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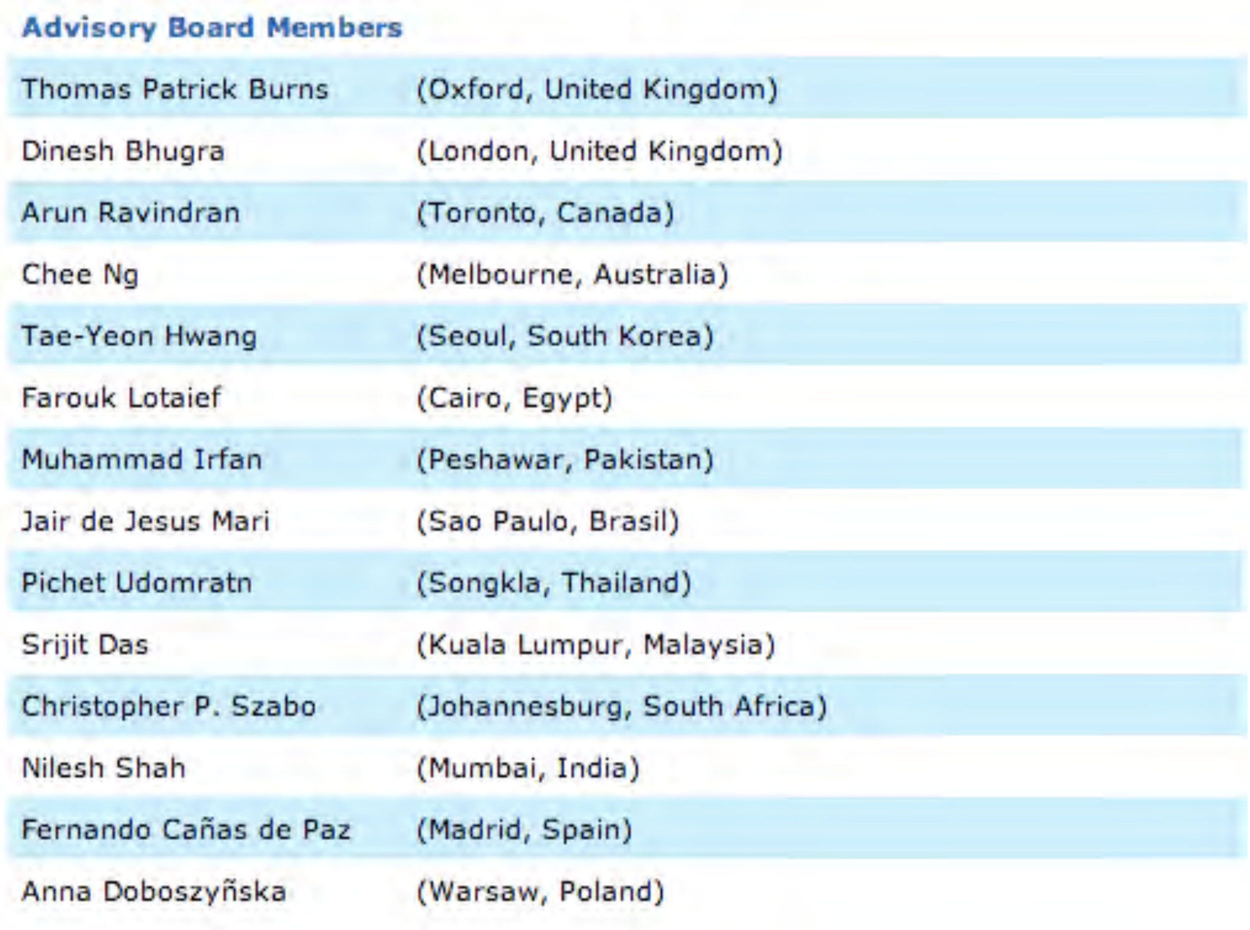

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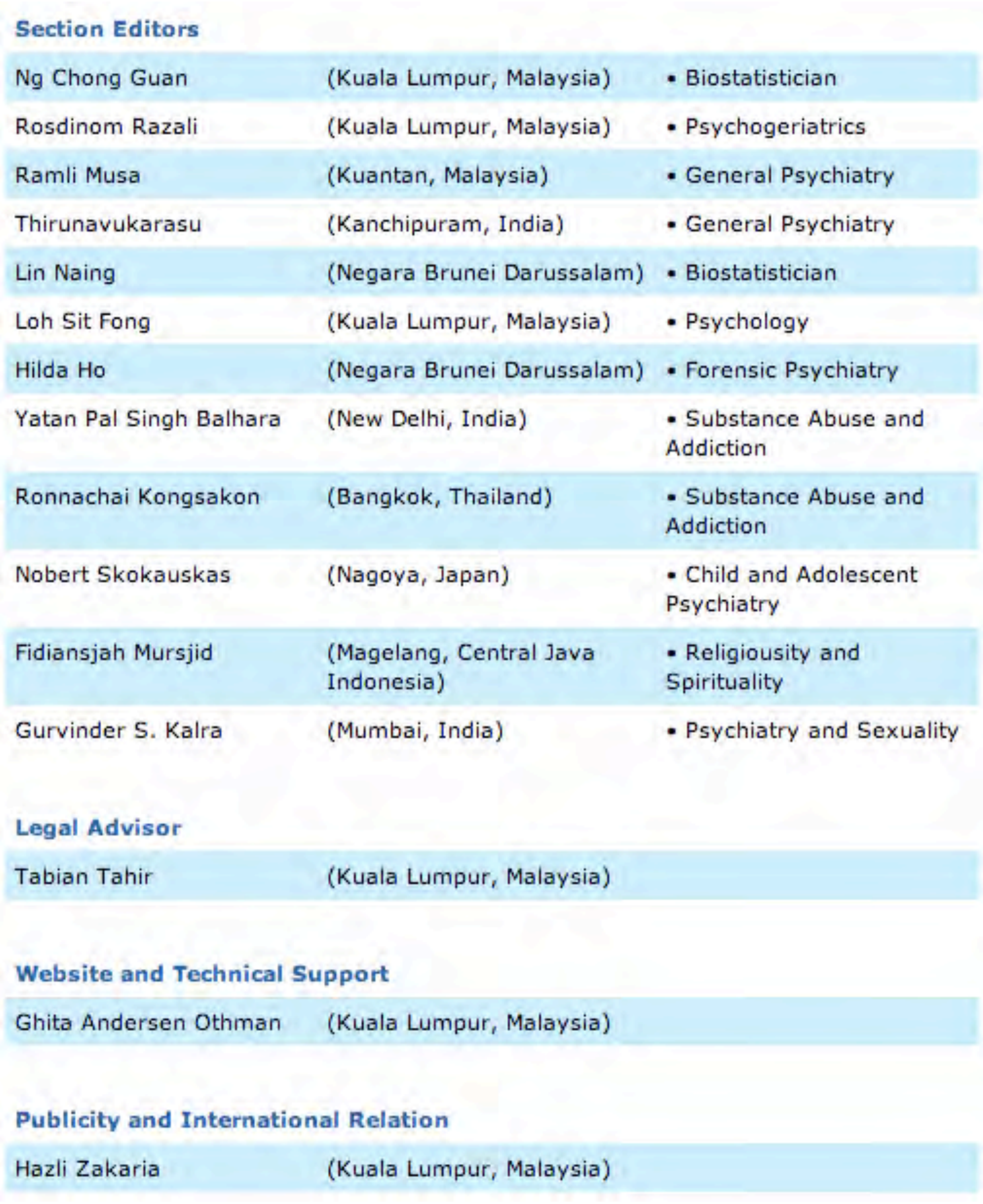

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EDITORIAL

THE CHALLENGES OF INDEXATION OF ASEAN JOURNAL OF PSYCHIATRY: NOW AND FUTURE

*Hatta Sidi**

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It gives me immense pleasure to share the success of the ASEAN Journal of Psychiatry over the last few years. The journal started its voyage in 1991 and I took over the editorship in 2009. Since then, we have maintained the momentum with regular biannually online publication since 2007. Many ups and downs were experienced in the functioning of the journal. We had to strive hard to invite articles from all parts of the world. An efficient editorial team comprising of eminent researchers had to be chosen. A good website of the journal was necessary for dissipating information about the society and journal and we did not lag behind in this aspect. I took the opportunity to engage suitable webmasters to make the website more appealing and user friendly while ensuring the quality of its academic content. The articles had to be reviewed and proof read properly in order to curtail the mistakes. Once, the quality and readership improved, there was no chance of looking back. We conducted regular meetings and discussions to strategize the plan of action. Once the action was strategized, we embarked on the venture to apply for indexation of the journal. I would say that we really needed guts and courage to apply for indexation because to date, the journal was functioning without a single indexation.

We burnt the midnight oil, readied the journal and applied for indexation in Scopus. Initial screening revealed positive response and we were asked to submit with few clarifications but it was later declined by Scopus. The reasons cited for rejection were no too impressive because these were rectifiable points and we were not allowed to re-appeal or apply for at least next 5 years, from 2010. We fought our way out and even during one of the meetings with Scopus officials recently in Kuala Lumpur, we were told that we could still improve because our journal had quality. We were even suggested few facts and we are working on it. Let me apprise you all that the quest has not ended but we have recharged our batteries to apply at the earliest for Scopus databases indexation.

In the meantime, I thought of applying for indexation in other databases because these could add feather to our cap. I could get the support of my editorial members to apply for indexation in other major databases. We got indexation in MyCite, Psychoinfo, EBSCO, Open J Gate, Google Scholar and the prestigious Western Pacific Index Medicus (WPRIM). Now, these six major indexations have projected our journal at a greater level. Readers and authors worldwide may be attracted and we may have more submissions in future. There is an endless list for future applications to other indexation databases and I shall keep you abreast with the latest happenings.

Indexation of a journal is a multifaceted matter. The quality of articles, timely schedules publication of the articles, frequency of publications and the full support and commitment of editorial members are very important. Despite the ongoing challenges, we, the editorial teams have never given up but chose to deal with it. I do not know how far I can achieve the target but let me assure you that at the end of next 6 months, we will have few more indexations. I would request your valuable support in the future. “It is a voyage in the rough sea and I do not know what will happen once the storm rises." Let us work for the stupendous success of the journal. Let me thank each and every one of you who has contributed to the success of the journal. May Almighty bless you all.

