan Ban's model of community-based psycho-

religious partnership might prove worthwhile.

Academic Psychiatry:

There had been no instruction in mental health for undergraduate medical students till the opening of the first psychiatric clinic in Khartoum North²⁷. The beginning was unstructured clinical exposure in the form of casual attendance of outpatient cases with the Dr El-Mahi and later with Dr Baasher till 1964. Thereafter it took the form of a module within the clinical syllabus of internal medicine till 1969 when the first department of psychiatry was established in the faculty of medicine in the University of Khartoum. This department delivered psychiatry courses to other universities till the others developed their own setups. One of these is the Faculty of Medicine in the University of Gezira which, since its inauguration in 1975, adopted a community-oriented community-based approach²⁸. Its psychiatry department is pursuing an active and broad “university-community-government partnership integrating mental health services in primary health care, training primary care staff, ensuring community participation in mental health service delivery, and encouraging research”²⁸.

Psychiatric Research:

No attempt shall be made here to review all the published Sudanese psychiatric research. Suffice it to say that, despite insurmountable constraints in manpower and material resources over most of the past decades, many quality studies have emerged. The latter include many of the

El-Mahi-Baasher seminal contributions to the elucidation of basic concepts, orientations, and challenges of contemporary mental health^{17-20, 29-33}.

Other studies focused on epidemiology, psychopathology, therapeutics, community mental health, primary care psychiatry, faith healing, traditional medicine, Zar, socioeconomic and socio-cultural impacts of rural impoverishment and push urbanization, civil unrest and refugism. Loyal to their El-Mahi-Baasher heritage, the new generations of mental health professionals shall hopefully stand up to challenge of addressing these and other mental health issues.

Conclusions:

The main components of El-Mahi-Baasher heritage can be summarized in the following: (1) Developing mental health services starting from the base of the pyramid of the community, through outpatient facilities, to general hospital wards, to small-size short-stay psychiatric hospitals, to larger-size longer-stay therapeutic-rehabilitation hospitals. (2). Recruiting, training, coordinating multi-disciplinary mental health teams. (3) Involving, psycho-educating, and supporting the family as an essential partner in the prevention, treatment, and rehabilitation of mental patients. (4). Incorporating mental health services in the general health program starting from the primary health care centre. (5). Collaborating with respectable traditional healers, especially in reputable and time-honored faith-therapeutic villages. (6). Encouraging scientific research with emphasis on epidemiology,

psychopathology, therapeutics, socio-cultural and multidisciplinary studies. (7). Training and qualifying future generations of mental health professionals at all levels of their undergraduate, post-graduate, and continuous professional development. (8). Creating and maintaining active participation in local, regional and global professional organizations and activities.

The younger generations of mental health professionals shall increasingly face more challenges associated with the ongoing processes of urbanization, desertification, rural impoverishment, socioeconomic inequities, expatriation, civil strife, cultural invasion and personification of lifestyles. These challenges are apt to accelerate the dispersal of the extended family, individuation of economic pursuits, loosening of communal interdependence, fragility of marital bonds, rising age of marriage, increasing rates of spinsterhood, noncommittal sexual activities, one parent families, home violence, as well as physical and sexual abuse. Adhering to the El-Mahi-Baasher heritage is apt to help enlightening the efforts to deal with these challenges.

Epilogue:

The heritage left over to the new generations deserves being cherished and preserved to future generations. A group of passing-by adolescents saw a very old man laboring to plant a date palm tree. He heard them mockingly saying "How senseless of such an old to expect living so long to eat the dates of his tree!". He turned to them saying "our ancestors cultivated for us to eat, and so we cultivate for our descendents to eat".

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Literature Review

Hypersomnia:

A major cause of road traffic accidents (RTA), cognitive impairments in young age, yet it's a patient plight and a medical pitfall to a wrong diagnosis.

Abdelgadir Hussein Osman^{*1} and Azza Nourani^{2}**

^{*1} Ass. Prof. Faculty of medicine University of Khartoum Sudan

^{**2} Psychiatric Registrar Sudan

Summary:

Epidemiological studies carried out across Atlantic have shown high rate of excessive daytime sleepiness(EDS) is 20% ,1.5-4% meet criteria for obstructive sleep apnoea syndrome(OSAS),5% suffering from wide range of EDS mainly insufficient sleep.3|10000 cases of narcolepsy.¹ However 20-25% of highways RTAs are due to drivers falling asleep whilst on the wheel.

Major cause of cognitive decline both in young age and elderly are consequent to hypersomnia or EDS, yet many psychiatrists, medical doctors misdiagnose hypersomnia either as depression or somatic illness.² Nonetheless this condition receives little attention in medical fields .In Sudan we are yet to see well developed sleep laboratories and sleep clinics.

In this topic we aim to review recent literature for syndromes causing hypersomnia, their clinical descriptions, epidemiology, risks factors, diagnostic methods, complications and management plans.

Introduction:

Hypersomnia is a common complaint. 9% of the adult population suffer from hypersomnia. Hypersomnia is defined as

the inability to maintain an alert state during the major waking episodes of the day. The problem has critical implications for human productivity and safety. Excessive daytime sleepiness (EDS) can result in injuries on the job, on the road, and in other circumstances where full attentiveness is required³

Numerous areas of the brain are known to participate in the initiation and maintenance of sleep and alertness, such as the brainstem reticular activating system, locus coeruleus, dorsal raphe and other brainstem nuclei, basal forebrain, thalamus, hypothalamic loci and cortex.⁴

Hypersomnia is screened clinically and epidemiologically by many screening tools, however the Epworth Sleepiness Scale (Johns, 1991) offers a more appropriate method for assessing `overall sleepiness.⁵ It consists of eight questions, each scored with a degree of severity ranging from 0 to 3. One limitation of this scale is that it asks subjects to imagine themselves in situations which they may actually experience rarely or never⁵

In assessing hypersomnia one should bear in mind that high rate of comorbidity between sleep disorders and various psychiatric illnesses, especially mood and

anxiety disorders exists. On the other hand, disturbance of sleep quality and continuity that is associated with many sleep disorders predisposes to the development or exacerbation of psychological distress and mental illness. Likewise, the presence of psychiatric illness may complicate the diagnosis and treatment of sleep disorders.⁶

In this topic we are going to address the main sleep disorders causing hypersomnia with special emphasis on narcolepsy and sleep apnoea syndrome.

Narcolepsy:

Narcolepsy is long known with the tetrad of EDS, cataplexy, sleep paralysis, and hypnagogic hallucinations, described by Yoss and Daly in 1957, but it is neurochemical discoveries in the last 15 years have elucidated the characteristic intrusion of REM sleep into wakefulness.

Over half of patients recall onset of their symptoms before age 20 years, including one third of adult patients who recall onset before age 15 years. Narcolepsy may be overlooked in childhood when it is misdiagnosed as ADHD and treated with a stimulant medication. The differential diagnosis includes chronic sleep deprivation, idiopathic hypersomnia, circadian rhythm disturbance, prolonged sleep need, unrecognized sleep disrupters, Kleine-Levin syndrome, psychiatric disorders (*e.g.*, depression, oppositional disorder, ADHD, and psychosis), and substance abuse.⁷

Narcoleptic patients experience EDS, often for some years, before developing cataplexy. EDS develops insidiously and is most pronounced in monotonous situations. This leads to irresistible

daytime naps, which can be refreshing. The average age of onset is from the teens to the early twenties, and chronic sleepiness can have a significant impact on academic, social, and vocational endeavour. Cataplexy, which is present in 64 to 80% of narcoleptic individuals, is the most specific symptom and occurs when skeletal muscle atonia is triggered by strong emotion. Laughter is the most common precipitant, but anger, surprise, or excitement can also provoke an attack. The episodes are brief, usually lasting less than 2 min, and result in muscle weakness in the limbs, neck, and face. It is thought that the descending motor inhibitory pathways are excessively activated, leading to inhibition of the lower motor neurons. Muscle strength and deep tendon reflexes are transiently lost but consciousness is preserved, which is an important distinction from sleep. Documentation of quadriceps areflexia during an observed or provoked attack is diagnostic of narcolepsy⁶⁻⁹

Hypnagogic hallucinations are present in up to 86% of narcoleptic patients vs. approximately 25% in healthy populations. Often visual, although sometimes auditory or tactile, hypnagogic hallucinations in narcolepsy likely represent fragments of dream imagery encroaching on wakefulness. Sleep paralysis may be due to residual REM atonia on awakening. It is present in 63% of narcoleptic patients, but is also reported by about 6% of healthy subjects. Disturbed nocturnal sleep is also common in patients with narcolepsy.⁷⁻¹⁰

It is believed that a peptide called hypocretins play essential role in

maintaining wakefulness. The hypocretins are synthesized in the dorsolateral hypothalamus, where deficiencies are implicated in the pathogenesis of narcolepsy and related disorders.⁹

Diagnosis:

Narcolepsy is initially diagnosed by clinical history, but the diagnosis should generally be confirmed by sleep laboratory testing. After the discontinuation of psychotropic medications for 2 weeks and ensuring adequate sleep time for at least 1 week, polysomnography is performed predominantly to rule out obstructive sleep apnoea. A multiple sleep latency test (MSLT) is performed the following day. Patients are given four to five daytime nap opportunities, and the mean time to sleep and the presence of REM sleep within 15 min is evaluated. The MSLT is a helpful but imperfect diagnostic tool in patients with narcolepsy and other hypersomnias, as clear definitions of abnormal values are lacking. A recent meta-analysis of healthy and control subjects found a mean sleep latency for a four-nap test of 10.4 min with a wide SD of 4.2 min. In contrast, pooled data demonstrated that patients with narcolepsy have a mean sleep latency of 3.1 ± 2.9 min. The current diagnostic criteria for narcolepsy are a mean sleep latency of < 8 min and sleep onset REM sleep (SOREM) periods on at least two of the nap opportunities in the absence of untreated sleep apnoea, sleep deprivation, or sudden withdrawal of REM sleep-suppressant medication.

However, in developing countries, diagnosis would generally rely on good

clinical history to rule out other causations of hypersomnia especially sleep apnoea and primary hypersomnia.

Treatment and general management:

Many sympathomimetic drugs have been tried for the treatment of narcolepsy, such as amphetamines, methylphenidate, pemoline, selective serotonin reuptake inhibitors (SSRI), and modafinil. But consistently modafinil seems to emerge as more superior.