Warm regards,

Hatta bin Sidi
Editor-in-Chief

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REVIEW ARTICLE

PSYCHOLOGICAL ISSUES IN HAND TRAUMA

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Abstract

Objective: **Acquired hand trauma is a significant event that often affects an individuals' life in diverse manners. The present paper aims to review the psychological issues in hand trauma along with factors that affect recovery from the same.** ***Method:*** **A relevant search for literature on psychological issues in hand trauma was made across search engines like Google Scholar, Medline and Pubmed and relevant studies were selected for this review. The studies include those on symptomatology, course as well as treatment. The studies were analyzed critically along with inputs of personal clinical experience of the authors.** ***Results:*** **Psychological symptoms that occur after hand trauma together with the treatment methods that provide relief from psychological symptoms are discussed. Symptoms of post-traumatic stress disorder (PTSD), flashbacks, concerns with personal appearance, avoidance of reminders of the trauma and physiological arousal along with sleep issues have been discussed. The article also looks at the psychosocial effects of hand trauma including marital and sexual issues that may arise. Treatment interventions commonly used in the form of imagery and in vivo exposure with and without cognitive restructuring are explained along with psycho-education approaches that may benefit these patients.** ***Conclusions:*** **It is important that surgeons and professionals dealing with hand trauma are aware of the psychological issues in hand trauma and to take appropriate steps to deal with any such problems that ensue.** ***ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 3-14.***

Keywords: Psychological Issues, Hand Trauma, Hand Surgery

Introduction

In the past two decades, India has witnessed rapid urbanization, motorization, industrialization and migration of people resulting from socioeconomic growth and development. With the mechanization and revolution in technology, traditional ways of living and working are being altered. Injuries are the major public health problem in India. Lack of reliable and good quality national or regional data has thwarted their recognition [1]. Most of these injuries are machine related hand injuries that may result in amputations of digits, hands, or arms [2]. In addition, many other hand traumas resulted in the loss of function due to crushes, nerve lacerations and transections, and significant scarring. Hand injuries are often both functionally and psychologically devastating [3].

Several factors play a role in the psychological sequel of hand injuries. Hands are the individual's primary means of interacting with the world. They are critical to both accomplishing tasks and interacting socially. Our hands, unlike our faces, are almost constantly in our line of vision and, thus, have a high degree of salience in one's day-to-day life [4]. Hands are very visible to the injured person itself and it is nearly impossible to avoid viewing the disfigured hand, which is a traumatic experience in itself than, for example, the body or even the face which may not be in direct vision [5]. Mutilating hand injuries often produce functional, occupational, social and cosmetic deficits that can be overwhelming for the individual experiencing them [6].

The disfigured hand is obvious to most people who come in contact with the affected individual, as the hand is a ‘public’ part of the body rarely concealed. In addition to the clumsiness or altered function created by the injury to the hand causes embarrassment together with a public exposure of the mutilated extremity where everyone even casually known to the patient wants to know how the injury occurred [7]. Family members and caregivers often move into a mode where they buffer these interactions, but this may cause further loss of personal efficacy and helplessness to the patient [8]. This loss of efficacy is magnified by the loss of the individual to engage in skilled and habitual tasks (where he was an expert previously) and often may cause a loss of livelihood [9]. The awareness of loss of these activities by people known to the patient, who then go out of their way to help him in everything, often draws even further attention to the injured extremity, with greater feelings of stigmatization and social conspicuousness [10]. Sometimes, in social situations, onlookers may respond with inappropriate comments regarding the appearance of the hand, with looks of horror, disgust and repulsion along with prolonged staring at the injured extremity resulting in further alienation and ostracizing of the individual with hand trauma [11].

Methods

For identifying articles that focused on psychological issues in hand trauma, the terms ‘hand trauma’, ‘psychological issues in hand trauma’, ‘sequel of hand trauma’, ‘psychological issues in hand injury’, or ‘post hand trauma quality of life’ were used. In identifying articles that focused on specific terms, terms such as ‘anxiety’, ‘anxiety disorder’, ‘depression’, ‘health related quality of life’, ‘marital functioning’, ‘sexual issues’, ‘psychosocial issues’ and other terms were used. These two search strategy results were combined with an “and” statement in the following data bases with the time frame being specified from 1980 through 2011. The databases used were Medline, Google Scholar, Pubmed and the Cochrane Database on Systematic Reviews. In total, 209 articles were identified which include reviews, mini reviews, opinions, perspectives, cohort studies, retrospective studies and randomized controlled trials in populations who had undergone hand trauma. The randomized controlled trials, cohort and retrospective studies were reviewed and studies centering on psychological symptoms after hand trauma were further analyzed.

We include studies that had sample sizes of more than 25 participants and that reported on either mean scores or percentages with appropriate statistical analysis. There is a dearth of large trials and prospective studies in this area. All the authors reviewed all the articles and the most relevant ones were chosen for this review. A total of 17 review articles were scrutinized for further articles on the topic. The papers reviewed in this article are supplemented with the personal clinical experience of all the authors in this field who work regularly with patients of traumatic injury and have further insight into the problems faced by them. Two of the authors are the psychiatrist and the psychologist. The first two authors are attached to a tertiary hospital and medical college where there is a consultation liaison between the plastic surgery and psychiatry departments on a regular basis. Studies with less than 25 subjects, casual reviews and reviews where methods of review were not clear were excluded from the study. This is left to the discretion of the authors.

The present paper aims to review the psychological aspects of hand trauma that occur as a result of accidental causes. The present paper shall not look at the problems faced by patients with congenital hand defects. The paper shall discuss psychological reactions to these injuries though literature in this area is currently less well developed. The paper shall also draw upon personal clinical experience of the authors and shall discuss the psychological management and treatment of these patients.

Discussion

Psychological effects of hand trauma

The psychological effects of hand trauma have been reviewed in hand surgery research for the past two decades [12-14]. The commonly reported sequel include Post Traumatic Stress Disorder (PTSD) and associated depression, which has emerged as the most frequent type of psychopathology associated with acquired hand trauma [15]. In addition, avoidance of work [16], appearance related concerns and body image issues [17], sleep disturbances [18], pain [19] and impairments in social functioning post hand injury [20] are other significant psychological responses.

Post Traumatic Stress Disorder (PTSD)

PTSD is a well-defined disorder with a distinct pattern of symptoms [21]. First, the individual must have been exposed to an event in which they experienced an injury or an event that threatened their bodily integrity or life. The second is that they experience repetitive reliving of the event in a distressing manner (i.e., flashbacks, nightmares, discussions about the event). The third is that they avoid reminders of the event in order to prevent triggering of these flashbacks. They also experience physiologic arousal including such symptoms as hyper-arousal, hyper-vigilance and concentration deficits. These symptoms must persist for at least a month and must disrupt socio-occupational functioning and the individuals' normal daily activities [22].

Flashbacks associated with PTSD in hand trauma may begin as early as 30 minutes after the injury [23]. The occurrence of flashbacks appears to be related to attributions the patient makes regarding the cause of the injury. Individuals attributing their injuries to external causes over which they had little or no control were more likely to experience ongoing flashbacks as well as avoidance of stimuli associated with the injury [24]. Flashbacks have been reported in almost all variety of hand traumas whether accidental, crush injuries or occupational. Occupational hand trauma has greater flashback rates than non-occupational trauma [25]. Individuals injured in non-occupational settings are more likely to accept responsibility for being a causal agent of the accident than those injured in factory settings [26]. Hand trauma workers who blamed their equipment for their injury are more likely to resist returning to their work than workers who judged them to be responsible for their trauma [27]. There appears to be three distinct components of flashbacks following hand trauma i.e. replay, projected and appraisal [28].

The replay flashback consists of the replaying of the entire accident. The person experiencing this often visually re-experiences all of the images from the time of the accident. They may also experience auditory memories (e.g., the sound of their bones shattering), kinesthetic memories (e.g., the feeling of their hand trapped in the machine), and olfactory memories (e.g., the smell of their skin burning). They re-experiencing the accident in such manner is very similar to that in which it occurred. Individuals with this type of flashback are the most successful at processing it psychologically. They also returned to work at a much higher rate than those individuals having other types of flashback components [29].

In a projected flashback, the individual will not only replays the flashback but also views a more catastrophic injury as occurring. For instance, the victim may replay an accident whereby the finger of the hand was amputated. Rather than the injury flashback ending there, unfortunately, the images go on to the scene where the entire arm is pulled into the machine. This type of flashback is more complicated to treat as it involves not only desensitization to the injury that actually occurred, but also cognitive reprocessing of an accident component that never happened. The return to work success rate for these individuals was found to be lower than for those with replay flashbacks alone [30]. In an appraisal type of flashback, the individual experiences a snapshot like recollection of the trauma, without all of the details of the replay or projected flashback. This is almost always consists of an image of the hand as it was first seen after the injury. This type of flashback is generally accompanied by feelings of horror [31]. Imagery techniques used for intervention with these flashbacks are most successful when the patient is able to redevelop the context of the injury (i.e., create a replay-type flashback) [32]. Flashbacks are the most resistant to treatment and have the poorest outcomes associated with them often in terms of return to previous employment [33].

Work Avoidance after hand trauma

Avoidance symptoms are predictive of returning to the work of which one was injured. At the time of an initial evaluation conducted by a nurse in the emergency room, most injured workers felt that they would be able to return to work [34]. Work related hand trauma patients showed greater avoidance of returning to work at 6 months post trauma than patients with non-work related hand trauma who often reported no symptoms of avoidance [35]. One of the factors that may determine this outcome is the fact that the injured workers would receive compensation for their injuries [36]. Compensation is often thought by the worker to be payment received for their injury as someone else is culpable for that injury [37]. Most workers fail to understand that the compensation is a ‘no-fault’ insurance (i.e., there is no blame assigned for the cause of the injury), which requires compensation to be paid even if the injury was intentionally incurred by the worker [38]. Compensation is known on its own to cause cognitive dissonance for the worker, which leads him to believe that he has little or no blame for the trauma caused leading many patients to feel absolved of blame by the mere fact that they are receiving compensation and therefore, must have been injured through some form of negligence [39]. This attribution pattern has been noted 6 months post injury, when workers blamed external causes such as a lack of safety guards or improper maintenance on the machines for their trauma [40].

Appearance concerns and body image issues after hand trauma

Regardless of the cause of the hand trauma, concerns about appearance are the major factor in the long-term functioning of the patient. Appearance deficits can be divided into two categories i.e. personal or self-appearance and social appearance [41]. Self or personal appearance pertains to the individual's own perceptions of the hand. Patients are often uncomfortable with the altered appearance of their own hand which would then trigger recollections of the trauma leading to PTSD [42]. There may be shame over the mutilated hand, camouflaging behaviors and even significant alterations in sexual desire and performance [43]. Keeping one's hand in the pocket, avoiding viewing the hand during physiotherapy or using dressings on the hand long after adequate healing has taken place are the frequent indicators of self-appearance concerns [44]. Often the trauma accompanying severe hand injuries causes the person to feel socially unacceptable. This can result in a loss of self-confidence and feelings of social inadequacy [45]. It is important to normalize these responses and to encourage the patient to use the hand as normal as possible when in public. This serves two purposes. The first is that the hand injury itself is less conspicuous when the hand is used as usual. The second is that even when the mutilation is noticed, the fact that the hand is being used will normally (i.e., to gesture during a conversation) conveys to other individuals that the patient has accommodated the injury [46].

Many hand injury patients are unaware of how to respond when someone asks them what had happened to their hand. This may lead to the feelings of vulnerability and anger. Assertive training can be helpful in reestablishing the personal boundaries of the hand trauma patient. Telling them to decline to answer or to tell others that they would prefer not to talk about it can enhance their feelings of control and of their personal boundaries [47]. It is also helpful to explain to the patient that some people will stare at their injured hand and that is merely a reflection of curiosity (or rudeness) [48]. Graded exposure to others of the injured hand is warranted. They can first show the injured hand to close family members and then progress to having it uncovered while in the clinic and at a waiting room setting [49].

Sleep Disturbances following hand trauma

Sleep problems are frequently present following severe hand injuries. The pain or diminished effectiveness of pain medication over time often interrupts their sleep [50]. Nightmares appear as patients move into lighter stages of sleep and patients are often anxiously awake from re-experiencing of the accident. Panic attack such as the symptoms in the form of palpitations, hyperventilation and profound hyperhidrosis often accompany the startle reaction to these intrusive thoughts [51]. Patients with hand trauma often begin to attempt to avoid sleep as a means of coping [52]. Sleep onset and sleep maintenance becomes disrupted and the condition worsens as sleep deprivation persists [53]. Individuals frequently describe the time just before they fall asleep as one in which they are more likely to experience flashbacks or recurrent thoughts about the accident [54]. It is recommended that these individuals practice a regimen of good sleep hygiene. This includes going to bed at a regular time each night, no napping during the day, using the bed only to sleep in rather than for watching television or reading and getting out of bed if they fail to fall asleep within 20 minutes and then returning to bed in another half hour [55].

Pain following hand trauma

Pain is another major concern for hand trauma patients. Pain produces a generalized sense of irritability and discomfort when poorly controlled [56]. One of the more challenging clinical distinctions to make is determining when the patients pain is of a type that will respond to pain medication and when is it more ‘psychological’ in origin suggesting the use of antidepressant medication or non-pharmacological methods as effective treatments [57]. Unfortunately, some patients resort to alcohol use or other substances of abuse in order to control both their physical pain and psychological symptoms. This causes major disruption with the rehabilitation process [58]. The emotional numbing from these agents results in a lack of benefit from exposures and cognitive re-processing techniques to assist in the psychological desensitization to their accident [59]. The relief provided by these agents as quick and short term may result in the patient being prone to alcohol or drug abuse. A pattern of dependence can rapidly develop, which only further complicate rehabilitation [60]. Here, treatment of the dependence and abuse issues are paramount before any other psychological intervention related to the trauma can be successful [61].

Psychosocial and Marital functioning after hand trauma

Following hand trauma, patients often become isolated and withdraw from others. This may be due to a reduced ability to function as before the injury and due to the feelings of depression, vulnerability, and worthlessness [62]. Often, the patient becomes dependent on close relatives accomplish seemingly simple tasks such as eating or buttoning or tying their shoes. They become fearful of what the future will hold for them and how others will view them and would prefer isolation [63]. Hand trauma can have a detrimental effect on marital and sexual functioning. Spouses may be resentful of the extra workload that he or she must carry at home and at work. The injury, and resulting changes in the dynamic of the marital relationship, can lead to the deterioration of the sexual relationship

[64]. Role reversals with the wife becoming the earning member and thus more dominant can happen [65]. Men have problems with erectile dysfunction secondary to their hand trauma while many partners report clumsiness during foreplay as a major factor in inhibiting their sexual response and libido following an upper extremity injury [66]. An open discussion and psycho-education regarding these topics by the treating plastic surgeon, visiting psychiatrist or consulting psychologist can help to normalize these feelings and lead to improve resolution of intimacy problems [67].

Individuals with hand trauma have a loss of personal control and efficacy. Those who feel helpless and fear with anxiety, are generally the predominant post injury emotions [68]. Guilt will more frequently occurs when the injured person feels a sense of having contributed to the accident either through engaging in risky behavior or through an error that resulted in the injury [69]. From a therapy standpoint, it is important to process each of these issues in order for the patient to function in a maximally effective manner following the injury. The nature of the intervention, however, must be tailored to the experiences and emotional states of the individual [70].

Treatment interventions for the psychological effects of hand trauma

Several studies have examined various interventions for the psychological sequel of hand trauma [71-72]. One of the most important findings from all these studies is that early psychological intervention has a major, positive influence upon subsequent recovery [73].

Psycho-education regarding the responses to acquired hand trauma

The first component of early psychological intervention is generally consists of normalization of the trauma response. It is important for the patient to know that intrusive thoughts, flashbacks, sleep disturbances and sexual issues are the frequent accompaniments of traumatic hand injuries [74]. By normalizing these experiences, the patient recognizes that they are part of the injury process, which instills confidence that they can be successfully treated. A second step is to help the patients understand the nature of their trauma and the process of reconstructive surgery [75]. Patients are often unduly optimistic about regaining total function in their hands following surgery. This appears to be particularly true when the patient has undergone a replant or revascularization procedure [76]. Patients often believe that since the hand has been restored surgically, they will also regain complete function and sensation. It is important for the mental health professional working with the patient to be knowledgeable regarding the procedures that have been performed and to be able to discuss these with the individual. This allows the patient to explore the implications of the surgery in a manner not often allowed for with the surgeon due to the time constraints under which the surgeon works [77].

Behavior Therapy Techniques

A number of behavioral techniques can be implemented early in a treatment that will assist the patient in reducing flashbacks. The most common among these techniques is the imaginal exposure [78]. This procedure consists of having the patients to close their eyes and basically ‘relive’ the accident by providing a detailed description to the mental health professional. The process of imaginal exposure often begins by having the patient recall a point earlier in the day on which the injury occurred. The patient tells the complete story of the accident together with the accompanying emotional reactions. Subjective units of distress (SUDs) ratings are obtained to judge the degree of affective distress experienced by the patient. These are typically rated on a scale of 0 to 100, with 0 being no distress and 100 being severe distress. As the imagery progresses, the patient proceeds through the events of the accident itself, as well as the ‘rescue’ or arrival of medical personnel. The rescue phase is critical to the imagery as patients frequently curtail their intrusive thoughts at the moment of greatest distress. As a result, they may fail to process the fact that others did intervene and come to their assistance [79]. Imaginal exposure appears to be particularly helpful at converting appraisal or projected flashbacks into a more complete recollection resembling the replay flashbacks [80]. Imaginal exposure appears to be particularly effective with those patients experiencing fear and anxiety as their predominant post traumatic emotions [81].

Imaginal exposure with reprocessing also relies on reliving the accident, as described above. The difference from simple imaginal exposure, however, is that the patient engages in a dialogue with the mental health professional, who assists in restructuring the manner in which the patient experiences the traumatic event [82]. Employing cognitive restructuring in the presence of imaginal exposure serves to activate the effect that accompanied the trauma and to allow for more complete processing of the event. The patient actually becomes capable of developing empowering beliefs that promote an element of mastery over the accident itself [83]. One of the major behavioral goals is to return the patient to a functional lifestyle as possible. Many hand injuries occur within the work setting. A variety of techniques have been developed to facilitate them to return to work with the same employer. All of these entail in vivo exposure and desensitization [84]. The typical approach to treating a hand-injured patient via in vivo exposure and desensitization begins by constructing a hierarchy of anxiety-provoking stimuli with the patient in order to formulate a graded program of exposure [85].

The hand trauma patient may not tolerate a return to the same machine or job at which they had the injury, hence it is wise to normally restrict the patient from doing so [86]. A variety of factors can influence a patient's response to a treatment. Substance abuse can greatly reduce the patient's ability to respond to exposure techniques due to the level of avoidance present. Thus, the patient with an alcohol or drug dependency problem should receive treatment for that condition prior to more specific psychotherapy designed to facilitate the return to work. Comorbidity of other psychological disorders can negatively impact psychological treatment of the hand trauma [87]. Depression may often be present in hand trauma patients and need to be treated conjointly with PTSD. Anti-anxiety and antidepressant therapy may be prescribed concomitantly with psychotherapy directed at both disorders. Randomized controlled studies are lacking in these populations and the choice of drug is left to the treating clinician after taking various factors into account [88]. The typical course of psychological treatment is 8 to 12 sessions for the PTSD symptoms, with additional sessions if issues involving sexual dysfunction and body image or family issues need to be addressed [89]. Typically cognitive therapy has been the most useful and studied psychotherapeutic approach in this regard [90].