Therapy with modafinil is usually started first because of reasonable efficacy, a favourable side effect profile. This wake-promoting agent works via an unknown mechanism and appears to have minimal potential for addiction. Headache is the most common adverse reaction, but, unlike amphetamines, modafinil does not produce sympathomimetic effects. Conventional stimulants that increase synaptic amine availability, including methylphenidate, dextroamphetamine, and methamphetamine, are introduced if sleepiness persists.⁹⁻¹⁴

Cataplexy has traditionally been controlled with tricyclic antidepressants, and more recently with selective serotonin reuptake inhibitors and venlafaxine.

There is currently no cure for narcolepsy. However, there are a number of ways that can be tried with medications in order to minimize the impact that narcolepsy has on patients daily life. Non-pharmacologic strategies such as exercise and scheduled daytime naps may help to reduce daytime sleepiness. These measures consistently been reported by different authorities in the field of narcolepsy.¹¹⁻¹³

Sleep habits

Frequent, brief naps that are evenly spaced throughout the day also have been shown to reduce unplanned naps. A strict bedtime routine and a minimum of at least eight hours sleep every night seems to reduce number of early day napping

Lifestyle:

A number of lifestyle changes may also help to manage narcolepsy symptoms, such as avoiding stressful situations, eating a healthy, balanced diet, not eating heavy meals during the day and before doing any potentially dangerous activities, such as operating machinery, and taking regular exercises.

Insufficient sleep

The most common cause of daytime sleepiness is insufficient sleep, which may reflect poor sleep hygiene (behaviours impacting sleep) or self-imposed or socially dictated sleep deprivation due to imposed social duties.

Adolescents generally need more sleep than adults, but are even less likely to obtain adequate amounts.¹⁵

This is usually a self-limiting condition often improves with the disappearance of underlying cause occasionally requires advice along sleep hygiene.

Primary Hypersomnia:

Patients with idiopathic hypersomnia never feel fully alert despite a normal or long night sleep; many patients exhibit narcolepsy-like sleepiness but do not exhibit cataplexy or rapid eye movement (REM)-related symptoms. These patients

are termed as having essential hypersomnia or monosymptomatic idiopathic hypersomnia. According to the revision of ICSD, idiopathic hypersomnia without long sleep, which is mostly consistent with essential hypersomnia, would be advocated.¹⁶⁻¹⁷ Although the severity of this kind of disorder has been suggested to be milder than typical narcolepsy, detailed examinations using both subjective and objective measures of daytime sleepiness have not yet been conducted. Patients with idiopathic hypersomnia were able to focus only for 1 h (versus 4 h in the controls). They complained of attention and memory deficit. Half of them had problems regulating their body temperature. Mental fatigability makes sufferer depend on other people for awakening them, and have a reduced benefit from alerting conditions (except being hyperactive or stressed) seem to be more specific of the daily problems of patients with idiopathic hypersomnia than daytime sleepiness.¹⁸⁻¹⁹

Sleep drunkenness is another symptom of hypersomnia and constitutes an important disability in the daily life of the patients. Seventy-eight per cent of the patients had difficulties with morning awakening, and one-third had sleep drunkenness.

Essential hypersomnia may be a milder disease condition than narcolepsy. Unlike narcolepsy, the diurnal variation in sleepiness was maintained in essential hypersomnia, and the correlation between subjective and objective sleepiness in essential hypersomnia was thought to be maintained relatively better, compared to narcolepsy.

Management:

Idiopathic hypersomnia essentially benefit from sleep hygiene, regular exercises, and sufficient hours of night time sleeping with strict routine. Sometimes SSRIs and stimulant drugs might need to be used similar to narcolepsy.¹⁹⁻²⁰

Sleep Apnoea

Clinically sleep apnoea present as self-reporting snoring, nocturnal gasping or apnoeas and measures of daytime sleepiness, correspond relatively poorly with objective measures, such as sound recording, apnoea/hypopnoea index (AHI) and MSLTs.²¹

Obstructive sleep apnoea/hypopnoea syndrome (OSAHS) is more common in males than in females, with a ratio of 2:1. Obesity and menopause are risks factors for sleep apnoea. OSAHS prevalence increases in mid-life, but the existence of OSAHS in childhood, adolescence and older age means that there is no simple positive correlation of OSAHS with age. Evidence suggests that multimodal distribution of prevalence by age is indicative of distinct disease subtypes with different aetiologies and health consequences. Sleep disordered breathing (SDB) occurs commonly in populations aged >65 yrs, but there is controversy regarding its significance in older people and its relationship to OSAHS that occurs in middle age.²¹⁻²³

Sleep-disordered breathing (SDB; snoring and associated apnoeas) is common and affects up to 20% of the population. On the other hand the full syndrome of OSAHS is common in adults and children. OSAHS is an independent risk factor for

hypertension and is associated with cardiovascular and cerebrovascular morbidity.²³

The epidemiology of obstructive sleep apnoea (OSA)/hypopnoea syndrome (OSAHS) has been described in a significant number of studies. OSAHS affects ~2–4% of the middle-aged population and is defined on the basis of symptoms of daytime sleepiness and objective measures of disordered breathing during sleep. Obstruction of the upper airway during sleep, resulting in repetitive breathing pauses accompanied by oxygen desaturation and arousal from sleep, is characteristic of OSAHS. Then after arousal air patency is maintained momentarily to reflect into the fluctuation seen in oxygen saturation, before obstruction occurs again, several hundred times per night. This results in diurnal sleepiness leading to cognitive impairment.

Non-commercial drivers with sleep apnoea are at a statistically significant increased risk of having a motor vehicle crash. Magnitude of daytime sleepiness and the severity of SDB were correlated with crash risk, while full treatment of sleep apnoea improves driver performance.²⁴ Untreated OSAHS increases societal costs due to traffic accidents and their consequences.

OSAHS leads to neuropsychological impairment that includes deficits in attention, concentration, vigilance, manual dexterity, visuo-motor skills, memory, verbal fluency and executive function. Perhaps the most important complication of OSAHS, and the one that has the greatest impact from the public

health perspective, is driving accidents. More than one-third of patients with OSAHS report having had an accident or near-accident on account of falling asleep while driving. There is also objective evidence of 1.3–12-fold increases in accident rates among those with sleep apnoea, and accident rates in OSAHS patients have been found to be 1.3 to seven times higher than those in the general population.²³⁻²⁵

Management

Treatment and diagnosis have remained largely unchanged over the past 25 yrs. In moderate-to-severe obstructive sleep apnoea/hypopnoea syndrome, treatment with continuous positive airway pressure has been shown to be effective.

In India, several factors were found to be responsible for, patients non acceptance and poor compliance, which include causes related to social, economic, cultural and geographical parameters peculiar their country.²⁶ Another recently developed technique of distraction osteogenesis has been found to be valuable and gives patients the ability to both prevent and correct the development of sleep disordered breathing.²⁷

Oral appliances therapy for OSA is non-invasive, cost effective and beneficial to affected patients. It greatly improves quality of life and cardio pulmonary health. Therefore in developing countries one should always consider proper surgical assessment by ENT doctors due to issues of acceptance and compliance of nasal cap among sufferers.²⁸⁻²⁹

Kleine–Levin syndrome

This uncommon disorder is a form of periodic hypersomnia, which occurs primarily in adolescents. Most case reports show male preponderance.³¹ It is characterized by the occurrence of episodes of EDS, usually accompanied by hyperphagia, aggressiveness and hyper sexuality, lasting days to weeks and separated by weeks or months. During symptomatic periods, individuals sleep up to 18 h per day and are often drowsy, confused and irritable the remainder of the time. The aetiology of this incapacitating syndrome is obscure, though most reported evidences indicate hypothalamic derangements.³²⁻³³

Management;

Treatment with stimulant medication is usually only partially effective. Effects of treatment with lithium, valproic acid or carbamazepine have been variable, but generally unsatisfactory. Fortunately, in most cases, episodes become less frequent over time and eventually subside. The syndrome must be distinguished from menstrual-related periodic hypersomnia³⁴ in which symptoms occur during the several days prior to menstruation.

Restless leg syndrome:

This is a common condition that seen and occurs to all age groups from infants to old age. However it may manifest with hypersomnia when it occurs after adolescence. This syndrome is marked with frequent restless movement to legs and calf muscles with what is known as muscle fasciculations. It may occur secondary to many organic and

psychiatric disorders such as uraemia, diabetes, Parkinson disease, thyrotoxicosis, anxiety, depression, or secondary to use of neuroleptics and antidepressants.

The restless movement of legs often takes place at early stage of non-REM sleep, but occasionally happens at deeper or REM sleep. Antiepileptics, B blockers have been used with modest response.³⁵⁻³⁶

Conclusions:

Recent evidences stress the seriousness and the huge public consequences of hypersomnia not to mention the life costs that it claims subsequent to road traffic accident beside its huge individuals suffering. Therefore this paper calls for more service organization and care to meet the increasing challenge that this condition poses to an already over stretched financial resources in developing countries.³⁷⁻³⁸

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Psychological impact on child soldiers in Sudan

Dr. Abdelghani Elshiekh, MRCPsych

Associate Professor,
Department of Psychiatry, Ribat University

Abstract

Introduction: Up to 50% of the world's child soldiers are in Africa. Since, 1998 there have been armed conflicts involving child soldiers in at least 36 countries. This practice continues in conflicts all over the world, Sudan is not an exception.

Objectives: The aim of this study was to assess the psychological impact, in child soldiers from Darfur who were recruited by a rebel group and participated in armed attack on the capital of Sudan.

Subjects and methods: We interviewed 103 child soldiers who accompanied a Darfurian rebel group fighting the Sudanese government, during the 2008 attack on Omdurman when the rebels approached the city in a convoy of 130 military vehicles.

Results: Research shows that 6% of these children developed depression and 10% have manifestations of PTSD. These results revealed lower prevalence when compared to other studies.

Conclusion: Current evidence strongly suggests that the trauma of being a child soldier results in any number of psychological and behavioral problems.

Key words: Child soldiers, Darfur, depression, post-traumatic stress disorder.

Introduction:

A 'child soldier' is defined as any child - boy or girl - under 18 years of age, who is part of any kind of regular or irregular

armed force or armed group in any capacity, including, but not limited to: cooks, porters, messengers, and anyone accompanying such groups other than family members. It includes girls and boys recruited for sexual purposes and/or forced marriage. The definition, therefore, does not only refer to a child who is carrying, or has carried weapons". (1) More than 500,000 children under-18 have been recruited into state and non-state armed groups in over 85 countries worldwide.(2) At any one time, more than 300,000 of these children are actively fighting as soldiers with government armed forces or armed opposition groups worldwide.(3) Up to 50% of the world's child soldiers are in Africa. Since, 1998 there have been armed conflicts involving child soldiers in at least 36 countries. Most child soldiers are between the ages of 15 and 18 years, but some are as young as seven. Most, but not all, soldiers under 15 years of age are believed to be part of non-state armed forces. Those children, who are not fighters, are typically runners or scouts, porters, sex slaves, cooks or spies. This practice continues in conflicts all over the world, Sudan is not an exception. Children make for cheap and obedient fighters, and are easier to mold

into effective and expendable combatants. With the newer creation of smaller arms and lighter weapons, children are now being better enabled to fight. Child soldiers are often abducted from their homes, schools or communities and forced into combat, whether by government forces, rebel groups or paramilitary militias. Sometimes they are accepted as "volunteers".

Over the last ten years, two million children have been killed in conflict, over one million have been orphaned, over six million have been seriously injured or permanently disabled and over ten million have been left with serious psychological trauma, including depression, post-traumatic stress disorder, personality changes, and behavioral disorders.

Objectives

The aim of this study was to assess the psychological impact, including post-traumatic stress disorder, depression, and behavioral problems in child soldiers from Darfur who were recruited by a rebel group and participated in armed attack on the capital of Sudan.

Subjects and methods

We interviewed 103 child soldiers who accompanied a Darfurian rebel group fighting the Sudanese government, during the 2008 attack on Omdurman when the rebels approached the city in a convoy of 130 military vehicles. The attack; took place in a single day, on 10/5/2008.

All these children were arrested, but the government granted amnesty to them and they were moved to the "The

Psychosocial rehabilitation center" in Algily city north of Khartoum 10 days later. The study took place in the center during the period from 20/5/2008 to 14/8/2008, and involved interviews with all children.

Data was collected using a questionnaire, the contents of which were divided into four parts: socio-demographic, trauma check list, diagnostic criteria of post-traumatic stress disorder which are based on Diagnostic and statistical Manual of Mental disorder, text revised 4th edition (DSM-IV-TR) criteria , and screening questions for anxiety and depression. Data was collected by fourteen researchers (trained psychologists) who were appointed to look after these children during their stay in the rehabilitation center. Many children were illiterate and some of them have language barrier, they needed help to understand and answer the questions. To make sure that the children understood the questions correctly they were asked to tell the researchers what they understand from it. We have explained to them that there is no right or wrong answers and these answers will be kept confidential.

The interviews were under supervision of an expert psychiatrist.

Results

In this study 103 children were included; they were all males (100%). The age ranged between 11-18 years, 68 children (66%) were between 14-16 years (table 1).

Table1: Age distribution among child soldiers (n=103)

Age group	frequency	percentage
11 - 13 yrs	7	6.8%
14 - 16 yrs	68	66%
17 -18 yrs	28	27.2%
Total	103	100%

Considering their age group, and being from conflict zone their educational level, showed that 64 children (62.1%) were at the primary level of education, and 18 of them (17.5%) had pre-school education(table 2).

Table 2: Educational level of child soldiers (n=103)

Level of Education	Number of children	percentage
Illiterate	13	12.6%
Preschool (khalwa)	18	17.5%
Primary	64	62.1%
Secondary	8	7.8%
Total	103	100%

The study found that 34 (33.1%) of these children were students before recruitment to the rebel group, 33 (32.1%) had no job, and 12 (11.7%) were Shepherds (table3).

n=103) (Table 3: Occupation of children prior to recruitment

Occupation	Number of children	percentage
None	33	32.1%
Shepherd	12	11.7%
Student	34	33.1%
Laborer	4	3.8%
Driver	2	1.9%
Farmer	11	10.7%
Driver assistant	3	2.9%
Trader	4	3.8%
Total	103	100%

Table 4: Psychological and behavior impact on child soldiers

Disturbance	Number of children	percentage
Nightmares	5	5%
Nocturnal enuresis	4	3.9%
Thumb sucking	3	2.4%
Angry aggression	3	2.4%
Sexual behavior	1	0.9%
Anxiety and phobias	5	5%
Depression	6	6%
PTSD	11	10%
None	65	64.4%
Total	103	100%

Most children were forcibly abducted (75.8%), or threatened (18.2%). Abduction period ranged from 7 to 240 days. The majority of the children was subjected to punishment rituals, hard labor & torture, e.g., tied for about a week in the military cars (95%), or sexually abused (3%). They were forced to engage in hazardous activities such as using weapons after receiving some military training. Child soldiers were forced to live under harsh conditions with insufficient food and little or no access to healthcare. They were almost always treated brutally, subjected to beatings and humiliating treatment.

The study revealed that some of these children experienced psycho-social disturbances like nightmares, nocturnal enuresis, & thumb sucking (11.1%), angry aggression that is difficult to control (3%), anxiety & phobia (5.1%), depression (6%), and post-traumatic stress disorder (PTSD) (10%). However, 65 (64.4%) of these children showed no evidence of any psychological disturbances. Our findings shed light on the nature of severe trauma experienced by this group of children (table 4).

Discussion

The trauma of being a child soldiers results in any number of psychological problems. Research shows that 6% of these children developed depression and 10% have manifestations of PTSD. These results revealed lower prevalence when compared to other studies.

A study by Fath Al'Alim A.Rahim & coworkers found that PTSD was 55% in a sample of 200 children in a camp for displaced Darfurian people in Al-Genaina Sudan, 2007.

Our findings contrast with those of Hubbard and colleagues, who assessed PTSD in a sample of 59 Cambodian adolescent and young adult refugees who had survived massive childhood trauma. They found that 24% met diagnostic criteria for current PTSD and 59% for lifetime prevalence. They also found that trauma exposure was related to age, but that age, in itself, did not predict symptoms. (4)

Our findings revealed considerably lower level of PTSD, compared to a study by Dyregrove, A., & Raundalen, M., who found that the level of PTSD among war-exposed children in Iraq was 84 %.(5)

The study by Shannon, noted some differences in the types of symptoms experienced by white, African-American, and other minority children in the aftermath of Hurricane Hugo, but the differences were mainly due to level of exposure, reporting biases, and possibly to a differential risk of PTSD outcome. (6).The most recent national survey by Kilpatrick, found that race was unrelated

to the risk of PTSD when exposure severity was controlled.(7) It appears, therefore, that if race is a risk factor for PTSD, it is only so because it is a marker of traumatic exposures. Our results revealed that about 8.9% of children developed nightmares and nocturnal enuresis. 2.4% have aggressive behavior.

Guyot found that, children who have participated in war often show regressive or aggressive behavior with a tendency towards violence.(8) The study by Bayer et al revealed that child soldiers had a high exposure to war-related trauma and, not surprisingly, the prevalence of PTSD symptoms was high 34.9%.

Conclusion

Current evidence strongly suggests that the trauma of being a child soldier results in any number of psychological and behavioral problems

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Factors associated with compliance with anti-schizophrenia drug therapy in Sudan

Amira Mohamed Osman Hamid Haroun
 Consultant psychiatrist
 Al-Tigani Al-Mahi Psychiatric Teaching Hospital

Introduction

Schizophrenia is a lifelong disorder, and prevention of recurrent psychotic episodes, treatment of negative symptoms and cognitive deficit is being increasingly recognized as essential for patients' quality of life,

Increasing emphasis is being placed on the importance of maintenance of drug treatment in patients with schizophrenia.

Medication compliance has become a focus of increasing concern.

Compliance can be defined as patient's acceptance of recommended health behavior. [1]

Also it can be defined as the degree to which a patient's behavior is consistent with medical advice. [2]

Adherence is sometimes used instead of compliance

Compliance suggests that the patient is passively following the doctor's orders and that the treatment plan is not based on a therapeutic alliance between the patient and the physician.

The level of compliance varies with time.

Following hospitalization or a recent exacerbation, patients are likely to take their medication relatively consistently but as time pass the likelihood of noncompliance increases [3].

It was found that at least up to 60% of patients in the community are episodically non-compliant (i.e., not taking their treatment continuously) and relapse rate could possibly be halved if compliance were significantly improved [4].

Aim

The aim of this study is to estimate the prevalence of compliance with medication among adult schizophrenic patients on maintenance treatment attending the referred clinic in Al-Tigani Al-Mahi Psychiatric Teaching Hospital and certain factors that influence compliance.

Hypothesis tested

There is a significant association between patient's compliance with medication and:

1. Information about his illness [5].
2. The information about the duration of the treatment [5].
3. The patient's satisfaction of medication [6].
4. The patient's satisfaction of the quantity of medication [7].
5. The patient relative's knowledge about the illness [8].
6. The patient relative's information about importance of medication [8].
7. Adverse effect of the drugs [6], like:
 -a cute dystonia [9] (muscles spasm)

- Weight gain [10].
- Excessive sleep [8].
- Akathisia [11] (increase in mobility)

Methodology:

It is a cross sectional descriptive study, done in Al-Tigani Al-Mahi Psychiatric Teaching Hospital, which is one of the three major psychiatric hospitals in Sudan, the hospital receives patients from all over the country.

The hospital has a 24 hours emergency psychiatric clinic with twelve emergency beds with a total number of 92 in-patients beds and also a daily out-patient referred clinic.

complete the questionnaire, the attending relatives were asked.

Verbal consent was taken from the patients or their attended relatives.

All schizophrenic patients who attended the hospital during a two calendar months period and who fulfilled the criteria of inclusion were studied.

Criteria for inclusion were age group 15-65 years and being on maintenance treatment of schizophrenia for at least one year.

The total number of patients was 130.

Diagnosis of schizophrenia was made according to DSM IV criteria.

All patients were interviewed directly using two questionnaires; one for socio-demographic data, and the other for their compliance with treatment. When patients were not able to

Results

Of the 130 patients who were examined, ninety two fulfilled DSM IV criteria for the diagnosis of schizophrenia and were studied and analyzed using SPSS.