Conclusions

This article has reviewed the typical symptoms and interventions for individuals sustaining hand trauma. These symptoms include flashbacks, PTSD, concerns with personal appearance, avoidance of reminders of the trauma and physiological arousal along with sleep issues. Social effects of hand trauma including marital and sexual issues were examined. Treatment interventions commonly used in the form of imagery and in vivo exposure with and without cognitive restructuring were explained. While there is much that we have learned about individuals' reactions to hand trauma, there is still much work that need to be done. Further research into the interaction of flashback types, attributions of injury cause and response to various treatment techniques is crucial in order to avoid the prolonged suffering of patients. Research on the social effects of acquired hand trauma and it effects on subsequent interpersonal functioning of the individual are lacking. Comparison between various groups of patients with accidental hand trauma as well as comparing them to patients with congenital hand defects need to be done. Psychotherapy protocols specific to these groups need to drawn out along with trials of their efficacy in this population. Further research in this area is a must in the coming years for a better understanding of consultation liaison between mental health professionals and plastic surgeons in this arena.

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ORIGINAL ARTICLE

ATTITUDES TOWARDS PERSONS WITH MENTAL ILLNESS AMONG UNIVERSITY STUDENTS

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Abstract

Objective: **Globally, there is growing evidence of stigmatization of people with mental illnesses and mental illness is more stigmatizing than physical illnesses. Therefore, this study aimed to determine the attitudes of university students towards persons with mental illness. Methods: A cross-sectional study was conducted among Management and Science University students during the academic year 2012. Prior ethical approval was taken for conducting the study. A total of 300 medical and health science students was recruited in this study and the response rate was 93%. The survey questionnaire was adopted from a previous study with 15 statements about attitude towards mental health illness and socio-demographic characteristics. Classes were chosen randomly and students also randomly selected. The inclusion criterion for this research was medical and health science students while the exclusion criterion was students from other faculties, staff and lecturers. Data was analyzed with the Statistical Package for the Social Sciences version 13.0. Descriptive statistics were used for the analysis of the basic demographics and survey items of the questionnaire. T-test and multiple linear regression were used to explore the relationship between the socio-demographic and the attitude. Results: A total number of 279 students participated in this study. The majority of them were female, age 20 years and above, single, Malay, from International Medical School (IMS) and from urban areas (68.5%, 88.2%, 96.4%, 58.1%, 60.2%, 77.8%; respectively). In this study, the majority of the participants showed a moderate to good attitude towards people with mental illness. Univariate analysis showed that marital status influenced the attitudes of university students towards people with mental illness (p=0.015). In multivariate analysis, multiple linear regression showed that gender, marital status, smoking and drinking alcohol significantly influenced the attitude of university students towards people with mental illness (p=0.014, p=0.012; p=0.009, p=0.013; respectively). Conclusion: This study showed that the undergraduate university students had a moderate to good attitude towards people with mental illness. Gender, marital status, smoking and drinking alcohol significantly influenced the attitude of undergraduate university students towards people with mental illness.*** ***ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 15-24.***

Keywords: Attitudes, Mental Illness, University, Students

Introduction

Globally, there is growing evidence of stigmatization of people with mental illnesses [1-3]. Several studies reported that mental illness is more stigmatizing than physical illnesses [4 & 5]. Several studies from developed and developing countries reported that public attitudes toward people with mental illness seem to have become more stigmatizing over the last decades in the US [6], Germany [7], and Finland [8]. Public attitudes towards persons with mental illness often include beliefs that they are dangerous and less capable than the general population [9-11]. There also seems to be considerable cross-cultural variation. In particular, perceived stigma is more common in developing countries [1]. People with mental illness can have a successful community reintegration if the community environment is tolerant and supportive [12]. Therefore, it is essential to evaluate and understand attitudes of the public towards people with mental disorders.

Social avoidance is common among people with mental illness and various studies suggested that the general population may accept people with mental illness socially, but tend to withdraw from more personal relationships such as working or living together [13 & 14]. As a result, people with mental illness face social isolation, social distance, unemployment, homelessness, and institutionalization [15].

Negative perceptions of mental illnesses have multiple ramifications for people with mental illness. It prevents people with mental illness from fully living, studying or working in the community. It is a barrier to proper care and it may even make the public less willing to pay for the care of people with mental illnesses; and contributes to the sense of hopelessness, isolation and low self-esteem for people with mental illness. [16]. Littlewood [17] suggested that societal understanding and response might determine the prognosis of severe mental illnesses, independent of the effect of treatment. He cited the findings of the World Health Organization International Pilot Study of Schizophrenia and the Determinants of Outcome Study which found that there were fewer patients with poorer outcome in the developing countries than in the developed countries. The attributed explanations included the differences in the individual responsibility for the illness, for instance, in certain African societies; a supernatural explanation for mental illnesses was associated with a better prognosis [18 & 19]. Attitudes and perceptions towards mental illness are colored by one's cultural values and beliefs. However, there is a paucity of studies on public perceptions and attitudes towards mental illness in non-Western countries: a recent survey of 61 of such studies, found that only nine were from non-Western countries [20]. Although the tendency for health care students to avoid mental health as a career specialty is not limited to occupational therapy, it is of particular concern to a holistic profession with a long and proud tradition in mental health care. Some authors have suggested that negative attitudes toward mental illness may be one factor in students' decisions not to enter mental health practice [21-23].

Studies of attitudes towards mental disorders among university students are lacking in Malaysia. Therefore, this study aimed to determine the attitudes of university students towards persons with mental illness.

Methods

A cross-sectional study was conducted in this study among Management and Science University students during the academic year 2012 from April through May 2012. Prior ethical approval was taken for conducting the study. A total of 300 medical and health science students recruited from two faculties: Faculty of Health Life and Science (FHLS) and International Medical School (IMS) participated in this study. The response rate was 93%. The survey questionnaire was adopted from a previous study [24] with 15 statements about attitude towards mental health illness (Table 2). In addition to socio-demographic characteristics such as (age, gender, marital status, race, type of faculty, residency, smoking status, drinking alcohol status and regular exercise and frequency of contact with persons having mental illness). Each item in part 2 was rated on a 5-

point Likert scale from 'strongly agree' to 'strongly disagree'. An attitude score was derived by adding the scores for the items in part 2. Data was obtained through a self-administered questionnaire. The questionnaires were distributed at the lectures halls of IMS in level 6 and FHLS in level 7. Classes were chosen randomly and students were also randomly selected. The inclusion criteria for this research were medical and health science students while the exclusion criteria was students from other faculties, staff and lecturers.

Data was analyzed with the Statistical Package for the Social Sciences version 13.0. Descriptive statistics were used for the analysis of the basic demographics and survey items of the questionnaire. *T*-test and multiple linear regression were used to explore the relationship between socio-demographics and attitudes.

Results

A total number of 279 students participated in this study. The mean age was 21.73±1.72; minimum age 18 and maximum 27 years. The majority of them were female, age 20 years and above, single, Malay, from International Medical School (IMS) and from urban areas (68.5%, 88.2%, 96.4%, 58.1%, 60.2%, 77.8%; respectively). Regarding lifestyle practice among the study participants, 11.8% of them were smokers, 8.2% drinking alcohol and 90% of them ever exercise. Regarding the factor that influenced the attitudes of university students towards people with mental illness, it was the marital status (p=0.015).

Table 1. Socio-demographic characteristics of the study participants and factors influenced their attitude (n=279).

Variable	Categories	N	%	p-value
Gender	Male	88	31.5	
	Female	191	68.5	0.108
Age (years)	<20	33	11.8	
	≥20	246	88.2	0.919
Marital status	Single	269	96.4	
	Married	10	3.6	0.015
Race	Malay	162	58.1	
	Non-Malay	41.9	41.9	0.051
*Faculty	IMS	168	60.2	
	FHLS	111	39.8	0.492
Residency	Urban	217	77.8	
	Rural	62	22.2	0.377
Smoking	Yes	33	11.8	
	No	246	88.2	0.084
Alcohol	Yes	23	8.2	
	No	256	91.8	0.156
Exercise	Ever	251	90.0	
	Never	28	10.0	0.193
Contact with mental illness people	Ever	74	73.5	
	Never	205	26.5	0.810

*IMS=International Medical School, FHLS= Faculty of Health and Life Sciences

In this study, the majority of the participants showed a moderate to good attitude towards people with mental illness (Figure1).

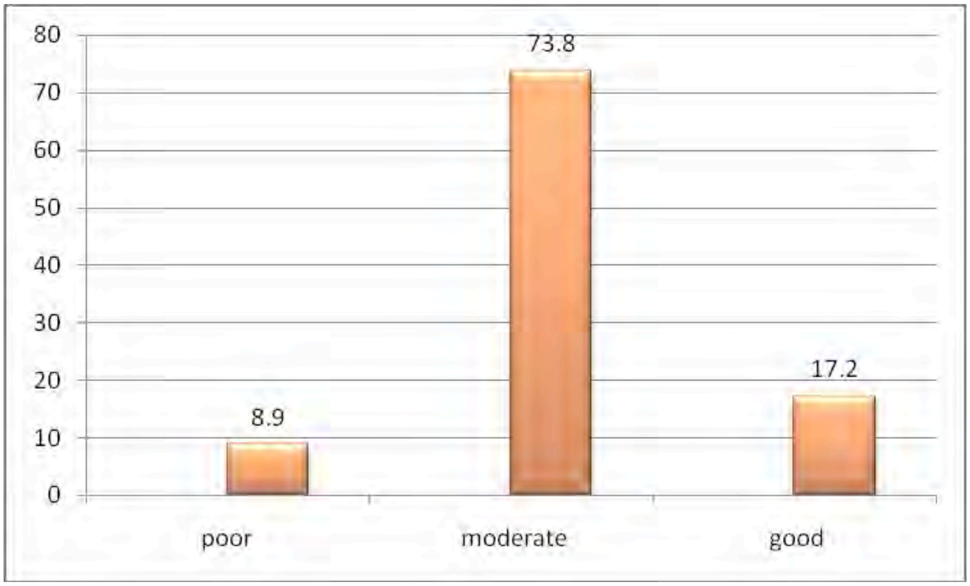

Figure 1. Attitude of the participants towards people with mental illness (n=279).