Figure [1] shows sex distribution of patients studied

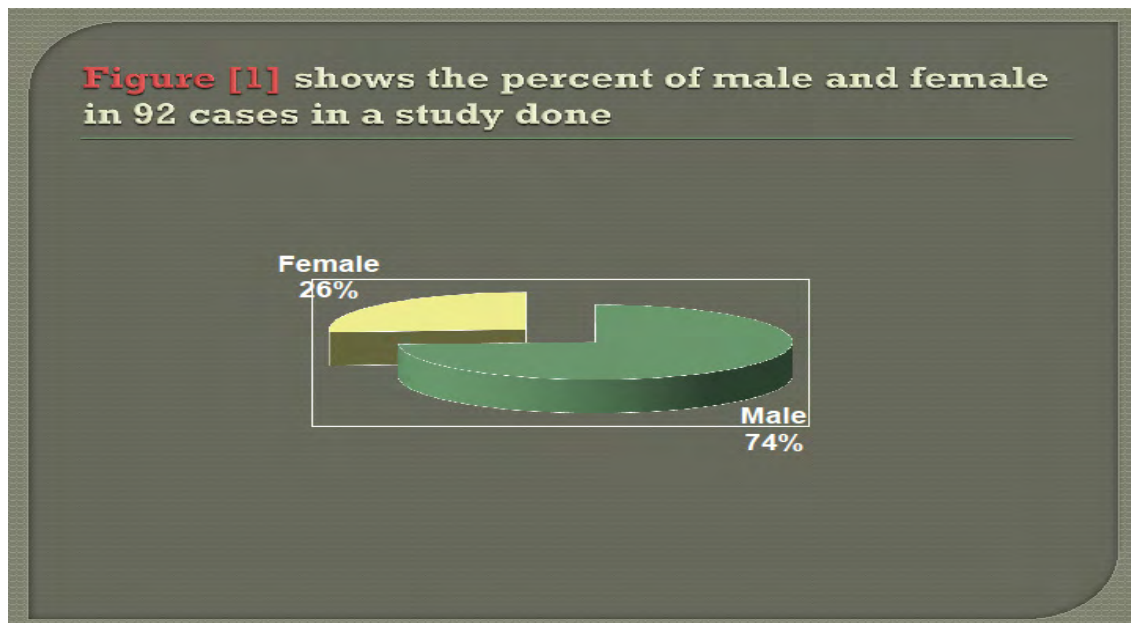


Figure [2] shows place of residence of the 92 cases in the study

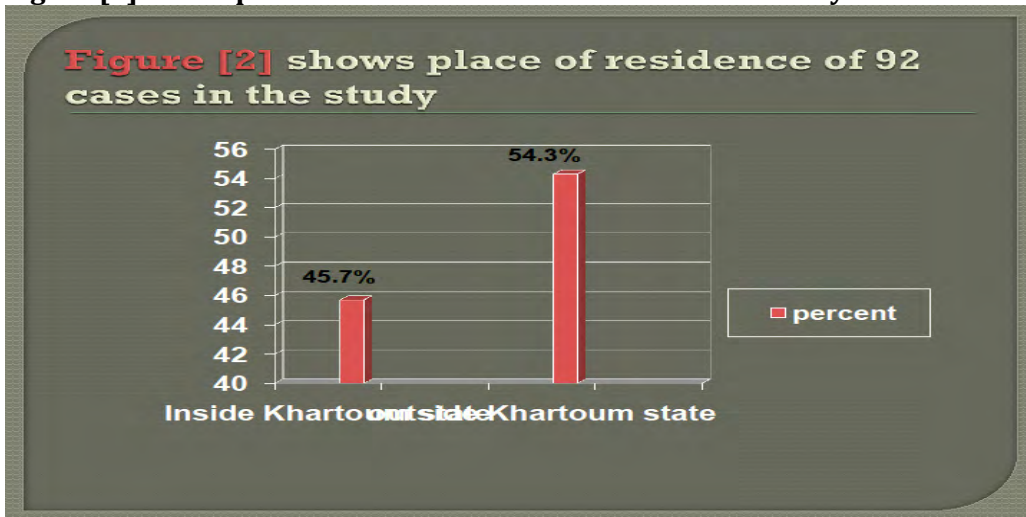


Figure [3] shows the level of the education in the 92 cases in the study

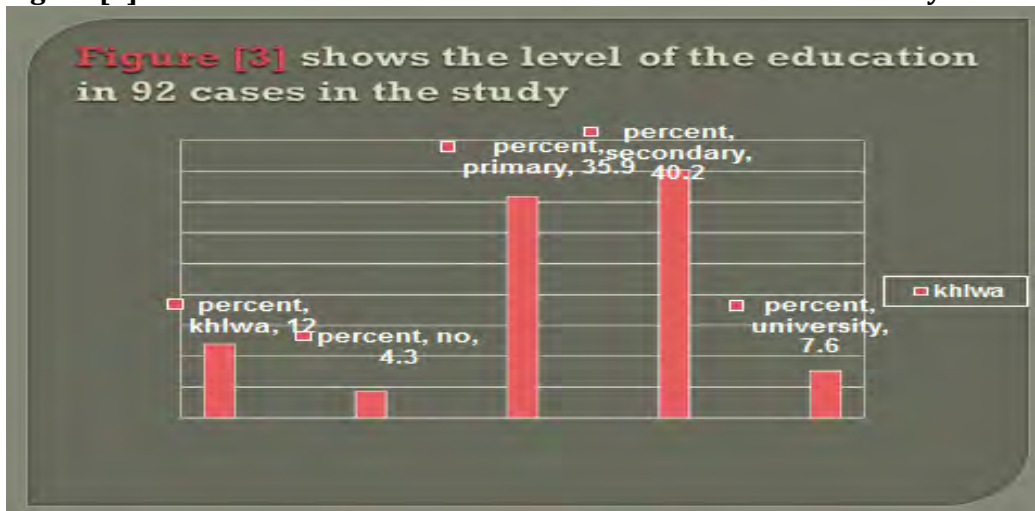


Figure [4] shows the marital status in the 92 cases in the study

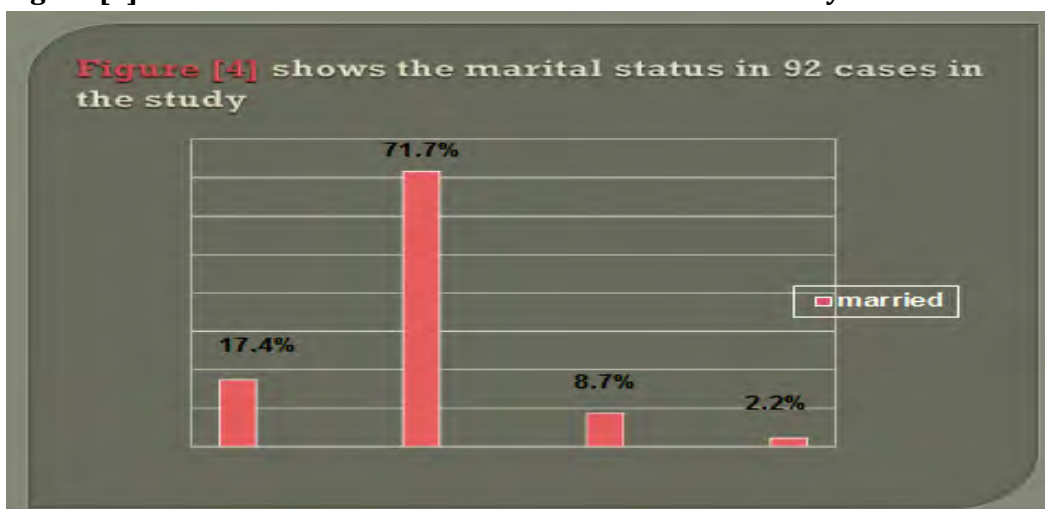


Figure [5] shows the occupation in the 92 cases in the study

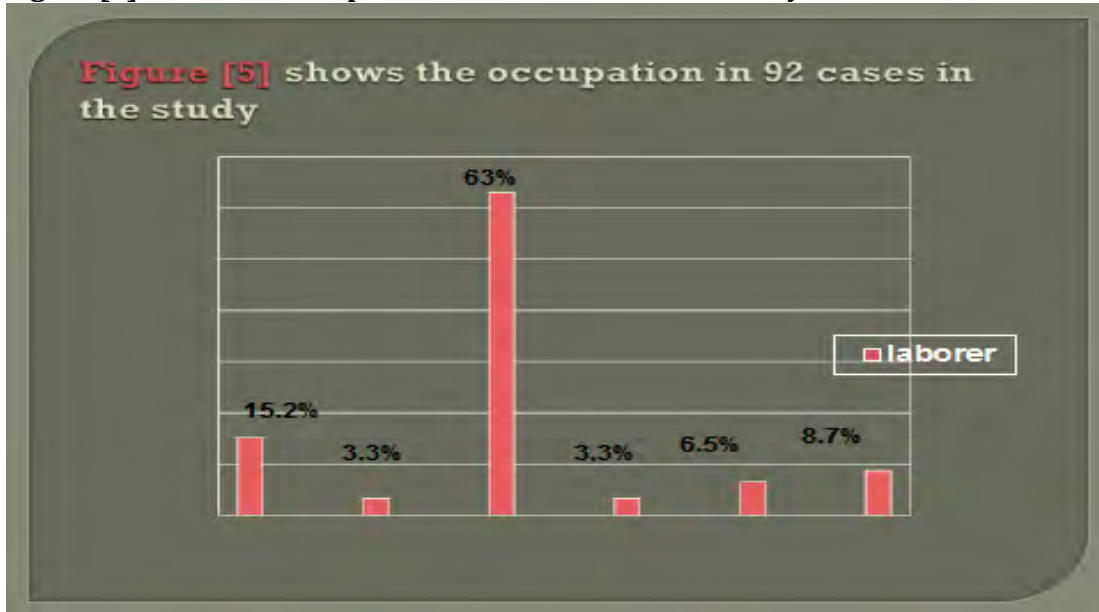
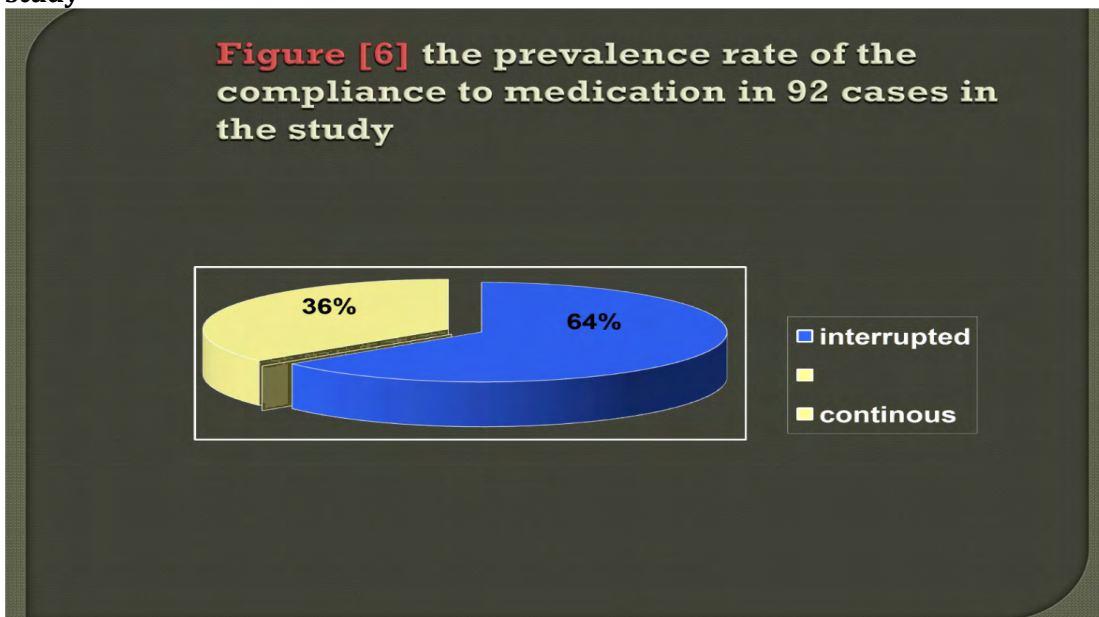


Figure [6] the prevalence rate of the compliance to medication in the 92 cases in the study



Result and Discussion

The prevalence rate of compliance with medication among this study population was only (35.9%), and those who were poorly complying (i.e., they were not taking their drug treatment regularly) was (64.1%).

The same result was found in a similar study where poor compliance with medication was up to 60% of outpatients (12).

From the above mentioned hypothesis the following were proved, and there was significant association in patient's compliance with medication and:

1- The patient's satisfaction of medication

2- The patient's satisfaction of the quantity of medication.

These two were confirmed in two studies (6, 7) where in one they found positive association between compliance and patient's feelings of a positive effect of the drug on his illness.

And in the other found that the probability of compliance is inversely proportional to the number of drugs prescribed and the frequency with which they are to be taken.

Also it was found that there is a significant association between compliance and:

3- The patient relative's information about importance of medication.

This result goes with study (8) saying that the patients and their families who were more aware of their mental illness and of the beneficial effects of medication were more likely to be compliant with the prescribed medications.

4 - For the side effects of the drug only akathisia was found to be significant.

This finding goes with the result of the study saying that the compliance is significantly decreased when patient felt that the adverse effect are difficult to undergo or become unbearable(13).

Conclusion

This study shows that compliance with medication in Sudanese schizophrenic patients was poor, and the fact that more than 50% of study population came from various areas of Sudan outside Khartoum state, may indicate that this problem is wide spread and national.

Conclusion

Our patient cares about the quantity of medication and whether it is going to make him feel better more than what is his illness.

This reflects the importance of considering that when prescribing the medication to our patients.

Recommendations

1- It is relevant to increase attention of the health team to the importance of compliance of the patient to the treatment putting in their mind the importance of:

a) Patient's satisfaction with his treatment, and the patient's need to experience for themselves the merits of taking medication before accepting the need to take them for long term.

b) The involvement of the family in the management of their patient.

b) Patient and family education

Limitations

Questioning the patient or using questionnaire which are indirect methods can be susceptible to misrepresentation and tends to result in overestimating the patient's adherence

A longitudinal study is recommended rather than cross sectional study

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Second Generation Antipsychotics (SGAs) and metabolic disorders – A Short Visit

Fath Al Alim Mohamed Abdel Rahim

Professor of Psychiatry, University of Medical Sciences and Technology , Khartoum, Sudan

The term atypical antipsychotic was coined to refer primarily to the low propensity of an antipsychotic to induce extrapyramidal adverse symptoms (EPS), compared to typical antipsychotics. The current alternative terminologies are second generation (SGAs) and first generation antipsychotics (FGAs) respectively. To qualify strictly for the status of being atypical, the antipsychotic should not induce catalepsy in laboratory animals, should have no effect on serum prolactin, be highly selective D2 blocker, has a high 5HT₂:D₂ receptor blocking ratio and should be effective on negative symptoms. Obviously, the SGAs do not satisfy all of these criteria and future definitions need to be introduced.

The introduction of FGAs in the 1950/60's was considered a breakthrough in the treatment of schizophrenia and other related psychotic disorders, but the emergence of acute extra pyramidal side effects (EPS) and years later tardive dyskinesia triggered a pursuit for novel antipsychotics and paved the way for the introduction of the SGAs(1,2). [Table 1] However, FGAs still have the credit of being effective on positive symptoms of schizophrenia, are cheaper and widely available and (3).

Earlier randomized controlled trials (RCTs), comparing FGAs and SGAs were criticized because they mainly used high

doses of haloperidol as a comparator (4). When subsequent comparative studies employed strategies to reduce EPS risk with FGAs, the differences between the two became less obvious. Such strategies include the use of low-doses of FGAs, the addition of prophylactic anticholinergics and the use of low-potency FGAs (3,4).

RCTs have confirmed that SGAs are better tolerated, have more gentle side effects profile and are effective on both positive and negative symptoms, hence are considered first-line treatment option for schizophrenia (3,4) and other increasing off label use such as dementia, depression with psychotic features, autism, delirium, aggressive behavior, personality disorders, PTSD etc. The NICE guidelines offer reasonable advice on the use of these antipsychotics (5). Clozapine remains the established treatment of choice in refractory schizophrenia (6).

The initial euphoria created by the extensive use of SGAs started to be eroded by emerging literature findings about associated metabolic disorders including obesity/overweight, pre-diabetes, type 2 diabetes and dyslipidemia and the subsequent risks involved (7,8). These findings were criticized because they were derived from limited data, case reports, and retrospective database with no control for risk factors (7).

A legitimate question arose as to whether these metabolic syndromes are inherent in the psychotic disorder or a complication of its treatment (8). Proponents of the first argument reported that drug-naïve schizophrenics have increased visceral fat, impaired fasting glucose, are more insulin resistant and have higher plasma glucose, insulin and cortisol levels(8). SGAs cause relatively rapid increase in body weight (fat) which does not plateau for up to a year with an average 0.5-5kg weight gain at ten weeks(9). The mechanism of this action is unknown; an effect on the hunger/satiety centers and on β cell functions have been postulated.

SGAs have been reported to be associated with onset or exacerbation of diabetes or hyperglycemia which resolves when the drug is discontinued and re-emerge by re-challenging by the offending drug (9). Head-to-head comparisons of SGAs reveal that few, if any, efficacy differences have been demonstrated between these agents but their metabolic side effect profile differ considerably as shown in Table 2 (3,8,9,10,11). Various monitoring protocols (Table 3) have been suggested to guard against the increased risk of cerebrovascular disease caused by

obesity, elevated blood glucose and triglyceride levels (12). Whether we are following any protocol in our clinical practice needs to be researched. Because of our limited resources it is not feasible to monitor all the metabolic parameters; recording the weight before initiating an antipsychotic and on subsequent follow-up visits may suffice.

The available SGA in Sudan include olanzapine, risperidone, quetiapine and clozapine; aripiprazole and ziprasidone which have the lowest propensity of causing metabolic disorders are not available yet. Clozapine and olanzapine have high propensity followed by risperidone with quetiapine in an intermediate position.(Table 2).

Being what we are economically, thanks to the Indian pharmaceutical industry for providing cheaper versions of these products albeit their efficacy may be questioned by some of us. It would be of interest if the metabolic profile of our schizophrenic patients receiving SGAs could be explored by one of our students as a postgraduate thesis.

Table 1: commonly used SGAs

SGA	Year introduced
Clozapine	1989
Risperidone	1993
Olanzapine	1996
Quetiapine	1997
Ziprasidone	2001
Aripiprazole	2002
Newer ones	

Table 2: SGAs and metabolic abnormalities

SGA	Wt. gain	Diabetes	Lipid worsening
Clozapine	+++	+	+
Olanzapine	+++	+	+
Risperidone	++	?	?
Quetiapine	++	?	?
Aripiprazole	+/-	-	-
Ziprazidone	+/-	-	-

Table 3: Monitoring protocol for patients on SAGs

	Baseline	4 wks	8 wks	12 wks	¼ yearly	Annually	Every 5yrs
Personal/family history	√					√	
Weight (BMI)	√	√	√	√	√		
Waist Circum.	√					√	
BP	√			√		√	
F.Glucose	√			√		√	
F.Lipid	√			√			√

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Case Report:

Acute Persistent Tardive Dystonia

Dr. Abdelgadir H. Osman

Ass. Professor University of Khartoum, Former consultant psychiatrist U.K

Summary:

This is a case report of unusually persistent cervical dystonia with oro-facial dyskinesia, developed two days after exposure to a neuroleptic medication. The abnormal movement did not respond to conventional treatment including treatment with Botulinium Toxin.

Background:

The term 'dystonia tarda' was first used by Keegan and Rajput to draw the attention to cases of persistent dystonic postures, due to prolonged exposure to antidopaminergic drugs.

Until recently, these cases remained overlooked in the general literature. Burke and Fahn reported a series of 67 patients with tardive dystonia developed after a median time of five years exposure to Dopamine Antagonist (DA).^{1,2}

The shortest exposure period was three weeks. In their report, they noted the phenomenological differences between tardive dystonia and the classic oro-facial tardive dyskinesia. Both can be caused by prolonged exposure to conventional antipsychotic drugs, and may show dyskinetic movement, but the present of severe dysonia, makes tardive dystonia frequently disabling than the classic oral dyskinesia.²

Another reason for distinguishing these subtypes is that they differ in their clinical and pharmacological treatment. Tardive dystonia may benefit from anticholinergics, and Botulinium toxins, while classic oral tardive dyskinesia

usually does not. Another difference is the clinical course between tardive dystonia and tardive dyskinesia. The former does not persist after discontinuation of DA, whereas the latter does.³

Case Report

Mr. Q, a 35 year old, factory worker, married and a father of three children. He lives in his own house, has no financial problems. He was made redundant shortly before he came to psychiatric notice. Referred by his GP with insomnia, depression and persecutory ideas that did not respond to Prothiaden 7 mg and Stelazine 1 mg bid, prescribed to him.