Regarding the attitude towards people with mental illness, the majority had a positive attitude; they mentioned that society should treat people with mental illness with a tolerant attitude (90%). There is a chance for everybody to develop mental illness (71.3%) and the majority of people with mental illness can recover (66.3%). However, the majority of the participants agreed that the communication with people with mental illness is difficult and tend to have tendency for violence (72.8%, 77%) (Table 2).

Table 2. Attitudes towards people with mental disorders among university students (n = 279).

Statement	Percentage who strongly agreed and agreed %
Is it difficult to communicate with people with mental illness?	203 (72.8%)
Is it common for people with mental illness to have propensity for violence?	201 (72%)
The majority of people with mental illness can recover.	185 (66.3%)
People with mental illness are weak; they should blame themselves for their illness.	48 (17.2%)
The society should treat people with mental illness with a tolerant attitude.	251 (90%)
Is it difficult to predict the behaviors and mood of people with mental illness?	242 (86.7%)
Everyone has the chance to develop mental illness.	199 (71.3%)
I would not tell others that I suffer from mental illness.	157 (56.3%)
People having a relative suffering from mental illness would be looked down upon by others.	163(58.4%)

I feel afraid of talking to people with mental illness.	151 (54.1%)
I oppose the building up of residential hostels for people with mental illness near to my household.	125 (44.8%)
There are no medication treatments for mental illness and people with mental illness have very low chance of being recovered.	71 (25.4%)
Is it difficult to make friends with people with mental illness?	139(49.8%)
I feel embarrassed to go out with my relative if my relative has mental illness.	67 (24.0%)
Is it a waste of money to increase the expenditure on the service to care for people with mental illness?	27 (9.7%)

Multivariate analysis (Table 3) using multiple linear regression showed that gender, marital status, smoking and drinking alcohol significantly influenced the attitude of university students towards people with mental illness (p=0.014, p=0.012; p=0.009, p=0.013; respectively). Age, exercise, residency, contact with mental illness people, faculty were excluded from the model.

Table 3. Predictive Model for the factors that influence the attitude of the study participants towards people with mental illness by Multiple Linear Regression (n=279).

	B	SE	Beta	p-value
(Constant)	1.234			
Gender Male Female	Ref. -0.173	Ref. 0.070	Ref. 0.159	0.014
Marital status Single Married	Ref. -0.415	Ref. 0.165	Ref. 0.153	0.012
Smoking Yes No	Ref. 0.273	Ref. 0.104	Ref. 0.175	0.009
Alcohol Yes No	Ref. -0.283	Ref. 0.113	Ref. 0.154	0.013

F=5.40, R^2= 0.073, p-value <0.001

Discussion

The participants in our study generally accepted individuals with mental illness, as the majority agreed or strongly agreed (90%) that society should treat people with mental illness in a tolerant way and that everyone had a chance of developing mental illness (71.3%). Similar findings were reported by Siu et al. (2012) [24]. Furthermore, the majority of the participants disagreed or strongly disagreed (90.3%) that it was a waste of money to increase expenditure on services to care for people with mental illness. However, a significant proportion of participants still agreed that it was difficult to communicate with people with mental illness (72.8%). Similar findings were reported by Siu et al. (2012).[24] This was so because they felt afraid to talk to such persons as they commonly believed the subjects had a propensity to violence and might not disclose their mental illness to others. This finding is not surprising as it has been well established that younger people are more likely to hold more positive mental health attitudes [25 -27].

Regarding to social distance, it was asked through the following statements "I oppose the building up of residential hostels for people with mental illness near to my household" and "Is it difficult to make friends with people with mental illness?" The majority of study participants agreed for the two above statements. The results supported by the findings of previous studies where the general population may accept people with mental illness socially, but tend to withdraw from more personal relationships such as working or living together [13, 15, 28]. . The findings in relation to the desire for social distance are also consistent with other studies [7, 29, 30]. Negative consequences were connected with the disclosure of mental health problems, such as perceived and personal stigma. Discrimination in social relationships, work, and health care was reported in several studies [10, 31, 32].

About 49.8% of the study participants strongly agreed or agreed on the statement "Is it difficult to make friends with people with mental illness?" That familiarity with someone suffering from a mental problem makes people more ready to engage in social contacts is an endorsement of the idea of many anti-stigma campaigns to invite people to become acquainted with people suffering from mental health problems [33-36].

In this study, gender, marital status, smoking status and drinking alcohol status significantly influenced the attitude of the participants towards people with mental illness. A similar finding was reported by Aghanwa [37] where marital status seemed to have a positive influence on the knowledge of and attitude toward mental illness. Yamawaki et al. [38] reported that marital status and gender were significant factors that influenced with whom participants would wish to talk in case of a mental health crisis, such as a nervous breakdown. Single females tend to talk to their friends or significant others, while married females tend to talk to their family members. Srinivasan and Thara [39] found that patient gender was associated with family beliefs about the cause of mental illness. Similar findings were reported in studies conducted in Western societies [40-44].

In this study smoking status significantly influenced the attitude of the participants towards people with mental illness. People with mental health problems are more likely to smoke and to smoke more heavily than the general population. However, smoking is associated not only with the prevalence but also with first-ever incidence of mental disorders [45]. Smoking tobacco is significantly associated with increased prevalence of all major psychiatric disorders [46] and the probability of any mental health problem in smokers is double than in non-smokers. In a large population survey of psychiatric morbidity in the UK, 64% of those with probable psychosis were smokers compared with 29% without psychosis [47].

In this study drinking alcohol status significantly influenced the attitude of the participants towards people with mental illness. The fact that alcohol causes depression and anxiety is not particularly surprising, given that alcohol is pharmacologically categorized as a central nervous system depressant [48]. Even though panic disorder with agoraphobia occurs in the general population at approximately 6.1%, [49] alcoholics suffer from panic disorder at a rate of up to 21% [50]. The similarity of panic symptoms to alcohol withdrawal has led some to hypothesize a causal link between the two, even to the point of suggesting that repeated episodes of alcohol withdrawal may cause panic disorder [51]. Bipolar disorder co-occurs with alcohol dependence more than any other mental illness. In a study of patients with bipolar disorder and alcoholism, patients who had primary alcoholism were less likely to experience remission from their alcoholism [53]. Bipolar patients with alcoholism have been shown to suffer more cognitive dysfunction and attempt suicide more often [54 & 55]. All of the personality disorders are affected by the use of alcohol or drugs, borderline personality disorder [56]. Patients with schizophrenia frequently use and misuse alcohol: a study of 168 individuals presenting with a first episode of psychosis had an alcohol misuse rate of 11.7% as compared to a drug misuse rate of 19.5% [57]. Another study found that among patients with schizophrenia, the lifetime prevalence of alcohol use disorder was in the 50% range [58].

Conclusion

This study showed that the undergraduate university students had a moderate to good attitude towards people with mental illness. Gender, marital status, smoking and drinking alcohol significantly influenced the attitude of undergraduate university students towards people with mental illness. Overall, our findings suggest that reducing the stigmatization of mental illness continues to be an important goal for mental health professionals. Although the generalizability of our findings may be limited by our dependence on student participants, it is likely that college students are in fact both more comfortable with mental illness and more concerned about social desirability than the general population, which means our results would underestimate overall levels of stigma. Future research should assess stigma associated with a wider variety of predictors and disorders.

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ORIGINAL ARTICLE

A JOURNEY FROM THE KNOWN TO THE UNKNOWN: A QUALITATIVE STUDY APPROACH

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Abstract

Objective:* Individuals deal with dying and death differently and may not experience the same journey. We investigated Kübler-Ross' Five Stages of Grief on terminally ill patients to review the current applicability of the model among this population. The aims of this paper is to share information regarding the Five Stages of Grief, the emotions associated with the stages, and the challenges that terminally ill patients, namely those diagnosed with cancer, experience. *Methods:* Non-structured interviews were conducted among terminally ill patients located at the palliative ward for two years. *Results:* We found that terminally ill patients at the palliative ward were undergoing the Five Stages of Grief, and that the emotions associated with the stages were reported to be similar to the emotions proposed in the model and among the patients. *Conclusion:* Kübler-Ross' Five Stages of Grief is still applicable among terminally ill patients. The thoughts regarding dying and death still remain negative, therefore, the change in the myths of dying and death are required to help improve the journey towards death. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 25-30.

Keywords: Dying, Death, Grief, Terminal Illness

Introduction

Individuals deal with dying and death in unique ways and not every individual experiences the same journey. The late Elisabeth Kübler-Ross proposed that the journey is made up of five stages [1] of which individuals may experience differently, such that some individuals may not stop at each and every stage, and that some may take longer than others to overcome the current stage. Dying affects both the individual and the individual's body. Individuals such as those diagnosed with terminal illness are affected physically, mentally, emotionally, socially, and spiritually [2]. The body progressively produces physical changes such as the increasing of restlessness, agitation, confusion and need of sleep, of which are common among terminally ill patients. The psychological and emotional changes often involve extensive mental anguish and/ or emotional pain such as depression, anxiety, anger, guilt, despair, and loneliness [3] which increases the probability of social withdrawal and detachment. During this period, there is usually an increase in religious faith and spirituality among terminally ill patients as a form of coping strategy [4].

When dealing with dying and death, individuals begin to undergo preparatory grief. Preparatory grief is defined as the grieving process that terminally ill patients undergo to prepare themselves for their departure from the world [5]. During this period, patients often revisit old memories and reflect on their past and re-live past moments or mourn for missed opportunities [6]. As part of the preparatory grief process, most patients undertake the previously mentioned Five Stages of Grief proposed by the late Elisabeth Kübler-Ross [1].

The late Elisabeth Kübler-Ross is an internationally recognized psychiatrist and author who spent most of her working life working with the terminally ill patients. She was disappointed with the standard of treatment that patients were receiving in hospitals which motivated her to focus her work on this population. From her interviews with terminally ill patients and their respective caregivers, she developed and introduced the now-famous idea of the Five Stages of Grief [1]. These stages are denial, anger, bargaining, depression, and acceptance. Denial involves the conscious or unconscious refusal to believe or accept facts, information, or the reality of the situation [1]. In reflection to terminally ill patients, the refusal to accept one's diagnosis is common. Once terminally ill patients acknowledge their diagnosis, they reacted with anger which is the second stage. Anger can manifest itself in different ways such as being angry with life, or with people especially those who are close to them [1]. Bargaining is the third stage which involves terminally ill patients asking and negotiating with the higher power for extended life. Guilt is often accompanied in the bargaining stage which causes terminally patients and their respective caregivers to find fault within themselves and ask what could have been done differently to prevent such tragedy [1]. During the fourth stage, which is the depression stage, terminally ill patients begin to understand the certainty of death and may detach themselves and may want to spend most of their time alone. This form of detachment, withdrawal, or isolation is a natural process of disconnecting from life which shows that the individual has begun to accept their situation [1]. Acceptance is the last stage which involves terminally ill patients with accepting their faith and awaits death [1]. Although the theoretical model focuses on the stages that terminally ill patients may experience, it has been found to be applicable in a variety of situations that involves a significant loss [1]. Such losses may also include significant life events such as the death of a loved one, end of a relationship or divorce, or losing a favourite object.

With Kübler-Rose's Five Stages of Grief [1], both patient and their respective caregivers became more aware and understanding with the changes that the patient was currently experiencing and what changes may be predicted in the near future. However, this model was merely created to be used as a tool to help frame and identify the emotions patients may be feeling, it is not a definite guide [1]. As mentioned previously, not every individual would experience the same milestones and feel the same emotions as they journey through their terminal illness. The model was created based on the similar responses that terminally ill patients gave but there is no typical response to loss as grief is as individual as our lives [1].

The anticipation of impending death and the pain associated with the terminal illness, namely cancer, may cause patients to have psychiatric morbidities [7-9] which can be responsible for the severe changes in their mood. The prevalence of psychiatric morbidities in terminally ill patients, namely with cancer, has reported to range from 20% to 60% [10, 11] with the prevalence of major depression to range between 16% to 36% [12, 13], anxiety disorders to range between 10% to14% [14, 15], and elevated psychological distress to range from 23% to 58% [16, 17]. Adjustment disorder and depressive disorder, however, are the two most common psychiatric diagnoses reported among advanced cancer patients [7-9, 18-20]. Common characteristics found among depressed individuals are persistent low mood most of the day or nearly every day, impairment in physical state (eg., fatigue or loss of energy), impairment in emotional state (eg., persistent sadness), absence of positive affect (eg., markedly diminished interest or pleasure in activities), significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month) or the decreases or increases in appetite nearly every day, changes in sleeping pattern (eg., insomnia or hypersomnia), and other associated symptoms (eg., excessive worry, irritability) which impairs their daily functioning [21]. Patients too, may often feel worthless, hopeless, and helpless most of the day or nearly every day [22]. Due to the possibility of increment in irritability and agitation, some terminally ill patients may start to scold their respective caregivers and may transform into a total opposite of their usual self. The fastest way to vent out such frustration is through their respective caregivers because they know that they would never leave them alone. This is a process where the patients see themselves as a victim and start to demand attention and care to compensate what they have already lost and will lose later.

The time remaining is a common question asked by patients as well as their respective caregivers; however, timing of death is unpredictable. Due to this, it evokes feelings of insecurity and fearfulness within patients which increases their level of psychological distress especially when left alone in their rooms. Individuals may address these behaviours as "being a baby," however, Clarke and colleagues [23] address these behaviours as symptoms of demoralization syndrome. They [23] proposed that this syndrome was associated with terminal medical illness, disability, bodily disfigurement, fear of loss of dignity, social isolation and detachment, and feelings of greater dependency on caregivers or the perception of being a burden to them. Due to their sense of impotence and helplessness, patients with the syndrome are thought to be at risk of developing depression and/ or suicidal ideations.

The journey towards death, however, is not always depressing [6] of which some individuals have found to live more positively for the duration of their remaining time. Ample evidence has shown the importance of communication in close, personal relationships such as among family members and/ or respective caregivers that has an influential role in increasing the quality of life (QOL) [24-28], compliance to treatment, disease progression, tolerability to pain and fatigue in terminally ill patients. It has deeper significance in the QOL among end- of- life (EOL) patients [29]. Having a reliable social support network, especially in times of increased suffering or crisis, has found to have positive effects for both physical and psychological functioning [30, 31]. However, it is common among terminally ill patients to acquire low social support with respective caregivers abandoning them. This is possibly due to the elevated psychological distress that respective caregivers would have to take on when caring for their ill loved one [32, 33]. Research has suggested that deficits in social support place terminally ill patients at greater risk of experiencing loneliness and developing depression towards the EOL [34]. Due to this, some terminally ill patients often adopt religion as it has always been perceived as being significantly more reliable and stable compared to depending on people [4, 35]. According to Siegal and Schrimshaw [36], religion is often adopted for its assistance in the adjustment process by evoking comforting emotions, offering strength, facilitating meaning making and acceptance of the illness, and reducing feelings of self- blame among terminally ill patients.

A lady on her wheelchair passed by and was smiling and waving on her way out for her medical appointment and said to me; *"I have limited time left. What's the use for me being all gloomy and sad? Why not I enjoy the time I have now?". Based on my observations, patients with terminal illness have different coping mechanisms due to the differences in belief, personality and social support received. Despite their condition, it was found that optimistic patients were willing to engage in conversations, had minimal regrets, and mainly worried about their children compared to their own condition. Introverts are known to keep their emotions and thoughts to themselves, whereas extroverts are more sociable by allowing them to willingly share. Extroverts may have stronger coping mechanisms as they are able to enjoy communicating with others which allows negative thoughts to be dismissed when talking* *to others. Introverts on the other hand, may have other coping mechanisms such as listening to music, watching videos, and meditating. Besides that, being an introvert or extrovert and being successful in life may have an impact on the coping mechanisms of patients. As Erik Erikson has demonstrated, when an individual has achieved greatly in life they were found to be more willing to accept their death and willing to share their life stories and advise others. However, there were cases where individuals who acquired successful lives were bitter because they were holding on to their old selves and were found to constantly compare their old self with their current situation. During interviews, some patients were found to have incongruent affects and often thought of "going to Heaven". In comparison, individuals who found themselves to have wasted their lives experienced greater deal of regrets which left individuals with feelings of despair.*

There were patients who had challenging lives and with the addition of the news of cancer was just their breaking point. During interviews, they expressed tremendous level of distress, guilt and dissatisfaction with life. The different characteristics and personalities of individuals were found to have an influence on their perception of things and behaviour accordingly. For example, one can use Clarke and colleagues' [37] basic cognitive model to explain the cognitive process that is activated after the occurrence of a stressful event. According to the model, after being informed of their illness, patients would be preoccupied with the negative thoughts associated with the cancer and would worry about the stigma associated with. These negative thoughts would then influence the patients' emotions and may begin to socially withdraw themselves. Unpleasant experiences and low social support were found to further strengthen these negative thoughts. When patients were overwhelmed with such thoughts, they were found to have an increased likelihood of manifesting suicidal thoughts followed by suicidal ideation and eventually attempt.

In closing, Kübler-Ross' Five Stages of Grief [1] is still applicable among terminally ill patients because it enables health care professional to identify the emotions currently experienced by terminally ill patients and categorize them accordingly to determine which stage the patients are currently in. However as mentioned previously, this model is to be used only as a tool to help frame and identify what emotions the patients may be feeling and not as a definite guide. Nevertheless, the thoughts regarding dying and death still remain negative as the unknown evokes fear and increases psychological distress among patients and their respective caregivers. Therefore the change in the myths of dying and death are required to improve the journey towards death. This can be achieved by having health professionals teach both patients and their respective caregivers to recognize the needs of the patient as well as their own needs as caregivers. With further understanding of how terminally ill patients cope with unfortunate news can help respective caregivers to deal with the emotional disturbances associated with it and meet the special needs of the dying patient. Eventually, the heart no longer beats and the breathing stops. They have completed their journey and have moved on to a better place.

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Escitalopram And Mirtazapine For The Treatment Of Depression In Hiv Patients: A Randomized Controlled Open Label Trial
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ORIGINAL ARTICLE

ESCITALOPRAM AND MIRTAZAPINE FOR THE TREATMENT OF DEPRESSION IN HIV PATIENTS: A RANDOMIZED CONTROLLED OPEN LABEL TRIAL

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Abstract

Objective: **The objective of this study was to compare the safety and efficacy of mirtazapine and escitalopram in HIV patients for the treatment of depression.** ***Methods:*** **In this trial, 70 adult HIV patients with major depression were randomized and assigned to receive 8 weeks of daily open label mirtazapine (5-30 mg) or escitalopram (7.5-20 mg). The primary outcome variables were endpoint response in Hamilton Rating Scale for Depression (HAM-D) score and change of HAM-D score from baseline to endpoint. Patients having improvement of $\geq$ 50% on the HAM-D total scores during treatment were considered to have responded. A final 17-item HAM-D total score of 8 or less defined remission.** ***Results:*** **The response rate was 91.4 % (32/35) in Mirtazapine group and 85.7 % (30/35) in Escitalopram group (p= 0.71). The remission rate was more in escitalopram group (48.6 %, 17/35) compared to Mirtazapine group (34.3 %, 12/35); however it was not statistically significant (Chi square (1, N = 70) = 2.1, p = 0.22). After controlling for baseline score, the median HAMD score at 8 weeks was significantly lower in the Mirtazapine group (Median (Mdn)=4, Interquartile range (IQR)= 11) compared to Escitalopram group (Mdn=13, IQR= 12) (p < 0.001). The number of adverse events reported was more in Escitalopram group (110) than Mirtazapine group (85); however this was not statistically significant (p= 0.34).** ***Conclusions:*** **Both these drugs are useful in the management of depression in HIV patients and need further study.** ***ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 31-39.***

Keywords: Escitalopram, Mirtazapine, Depression, HIV, Antidepressants

Introduction

Depression is the most prevalent psychiatric disorder among HIV-positive adults after the substance abuse. However, depression is also the most unattended condition in these patients [1]. The presence of depression in HIV patients affects their quality of life and adherence to medication and diet regime [2]. There are many treatment options for the treatment of depression in HIV including conventional antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs), novel agents such as dehydroepiandrosterone, psycho-stimulants and some psychotherapies, particularly interpersonal and group psychotherapy [3]. However, lack of comparative studies made it difficult to draw a firm consensus regarding the best course of treatment [4]. Both escitalopram and mirtazapine have been used in the management of depression with good success reported across reviews and meta-analyses [5-6]. In this trial we compare the the safety and efficacy of mirtazapine and escitalopram in HIV patients for the treatment of depression.