On a home visit by a psychiatrist he showed no evidence of depression, but was rather preoccupied with paranoid persecutory ideas. The patient admitted experiencing auditory hallucinations of second person order of persecutory nature. The patient medications were changed to Haloperidol 5 mg, procyclidine 5 mg at night, instead of stelazine 1 mg bid (which he was taking for ten days) ..

Two days later he developed dystonic cervical movement involving trapezius and sternomastoid muscle, of both sides

of his neck with distressing dyskinesia of bucco-facial muscles leading to grimacing and partial to and fro movement of the neck (fifteen per minute). In-patient treatment arranged and thorough psychiatric and medical investigations and consultations were undertaken as these movements failed to respond to prompt treatment with anticholinergic, muscle

relaxant and B-Blockers ,as all other medications were withdrawn (i.e., Haloperidol and Prothiaden).The patient mental state ,was of distressed mood from the dystonic movements but not depressed. Investigations for other causes of dystonia failed to reveal any abnormality.

FBC	Within normal ranges
<i>LFT</i>	
α Aminotransferase	981U
GamaGT	92C50IU
Creatinine Kinase	928C.195
Hep Band	
Thyroid function test	NAD
Cholesterol	NAD
Ultrasound upper	Clear
Hep. B	Clear
Serum Copper	NAD
VDRL	NAD

Neurologist started him on Botulinum toxin on both sides of his neck muscles, which were repeated a few times over a six month period. But his dystonic movements showed minimal response.

No other neurological illness causing abnormal muscle movements was found.

Hence a diagnosis of neuroleptic induced tardive dystonia was made.

Discussion

Burke & Kang stated that, the occurrence of persistent dystonia in the setting of antipsychotic is rare, there have been around 22 reports describing a total of 131 patients. There have been very few cases of persistent dystonia, which developed few days after exposure to "AD").^{4,5}.

Burke and Fahn, ² in their ⁶⁷ series of patients with tardive dystonia, found the median exposure period as five years, whilst only one patient developed persistent dystonia after three days of exposure.

Therefore in our present case we report a case of persistent tardive dystonia, two days from exposure to Haloperidol and a total of less than two weeks from the exposure to all other antipsychotic drugs.

Jankovic and Schwartz, ^{3,4} reviewed outcomes of 300 patients with cervical dystonia that had been referred to Baylor College of Medicine Movement Disorder Clinic during the period between 1979–1989. They found, anticholinergic drugs provided moderate improvement in 33% of patients, but local intramuscular botulinum toxin injections relieved CD, local pain, or both in 90% of patients, whilst this same measure of treatment provided very little help for our case if at all.^{6, 7}

Therefore-one would raise a question whether some of these persistent dystonic reactions are caused by some permanent damage in the extra pyramidal system? A question which further research would clarify.

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بسم الله الرحمن الرحيم

الإمام أبو حامد الغزالي

تجربته مع الإكتئاب

Author:

Dr. Abul Gasim Saad, FRCPsych.

Consultant Psychiatrist, Khartoum North

Abstract:

This investigation supports the previous work reporting a high prevalence of mental abnormalities observed in international persons of creative and high achievement in all walks of life. Imam Mohammed Al—Ghazali (1058—1111) was one of the most influential Islamic theologians. He experienced a crisis of general enfeeblement described by his doctors then as a mischief in his heart with no hope of cure, unless the cause of his previous sadness he arrested. When his symptoms and signs were tested against the criteria of the Diagnostic and Statistical Manual IV, they fit into the category of major depressive episode.

ظاهرة تزامن الذكاء المفرط مع مؤشرات ودلائل الاضطراب النفسي عند العباقرة والموهوبين مالوفه ومتواترة في كل المجتمعات والثقافات من قديم الزمان.

هذه الظاهرة استرعت انتباه واهتمام الباحثين في حقل الطب النفسي حيث تناولو بالبحث والدراسة العظماء من العلماء والادباء والفنانين والموسيقيين والفلاسفة والسياسيين الذين طوفت شهرتهم الافاق نتيجة انجازاتهم وابداعاتهم والذين لم تخل سير حياتهم من بعض الاعراض والعلامات الدالة على اصابتهم بقدر من الاضطرابات النفسية او عدم السويه في سلوكياتهم.

ممارستي للعلاج في حقل الطب النفسي استوجبت منى المعرفة بخلفيات و اساليب للمعالجين من غير الأطباء المتخصصين, وما كانت الأغلبية من هؤلاء ينتمون الى طائفة الصوفية ويستمدون شرعيتهم من التصوف فقد حفزني هذا الى دراسة التصوف وتاريخه وأقطابه.

أبو حامد الغزالي من أشهر رجال التصوف الإسلامي . وقراءتي لسيرة حياته المضطربة و المثيرة للجدل شجعتني لأن ابحث و استقصي عن طبيعة وكنة المرض الذي غشيه لما انتقل الى بغداد وهو يومئذ في أوج شهرته ومجده.

سيرته الذاتية :-

هو ابو حامد محمد بن محمد أحمد الغزالي ولد في بلدة طوس من اعمال خراسان عام 450 هـ الموافق 1059 م . فهو اذاً من أصل فارسي. كان والده يعمل في صناعة الغزل ويقوم على خدمة رجال الدين و الفقهاء . استهوته مخايل العظمة ومظاهر الإعجاب و التقدير التي كان ينعم بها هؤلاء النفر من الناس مما جعله يشتهي ان يصل إبناه محمد و أحمد الى تلك المرتبة . ولكن الموت عاجله ولما يزل ابناه في مدارج الطفولة .كانت وصيته التي أودعها عند صديق له مع قليل من المال : ((كانت أمتي في الحياة ان أتعلم الخط .فاريد منك ان تحقق امنيتي في نجلي هذين))

بذل الصديق جهده في إنفاذ وصية والدهما ولما ضاقت ذات يده عن رعايتهما الحقهما بمدرسة للفقه . ومن ثم اعتمد الابن الاكبر محمد الغزالي على نفسه وواصل مسيرته في التحصيل والاخذ من كل فنون المعرفة المتوفرة في ذلك الوقت من فلسفه وفقه وتوحيد ومنطق. واصبح يتردد على مجالس اصحاب الملل والنحل والمذاهب والمتصوفة.. فاختلف بهم واكثر جداله معهم مستعينا باسلحته الفكرية القويه المتمثله في اسلوبه الجيد وقدرته الفائقه على النقاش ومعرفته والمامه الغزير باخبار الطوائف والنحل والمذاهب القائمه كما استفاد من طبيعته المتمرده والثائره التي اتسمت بالنشاط والاندفاع والمواجهه والمصادمه الفكرية المشوبه بالتهكم والسخرية!.

وبينما هو في قمة النشاط والمعرفه يفقد بسبب الموت استاذه وصديقه إمام الحرمين ضياء الدين الجويني, مما أورثه حزنا وحرمة من رفيق دربه. فانتقل الى بغداد التي كانت مهوى افئدة العلماء وعشاق المعرفة والمجد. وبفضل تأهيله المتين وقدرته الفائقة في الجدل وكسب الأنصار والمعجبين شق الغزالي طريقه الى نظام الملك الذي قربه اليه وأدناه من مجلسه, وعينه استاذا للتدريس في المدرسة النظامية (اكبر الجامعات العلمية) ولم يتجاوز الغزالي الرابعة والعشرين من عمره!

المرض وأسبابه:

وصل ابو حامد الغزالي الى ما كان يشتهي من متع الحياه والجاه والسلطان.

ولكن نفسه الطلعة القلقة لم ترض بهذا، فبدأ يبحث عن ضالته مما يقظ عنده الشك في كل شي.

شك في كل ما يقع تحت الحس وفي كلما يثبتة العقل.. شك في صدقية العلماء. والفقهاء والفلاسفة وفي دوافع سلوكهم ...

هذا الصراع العميق بين الشك والإيمان وحزنه على فقد أستاذه و صديقه إمام الحرمين رسب عنده المرض فانقطع عن التدريس ولزم الفراش. (فلم أزل أتردد بين شهوات الدنيا ودواعي الآخرة قريبا من سنة وجاوز الأمر حد الإختيار إلى الإضطرار.

كان لساني لا ينطق بكلمه ثم اورثت هذه العقلة في اللسان حزنا في القلب بطلت معه قوة الهضم حتى قطع الأطباء طمعهم في العلاج وقالوا...

(هذا مانزل بالقلب ومنه سرى الى المزاج فلا سبيل اليه بالعلاج الا بان يتروح السر عن الهم الملم)²

منهاج البحث:

هذا البحث قائم على فرضية المعلومات المتوفرة عن مرض الغزالي

(الأعراض والعلامات) اثناء إقامته في بغداد سواء كتبها هو يصف حاته المرضية أو التي إستنبطها الباحثون في حالته كانت تومى الى واقعه من إكتئاب المزاج الشديد المت به Major depressive episode

قايسة تلك الأعراض والعلامات على مرض الإكتئاب الرئيسية الوارده في ملزمة الأحصاء والتشخيص الامركيه الإصدار الرابع DSM IV وجاءت النتيجة كما يلي:

1. هبوط المزاج (الحزن) depressive mood

أ. قال الأطباء عن طبيعة مرضه : (هذا أمر نزل بالقلب ومنه سرى إلى المزاج فلا سبيل اليه بالعلاج إلا ان يتروح السر عن الهم الملم)³.

ب. قيل عن طبيعة مرضه : (هذا مرض سماوى وليس له سبب إلا عين أصابت أهل الإسلام وزمرة العلم)⁴.

2. تديني الرغبة والإستمتاع بالأنشطة التي كانت مصدر متعه: Diminished interest in pleasurable activities

قال الغزالي أسهل إلى قلبي الإعراض عن الجاه والمال والهرب من الشواغل ثم لاحظت أحوالي فإذا أنا منغمس في العلائق وقد أهدت بي الجوانب.