Methods

This study was performed as a prospective, open, randomized, and parallel-group trial to compare the safety and efficacy of mirtazapine and escitalopram in HIV patients with depression. All the patients who satisfied the inclusion/ exclusion criteria and gave their voluntary written informed consent were randomized in 1: 1 ratio to receive either mirtazapine or escitalopram. After receiving the study medication at the baseline visit, patients were followed up for assessments at the end of Week 2, 3, 4, 6, and 8. Patients with HIV presenting to the OPD with symptoms of depression were evaluated. Patients of 18 years of age or older with HIV and on HAART for at least 6 months, who fulfilled the diagnostic criteria for depression as defined by DSM-IV, with HAM-D score more than 13 and MADRS score more than 19 were enrolled in the study. Pregnant or nursing women were not included in the study. The other exclusion criteria includes hypersensitivity to TCAs or SSRIs, previous use of mirtazapine or escitalopram, history of consumption of any psychotropic medication in the past 4 weeks, history of seizures, bipolar depression or other primary psychiatric diagnosis or abnormal lab results or serious disease that in the investigator's opinion should preclude their entry to the study.

Consenting patients who fulfilled the study selection criteria were randomized 1:1 to receive open-label treatment with either mirtazapine (starting dose, 15mg once a day, daily) or escitalopram (starting dose, 10mg once a day, daily). Randomization was done using a computer-generated list of random numbers. Both medications were prescribed to be taken before going to bed. The patients were given respective medications in blister packs till the next follow up. The dose was up titrated i.e. mirtazapine to 30mg/day and escitalopram to 20mg/day if the improvement was less than 20% in the score of The Hamilton Rating Scale for Depression (HAM-D) [7] and Montgomery Asberg Depression Rating Scale (MADRS) [8] [both or any one of these] at the end of one month. The dose was down titrated i.e. mirtazapine to 5mg/day and escitalopram to 7.5mg/day if the patient complained of any adverse events any time during the follow up period, at the discretion of the investigator. Treatments with other psychotropic medications were not allowed to be prescribed to the subjects during study enrollment.

Demographics like age, sex and body weight were recorded at baseline before giving the trial medications. Patients were evaluated at baseline and every two weeks thereafter, until the study endpoint, using the Hamilton Rating Scale for Depression (HAM-D), the Montgomery-Asberg Rating Scale (MADRS), Clinical Global Impression Scales for Severity and Improvement (CGI-S and CGI-I) [9-10], Score on the insomnia subscale of HAM-D, Safety was determined through assessments of adverse events. All assessments were made by the same individual having experience in using the psychopathological scales.

At each follow-up visit, the patients were asked for any possible adverse events by non-leading questions. Any reported side effects were recorded in the adverse event form. The number and percentage of patients experiencing each specific event for Treatment-Emergent-Signs and Symptoms (TESS) (defined as experience that appeared for the first time during the study) were calculated for both treatment groups. The primary outcome variables were endpoint response in Hamilton Rating Scale for Depression (HAM-D) score and change of HAM-D score from baseline to endpoint. Patients having improvement of $\geq$ 50% on the HAM-D total scores during treatment were considered to have responded. A final 17-item HAM-D total score of 8 or less defined remission [11]. The secondary variables were (1) 50% or greater improvement in MADRS scores from baseline to endpoint; (2) Clinical Global Impression (CGI) severity scores of 1 or 2 at endpoint; (3) CGI improvement scores at endpoint; (4) Score on insomnia subscale of Hamilton scale; and (5) Score on insomnia subscale of Montgomery scale at endpoint; (6) Percentage of adverse events reported in each group.

The study was conducted in accordance with the Helsinki Declaration after the approval of Hospital Ethics Committee. Before enrollment in the study, the objectives, methods of the study and other necessary issues related to the protection of human rights were explained to the patients. Written informed consent was obtained from all patients on a voluntary basis prior to the enrollment in the study.

Statistical analysis

The analysis was performed on data from the intention-to-treat sample. Baseline characteristics for efficacy and safety outcomes were summarized using means/ standard deviations for interval/ratio variables, frequency/percentage for nominal variables and median/ interquartile range for ordinal variables. The last observation was carried forward to an estimate missing data for patients who withdrew the prior of completing 8 weeks of treatment. The remission rate between two groups was analysed for significance by chi-square test while the response rate was analysed by Fisher’s exact test. In view of the incomparable baseline scores, the endpoints (HAM-D score and MADRS score) were analysed using an analysis of covariance model (ANCOVA) after the rank transformation to correct for baseline differences [12]. The model included terms for treatment as a fixed effect and the baseline measurement as a covariate. The aim was to assess the treatment differences. The MADRS scores and Clinical Global Impression (CGI) severity scores at endpoint were dichotomized and analyzed for the significance with Chi square test or Fisher’s exact test when any of the expected value was less than 5. The CGI improvement scores, score on insomnia subscale of Hamilton scale and Montgomery scale at endpoint were compared between groups using Mann-Whitney's U test. The change in score on insomnia subscale of Hamilton scale and Montgomery scale at endpoint was analyzed for significance using Wilcoxon Signed-rank test. The safety analyses were conducted on data from patients who received at least one dose of a study drug. The rate of adverse events was compared between treatment groups with Chi square test or Fisher’s exact test when any of the expected value was less than 5. All the Statistical tests performed were two tailed and p-value < 0.05 was considered to be statistically significant. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 17.

Results

Participants' characteristics at entry

The randomisation of treatment (participant flow in the trial) is shown in the figure 1. The demographic and clinical characteristics of participants at baseline are shown in Table 1.

Figure 2: Participant flow through the trial.

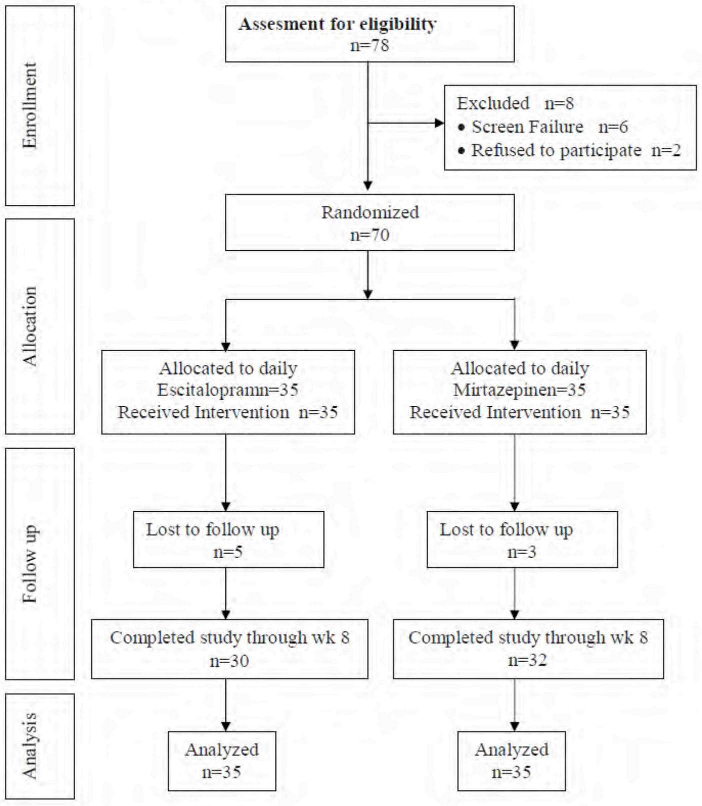

Table 1. Baseline demographic and clinical characteristics of the study participants.

Demographic characteristics	**Group 1 (Escitalopram) n=35**	**Group 2 (Mirtazepine) n=35**	**Total**	***p*- value**
Sex[1]				
Male	14 (60.0)	16 (45.7)	30 (42.9)	p = 0.63[a]
Female	21 (40.0)	19 (54.3)	40 (57.1)	
Age (Years)[2]	37.86 ±7.7	36.8 ± 8.2	37.34 ± 7.9	p =0.41[c]
18-30	4	6	10	
31-40	21	22	43	
41-50	7	4	22	
>50	3	3	6	

Weight (Kg)[2]	52.5 ± 9.3	50.4 ± 8.2	51.4 ± 8.8	p =0.31[b]
HAM-D score[3]	36 ± 6	38 ± 7	36.0 ± 7	p =0.01[c]
MADRS score[3]	42 ± 12	45 ± 8	44 ± 9	p =0.06[c]
CGI Severity score[3]	5 ± 2	6 ± 1	5 ± 1	p =0.04[c]
Insomnia Hamilton scale[3]	5 ± 3	6 ± 1	6 ± 1	p =0.05[c]
Insomnia Montgomery[3]	5 ± 1	5 ± 0	5 ± 1	p =0.12[c]

[a]= Chi square test, [b]= Student's t test, [c]= Mann Whitney U Test
[1] = Data expressed as frequency (Percentage)
[2] = Data expressed as mean ± one standard deviation
[3] = Data expressed as median ± one interquartile range

Table 2. Comparison of response and remission rates between the treatment groups.

	Group 1 (Escitalopram) n=35	**Group 2 (Mirtazepine) n=35**	***p*-value**
Response Rate (≥50% decrease in baseline HAM-D Score at week 8)	30 (85.7)	32 (91.4)	p = 0.71[a]
Remission rate (8 week HAM-D Score ≤ 8)	17 (48.6)	12 (34.3)	p = 0.15[b]

*Data expressed as frequency (percentage)
[a]= Fisher's exact test, [b]= Chi square test

The two treatment groups were balanced at entry with regard to the demographic variables. The severity of depression was higher in Mirtazapine group patients (Mdn HAM-D score 38, IQR= 7; Mdn MADRS score 45, IQR= 8; and Mdn CGI severity score 6, IQR= 1) compared to Escitalopram group (Mdn HAM-D score 36, IQR= 6; Mdn MADRS score 42, IQR= 12; and Mdn CGI severity score 5, IQR= 2) as indicated by higher baseline scores in Hamilton (p=0.01), Montgomery (p=0.06) and CGI severity (p=0.04) scales.