3. فقدان للشهية مع نقص الوزن: poor appetite and loss of weight

قال الغزالي يصف حالته: (حتى أورثت هذه العقلة في اللسان حزنا في القلب بطلت معه قوة الهضم ومراءات الطعام و الشراب فكان لا ينساق لي ثريد ولا تنهضم لي لقمة وتعدي الى ضعف القوى).⁵

4. إضطراب النوم Disturbed sleep

لم تتوفر معلومات عن طبيعة نوم الغزالي اثناء المرض.

5. تهيج أو تديني النشاط Psychomotor agitation or retardation

قال الغزالي (وتعدي الى ضعف في القوى حتى قطع الأطباء طمعهم في العلاج).⁶
وقال أيضا: (ثم لما احسست بعجزتي وسقط بالكلية اخياري).⁷

6. فتور ونقص في الطاقة الجسمية: Fatigue and loss of energy

ورد هذا في الفقرة (5) أنفة الذكر.

7. الإحساس بالذنب : Feeling of Guilt

كان الغزالي يحاور نفسه: (ثم تفكرت في نيتي في التدريس, فإذا هي غير خالصة لوجه الله تعالى بل باعثها ومحركها طلب الجاه وإنتشار الصيت).⁸ (فتيقنت أني على شفا جرف هار, وأنني قد أشفيت على النار).⁹

8. تديني القدرة على التركيز والتردد في إتخاذ القرار: Diminished ability to concentrate and indecision

(فلم أزل أتردد بين تجاذب شهوات الدنيا ودواعي الآخرة قريبا من ستة أشهر).¹⁰

9. التفكير في الموت وإشتهاءه : Suicidal ideation
لم تتوفر معلومات عن تفكير الغزالي في الانتحار.

الخاتمة:

الإمام الغزالي يعتبر بحق حجة الإسلام ومجدد المائة الخامسة, ومن الاعلام المتميزين في ميادين عديدة كالفكر والفلسفة والفقہ والتصوف .. الخ ولهذا فقد شغل الباحثين فيه كتابة وبحثا وترجمة. إلا ان إعادة قراءة سيرة حياته بعين مفتوحة ومن منظور تحليل شخصية وتحديد سماتها وخصائصها فإن العين لا تخطى الإضطراب الذي غشيه في فترة مفصلية من حياته. وإن تفعيل المعايير والأدوات المتفق عليها والمعمول بها والمتضمنة في ملزمة الإحصاء والتشخيص الأمريكية (الإصدار الرابع). يثبت إن حالة الغزالي إستوفت سبعا من الشروط التسعة المطلوب توفرها لتشخيص الإكتئاب علما أن التشخيص يتأكد بتوفر خمسة شروط من تلك الشروط فقط.

المصادر:

1. الغزالي _ سلسلة إقرأ- طه عبد القادر سرور 11-12.
2. المنقذ من الضلال- الطبعة الثالثة- مكتبة الأنجلو المصرية ص 175.
3. **Diagnostic and Statistical Manual of Mental Disorders IV Edition 1994**
4. المنقذ من الضلال ص 176.
5. المنقذ من الضلال ص 176.
6. المنقذ من الضلال ص 176.
7. المنقذ من الضلال ص 176.

Pick from the Abstract Book of the 11th. Pan Arab Conference

1. PREVALANCE OF STRESS AMONG FOREIGN POST-GRADUATE DOCTORS AT UNIVERSITY MALAYA MEDICAL CENTRE (UMMC), KUALA LUMPUR

AUTHORS

Omer Mohd Hussein,¹ Nor Zurida bt. Zainal²

1. Department of Psychiatry, National Ribat University, Khartoum, Sudan
2. Department of Psychological Medicine, University Malaya Medical Centre, Lembah Pantai, 59100 Kuala Lumpur, Malaysia

Background:

Stress affecting doctors is receiving increased attention. Researchers have shown that hospital doctors are under high levels of stress from number of sources. This is of importance because it is known that the quality of care physicians give is directly related to their own health.

Objectives:

To study the prevalence of stress among foreign postgraduate doctors in University Malaya Medical Centre (UMMC), Kuala Lumpur, Malaysia.

Methodology:

Postgraduate doctors completed General Health Questionnaires (GHQ-28) covering Somatic Symptoms, Anxiety and Insomnia, social Dysfunction, Severe Depression. The results were converted into percentage scale by summing the scores

of individual items; in this overall scale high scores indicate increased stress. A total of 50 international doctors from different clinical and non-clinical medical subspecialties took part in the study between 2004-2005.

Results:

The prevalence of stress among foreign doctors was 54% (95% CI: 44 – 63%). The highest levels of stress were reported for “Anxiety and Insomnia” and the lowest level was reported for “Severe Depression”.

Furthermore, individual questions analysis revealed highest scores for three questions: “felt constantly under strain”, “been feeling well and in good health” and “been managing to keep yourself busy and occupied”.

Conclusions:

The results should be interpreted with caution, as the study is based on a small sample. However, it does provide a useful first insight into stress and dissatisfaction, which have important implications for the wellbeing of foreign postgraduate doctors.

2. SOCIAL FACTORS IN THE PREVENTION OF SUICIDAL ATTEMPTS IN SAUDI ARABIA

AUTHOR

Yasein ElGaddal, MB,BS; M.R.C.Psych.
Dhahran, Saudi Arabia

SUMMARY:

This is a retrospective review of patients admitted to a general hospital in Saudi Arabia with suicidal attempts. A total of 53 cases were identified for the year

METHOD: Files of all patient's with suicidal attempts/ parasuicide suicidal attempts were screened against 19 variables. These were by age, gender, nationality, education status, marital status, employment status, psychiatric illness, medical illness, state of mind, method of attempt, reason for attempt, source of referral, family history, history of suicidal attempt, number of attempts and history of drug abuse, types of drugs abused, duration of hospital stay and follow up arrangements. This poster presentation will deal with only the psychosocial factors.

RESULTS: 53 patients were identified (15 males and 39 females). 47 of these were Saudi nationals and 6 non Saudi nationals. 15 were employees and 38 were dependent relatives of employees. 35% were below the age of 20 years. 28% were between 41 and 50 years and 17% were between 31 and 40 years. 90% of attempters received some form of education, only 10% were illiterate, 53% were single and 47% were married. Among 39 females, 32% were dependent

2004-2005. The results showed that suicide attempts in this population were reduced as compared to a similar study 20 years earlier. The low rate was postulated to intervention in psychosocial factors by the health care provider.

wives and 35% were dependent daughters. In relation to the total diagnosis: 34% had acute situational reaction, 13% had adjustment disorder, and almost 50% had a comorbid medical condition, mainly anemia and diabetes mellitus. Looking at the state of mind 86% of the attempts were seen as impulsive, only 14% planned. 77% were drug overdose and 11% was cutting. Interpersonal relationship problems were found in 34%, marital problems 17%, occupational problems 24%. A high social factor in referrals was 94.3% referred by their family. The majority had no family history of suicidal attempts. 5 patients had attempted before but 48 had no history of attempts. 3 patients attempted once, 2 patients attempted twice or three times and 48 had no previous attempts. 80% of patients were referred to the Psychiatric Outpatient Clinic. 60% were referred to the Community Counseling Clinic. 3.8% were followed up by their Family Physician. Age was found to be significantly related to diagnosis of acute situational reaction and female gender

was significantly related to the same variable. Impulsive methods of attempts were significantly related to age but not to gender or employment status. Attempting overdose was significantly related to gender but not to age, nationality or employment status.

DISCUSSION: There has been little study of this kind done in the Islamic world and developing countries. 1/3rd of attempters were below the age of 20 years. Comparing the average age, the parasuicide rate was 14 per 100,000. This is a significant reduction from a study done on the similar population done 20 years earlier, the rate was found to be 20.7 per 100,000. This study postulates that reduction in rate may be related to improved psychiatric services and psychiatric awareness as well as to the referral system that the majority of patients are referred to the Psychiatric or Community Counseling Clinic. The previous study also found similar studies by Daradkeh, TK & Al Zayer, N which indicates that young females with disorders in interpersonal relationships with spouses and parents are precipitating factors. We found that in addition to young females aged 20 years, there is a peak in females aged 40+ years, in this case dependent wives. Acute stress reaction was the most common followed by depression and we found the majority were from overdose.

The health provider Saudi Oil Company – Saudi Aramco Medical Organization has a program of helping employees with stress and there is a policy to refer all suicide attempts to Psychiatric Services for re-

evaluation and follow up. The provider also has active health education program and conducts mental health awareness campaigns on a yearly basis as well as provision of regular educating material, audiovisual as well as newsletters educating the public about different disorders and how to seek help. Al Jadhali, H. 2004 concluded that intentional drug overdose is a relatively uncommon reason for hospital admission in Saudi Arabia. Devrimcu-Ozguven H. Sayil I found a high rate of 46.9 per 100,000 for men and 112.9 for women. They found that the risk groups appeared to be young and female similar to our study. Al Ansari AM. 1997 in Bahrain concludes that the most common difficulties preceding the overdose were problems with parents, schools or work, social isolation and interpersonal problems. Adjustment disorder was the most common diagnosis followed by depression.

3. Community Psychiatry: Fact or Fiction

AUTHOR

Dr. Abdelazim Ali

Psychiatrist, UK

Definition of Community psychiatry:

Community psychiatry is a branch of psychiatry, which concerned with the detection, prevention, and treatment of mental disorders as they develop within designated psychosocial, cultural, or geographical areas. It concerned with the development of an adequate and coordinated program of mental health care for residents of specified catchment areas.

History of Community psychiatry:

The year 1930 brought with it a new optimism to psychiatric practice in UK, when The First Mental Treatment Act came to light. This Act arose from a Royal Commission because of public concern about unacceptable conditions in mental hospitals. Until that time all inpatients were committed, so it represented a very significant change in culture. The Act endorsed a more medical approach to mental illness, stressing the relationship between psychiatry and general medicine and emphasizing the need for aftercare.

In the second half of this century 'community' replaced the 'institution' because the latter came to be seen as authoritarian, inefficient and in many ways anti-therapeutic. The institution was a place with almost impenetrable barriers to the outside world, having all sorts of institutional rituals and requiring huge

expenditure, perhaps without demonstrable efficacy. The community, on the other hand, was considered an ideal place for the treatment of those suffering from mental illness. It must also be realized that community psychiatry was not merely a product of movement against the psychiatric institutions. The prevalent political and social ideologies at that time also played a significant role in highlighting a role of the community in treatment of psychiatric disorders.

Principles of Community Psychiatry:

These 'principles' of community psychiatry, proposed by Caplan and Caplan (1967), have proved useful and valid to varying degree in defining the subject. These principles include:

1. Responsibility to a population, usually a catchment area defined geographically
2. Treatments close to the patient's home
3. Multi-disciplinary team approach.
4. Continuity of care.
5. Consumer participation.
6. Comprehensive services.

○ **Community psychiatry in Developing countries:**

Some Countries like Pakistan and India start to adopt the British Model in

Community Psychiatry, but we can say that community psychiatry actually exists in developing countries, but the term is applied and used in a totally different way from the above defined principles. For example the practice of the traditional healers in Sudan and some other Arabic and African countries, is actually some sort of community psychiatry, as those healers see patients in a certain geographic area or specific community.

Current Community Mental Health

Practice in UK:

1. Primary Psychiatric Care
2. Secondary Psychiatric care: which consists of different Community teams:
Community Mental Health Team, Early Intervention Team, Home Treatment team, Crisis Resolution Team, Assertive Outreach Team.

What Obstacles are facing Practice in UK?
How can we adapt a Mental Health Community Model for Sudan?

Current Practice in Sudan
Positive aspects and possible Obstacles
Resources needed

Conclusion:

In order to run a Community psychiatric service in Sudan, we should start with the current mental health hospitals and psychiatric units to change the focus from an inpatient services to a community one, and then establish a new Community psychiatric Teams and Units.

4. Trauma, mental health, and coping of Palestinian children after one year of Gaza War

AUTHOR

Thabet Abdel Aziz, Consultant Child and Adolescent Psychiatrist
GCMHP Research Department

Aim:

The aim of the study was to investigate the effect of trauma after one year of Gaza War on children PTSD, anxiety, and depression and coping as mediator factor.

Methods:

The study sample consisted of 449 children from the children who were exposed to the Israeli war on the Gaza Strip, 51.9% of them were boys and 48.1% were girls. Children completed measures of experience of traumatic events (Gaza Traumatic Events Checklist-20 items, War on Gaza), PTSD, Birlerson Depression Scale, and Child Revised Manifest Anxiety Scale. The data was collected on March 2010 from the entire Gaza Strip.

Results:

After one year, still the Palestinian children reported many traumatic events, 90.4% of children reported watched mutilated bodies in TV, 44.6% exposed to deprivation from water, food, or electricity during the war, 33.5% left their homes with families and relatives, 29.8% witnessed firing by tanks and heavy artillery at neighbor's homes, 4.1% threaten with being killed, 4.1% threatened with death by being used as human shield by the army to arrest their neighbor. Our results showed that each children experience 3.9. The study showed that 85.5% of children still

reporting mild trauma (0-5 events), 10.9% reported moderate trauma (6-10), and 3.66% reported severe trauma level. There were no significant sex and age differences in exposure to trauma. Children with high traumatic experiences reported more self-criticism; also children with high exposure to trauma had less social support.

For post-traumatic stress reactions, 43.4% of children reported that when something reminds them of what happened during the war, they get very upset, afraid or sad. 31.5% afraid that the bad thing will happen again. 30.4% feel jumpy or startle easily, like when I hear a loud noise or when, 30% try to stay away from people, places, or things that make me remember what happened. Using DSM-TR criteria for PTSD, 29.8% of children had no symptoms, 28.3% had at least one cluster of symptoms (intrusion or avoidance or hyper arousal), 30.5% had partial PTSD (Two cluster of symptoms), and 11.4% had full criteria of PTSD. No significant sex differences in PTSD. Children living in families with monthly income less than 300 \$ had more PTSD, intrusion, avoidance and hyper arousal than the other groups. The study showed that children live in cities showed more PTSD symptoms than those in villages and camps. There was significant correlation between total traumatic events and PTSD.

For anxiety symptoms, the most common symptoms were: feel worried when things do not go as they want (79.1%), being anxious to what is happening in the future (67%), they are always anxious for bad things can happen to them (64.4%), hurt easily their feelings when they are anxious (54.8%), while the less items was they always feel that they are am alone when they are with people (22.1%). Using cut-off point of RCMAS, 20.5% of children scored above cut-off point of anxiety. There were significant correlations between total anxiety and total traumatic events score. There were statistically significant differences in anxiety toward boys. Children with anxiety scored more in total coping strategies, more resignation, and social withdrawal as coping strategies than children without anxiety.

The results showed that the most common depression symptoms were: 82.3% suffer from pain in the stomach, 77% said they never love talk with my family and with others 69.8% feel that life is not worth anything, 69.6% would like to run away, and 22.3% children scored above cut-off point of Birleson Depression scale. Depressed children had less social withdrawal and less social support than children without depression as coping strategies.

The results indicated that coping strategies of children were: 72.6 % of the children try to feel better by spending time with others like family, grown-ups or friends, 65.7% try to sort out the problem, and 63.3% try to sort out the problem by doing something or talking to someone about it.

The results showed that the total coping mean was 10.32. While the highest coping subscales means used by children was social withdrawal (mean =2.88) followed by emotional regulations (mean =2.61), and distraction (2.53). The results showed that children with PTSD and without PTSD were not different are total coping strategies. However, children with PTSD were significantly used less social withdrawal, wishful thinking, and self-criticism as coping strategies than children without PTSD

Conclusion: This study showed that after one year of Gaza war still Palestinian children had the impact of traumatic experiences on their mental health. Children are suffering of depression, anxiety, PTSD, and fears. All those reactions were related to traumatic events. However, children are able to cope with such reactions by using different ways of coping, mainly try to feel better by spending time with others like family, grown-ups or friends, try to sort out the problem, and try to sort out the problem by doing something or talking to someone about it.

Implications: These findings highlight the needs for more community based interventions to improve children mental health. This could apply in schools and other community centers by trained psychologists and psychiatrists. Also parental training of early detection of children with mental health problems and dealing with such problems by behavior modification and more listening to their children. Also, programs of increasing children ability to cope with conflicts and

gaining more health coping strategies could be useful.

Key works:

One year of Gaza War, Children, PTSD, Depression, Anxiety, Fears, Coping

5. Depression & Outcome in Acute Coronary Syndrome

AUTHOR

Alaa Farghaly (Egypt)

Consult.Psych. – Teaching hospitals -Cairo

Depression is common co morbidity in patients with heart diseases. About 20% of cardiac patients meet the diagnostic criteria of depression in the (DSM-IV-TR). There is a bidirectional link that depression may increase the risk of CVD and worsen recovery process, on the other hand CVD may induce depression. It is found that plasma catecholamines provoke arrhythmias, myocardial ischemia are elevated in depressed patients. Also, found that depression is associated with serotonin platelet activation and cytokines that may increase the risk of developing coronary artery disease and myocardial infarction (MI).

So, depression in cardiac disease may increase risk of hypertension, increase risk post MI death, increase sympathomedullary activity, increase platelet aggregation, coagulation, decrease fibrinolysis and decrease HR variability. It is proved that patients who fail to recover from depression after an acute episode of

MI or unstable angina have double the mortality rate of those who return to psychological health even seven years after the initial cardiac event.

This paper will throw lights on the following topics:

- Screening for depression
- DSM-IV-TR for post myocardial (MI) depression
- Depression measures
- Clinical features of post MI depression
- Risk factors of post MI depression
- The relation between MDD & CVD
- The bidirectional biological mechanism
- The mechanistic puzzle and the search for high risk subgroups
- Translating research into clinical practice
- The outcome of post MI depression
- Treatment of post MI depression (Drug and Psychosocial treatments)

Conclusion:

The opportunity to treat depression in cardiac patients should not be missed, because treatment may improve outcomes, improve patient's quality of life. Also treating cardiac patients with co morbid depression may improve their compliance with pharmaceutical and lifestyle interventions that reduce cardiovascular risk.

6. Music therapy

AUTHOR

Dr. Nuha Elsadig

MR. Hassan Elmahi

Music has soothed the souls of human beings for ages. It also has helped people recover from ailments since ancient times. Today, there is a widespread interest in the use of music therapy in treating psychiatric disorders. This article describes the various types of music in Sudan, and also offers insight into how music can be incorporated into the Sudanese society as an element of traditions and practices

Music is an ancient art that has soothed minds for centuries. Music helps people regain inner peace and is the voice that binds people together. It has been used to treat the sick since ancient times and frequently is used to cure depression. Songs offer people solace in adversity and joy in prosperity. They are sung on marriage days and even at the death of a loved one. Music is accepted as a universal means to express one's emotions. It was an essential component of ancient healing. A drum was beaten when treatment was offered to a patient, and a successful recovery was announced with trumpets.

Before many centuries, Nubian land was known as a link between civilizations (Pharos Roman) .At the same times the Nubian knew how to practice music therapy with the inpatients (Abu Tartoor) Dr. Nabila Mikhail Egyptian Music therapist. , the different shapes of using

music as therapy, had been very clear after the intermingling of the Nubian and Arabian cultures.

The African and there wide spaces for using music in different psychosocial ways as worshipping, agriculture, war etc.... and the new Arab civilization which had been depended on worshipping and spiritual therapy (Althikr –Ibn Siena). This intermingling stretched its shadows upon Sudanese personality.

At the middle of the nineteenth century shined the sun of Dr. Eltigani Elmahi and after him Dr Taha Baashar ,Both of them wrote about the importance of music therapy to patients(alzar althikr)

At the beginning of 1970 the musical bands began visiting Psychiatric hospitals and prisons.

The Sudanese Association for music and arts therapy had been established, and registered on the 1997, at the ministry of Humanitarian Affairs. Now the work is going forward after establishing Star psychotherapy Center, We are working at a very wide space, participated at many international Congress conferences, working with mental health, Special Needs, Street children, and other categories.

We are going forward to establish the Sudanese Collage of music therapy.

Key Word: Music therapy

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157

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Correspondence:

Contact Info:

Email: sudapsych2010@hotmail.com

Telephone: +249 155 232940

Fax: +249 1555 3495

P.O Box: 943, Tigani Al Mahi Hospital, Omdurman: Khartoum, Sudan

Website:

www.sudanesepsychiatrists.org.sd