Efficacy

The response rate (i.e. >50% decrease in baseline HAM-D Score at week 8) was 91.4 % (32/35) in Mirtazapine group and 85.7 % (30/35) in Escitalopram group (p= 0.71). The remission rate (i.e. HAM-D score of less than or equal to 8 at 8 weeks) was more in escitalopram group (48.6 %, 17/35) compared to Mirtazapine group (34.3 %, 12/35); however it was not statistically significant (Chi square (1, N = 70) = 2.1, p = 0.22) (Table 2). After controlling for baseline score, the median HAMD score at 8 weeks was significantly lower in the Mirtazapine group (Mdn=4, IQR= 11) compared to Escitalopram group (Mdn=13, IQR= 12) (p <.001). The median MADRS score at 8 weeks, after controlling for baseline score, it was also significantly lower in the Mirtazapine group (Mdn=7, IQR= 12) compared to Escitalopram group (Mdn=17, IQR= 15) (p <.001). The number of patients with greater than or equal to 50 % decreases in baseline MADRS Score at 8 weeks did not differ significantly in Mirtazapine (30/35) or Escitalopram group (32/35) (p= 0.71). The number of patients with Clinical Global Impression (CGI) severity scores of 1 or 2 at 8 weeks were more in the Mirtazapine group (23/35) than Escitalopram group (18/35); however this difference was not statistically significant (p= 0.22). The Median CGI improvement score at 8 weeks was significantly lower in the Mirtazapine group (Mdn=1, IQR=1) than Escitalopram group (Mdn=2, IQR=2) (p < 0.001) (Table 3).

Table 3. Comparison of other outcome variables between treatment groups at end point (8 weeks).

	Group 1 (Escitalopram) n=35	**Group 2 (Mirtazepine) n=35**	***p*- value**
HAMD score (after controlling for baseline) at 8 weeks	13 ± 12	4 ± 11	p < 0.001[a]
MADRS score (after controlling for baseline) at 8 weeks	17 ± 15	7 ± 12	p < 0.001[a]
Patients with ≥ 50 % decrease in baseline MADRS score at 8 weeks	32 (91.4)**	30 (85.7)**	p = 0.71[b]
Patients with CGI severity scores of 1 or 2 at 8 weeks	18/35 (51.4)**	23/35 (65.7)**	p = 0.22[c]
CGI improvement score at 8 weeks	2 ±2	1 ±1	p < 0.001[d]
Score on insomnia subscale of Hamilton scale at 8 weeks	3.0 ±4	0.00 ±0	p < 0.001[d]
Score on insomnia subscale of Montgomery scale at 8 weeks	4.0±2	0.00 ±0.00	p < 0.001[d]

*Data presented as median ± one interquartile range unless otherwise specified

**= Data presented as frequency (percentage)

[a]= Rank analysis of covariance, Covariate = baseline score

[b]= Fisher's exact test, [c]= Chi square test, [d]=Mann Whitney U test

Compared to baseline, there was a significant decrease in Score on insomnia subscale of Hamilton scale at 8 weeks in escitalopram group (Mdn=5.0, IQR=3 to Mdn=3.0, IQR=4) (Z= -2.965, p= 0.003, r = 0.35) as well as in mirtazapine group (Mdn=6.0, IQR=1 to Mdn=0.00, IQR=0) (Z= -5.206, p <0.001, r= 0.62). The Score on insomnia subscale of Montgomery scale was also significantly lower at 8 weeks (Mdn=4.0, IQR=2) compared to baseline (Mdn=5.0, IQR=1) in escitalopram group (Z= -3.730, p <0.001, r = 0.44) as well as in mirtazapine group (Mdn=5.0, IQR=0 to Mdn= 0.00, IQR=0, Z= -5.144, p <0.001, r= 0.61) (Table 4). Compared to escitalopram group (Mdn=3.0, IQR=4), the Score on insomnia subscale of Hamilton scale at 8 weeks was significantly lower in the mirtazapine group (Mdn = 0.00, IQR=0, U= 176.5, Z= -5.661, P < 0.001, r=0.68). The Score on insomnia subscale of Montgomery scale at 8 weeks was significantly lower in the mirtazapine group (Mdn= 0.00, IQR=0.00) compared to escitalopram group (Mdn=4.0, IQR=2, U= 172.5, Z= -5.665, P<0.001, r=0.68).

Table 4. Comparision of change in scores of insomnia subscale of Hamilton and Montgomery depression scale between treatment groups.

Decrease in Scores on Insomnia	**Group**	**Baseline**	**Score at 8 weeks**	***p*- value[a]**
Decrease in Score on insomnia subscale of Hamilton scale at 8 weeks compared to baseline	Group 1 (Escitalopram) n=35	5.0 ±3	3.0 ±4	p <0 .01
	Group 2 (Mirtazepine) n=35	6.0 ±1	0.00 ±0	p < 0.001
Decrease in Score on insomnia subscale of Montgomery scale at 8 weeks compared to baseline	Group 1 (Escitalopram) n=35	5.0 ±1	4.0 ±2	p < 0.001
	Group 2 (Mirtazepine) n=35	5.0 ±0	0.00 ±0	p < 0.001

*Data presented as median ±one interquartile range

[a]=Wilcoxon Signed-rank test

Table 5. Adverse Events According to Treatment Group.

Adverse Events	**Group 1 (Escitalopram) n=35**	**Group 2 (Mirtazepine) n=35**	***p*- value**
Total number of adverse events	110	85	p = 0.34[a]
Anxiety	16 (45.7)	9 (25.7)	p = 0.08[b]
Nausea/vomitting	20 (57.1)	16 (45.7)	p = 0.17[b]
Memory/concentration problems	14 (40)	8 (22.9)	p = 0.06[b]
Dry mouth	18 (51.4)	12 (34.3)	p = 0.07[b]
Loss of libido	7 (37.1)	3 (28.6)	p = 0.17[b]

Premature ejaculation	3 (17.1)	2 (5.7)	p > 0.99[c]
Suicidal thoughts	5 (31.4)	3 (25.7)	p = 0.71[c]
Constipation	10 (28.6)	12 (34.3)	p = 0.60[b]
Dizziness	11 (31.4)	7 (22.9)	p = 0.27[b]
Sedation	4 (11.4)	8 (25)	p = 0.20[b]
Abnormal dreams	2 (22.9)	5 (37.1)	p = 0.43[c]

*= Data presented as frequency (percentage)

[a]= Student's t test, [b]= Fisher's exact test, [c]= Chi square test

Safety and tolerability

The number of adverse events reported were more in Escitalopram group (n = 110) than Mirtazapine group (n = 85); however this was not statistically significant (p= 0.34). The number of adverse drug events reported by the patients is shown in Table 5.The common adverse events include anxiety, nausea, vomiting, memory problems, dry mouth, constipation, and dizziness. The most common adverse event was nausea and vomiting in Mirtazapine (16/35) as well as escitalopram group (20/35).The adverse events did not differ significantly between the two groups. Most of the adverse events in both the treatment groups were mild to moderate and did not lead to discontinuation of treatment. No serious adverse reaction was reported by any patient from either group.

Discussion

Mental disorders are common in HIV-infected persons globally. The most common psychiatric diagnoses among HIV-positive individuals are mood and anxiety disorders, particularly MDD and other depressive disorders. The efficacy and tolerability of both the drugs escitalopram and mirtazapine in the study was in keeping with studies using the two drugs in depressed subjects [13-14]. No specific side effects related to the immune-compromised state of the patients was noted. There is no specific drug of choice with regard to the management of depression in HIV patients [15]. The following study demonstrates the usefulness of both of these drugs in this population while highlighting the need for further studies in this arena.

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ORIGINAL ARTICLE

USE OF MIND BODY COMPLEMENTARY THERAPIES (MBCTs) AND HEALTH RELATED QUALITY OF LIFE (HRQoL) OF CANCER PATIENTS

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Abstract

Objectives*: Prayers, spiritual healing, yoga, meditation, *t'ai chi*, qigong and support groups are classified as mind body complementary therapies (MBCTs). The study aimed to examine the prevalence of MBCTs use and the Health Related Quality of Life (HRQoL) in a group of Malaysian cancer patients. *Methods*: This cross-sectional study was conducted at the oncology clinic of Penang general hospital, Malaysia. MBCTs was assessed using a self- administered questionnaire while the HRQoL of the participants was assessed by using the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30). *Results*: Among the complementary and alternative medicines (CAM) users (n=184), 75(40.7%) patients self-reported using MBCTs while having cancer. Majority of MBCTs users were female 60(80%, p=0.01), aged between 38 and 57 (58%), and were of Malay ethnicity (61%). Socio-demographic factors including age (r=0.15, p=0.03) and monthly house-hold income (r= -0.25, p<0.001) were significantly correlated with MBCTs use. Prayers for health reasons was the most frequently practised MBCTs modality, followed by spiritual practices 20(10.8%), meditation 7(5.9%), *t'ai chi* 7(3.8%), music therapy 4(2.1%), qigong 1(0.5%), hypnotherapy 1(0.5%), and reiki 1(0.5%). Recommendations from friends and family members 53(70%) were the most common reasons of MBCTs use followed by patient's own will 22(29.3%). Health related Quality of Life (HRQoL) scores showed significant difference in all functional and symptoms scores among MBCTs users and non-users (p<0.05). *Conclusion*: The study helps to identify numerous MBCTs commonly practised by a group of Malaysian cancer patients. Prayers specifically for health reasons and spiritual practices were somewhat common among patients. Viewing MBCTs, not as alternative but to complement conventional cancer therapies may help to address cancer patients' emotional and psychological needs. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 40-50.

Keywords: Mind Body Complementary Therapies, Cancer Patients, Quantitative, HRQoL

Introduction

Mind Body Complementary Therapies (MBCTs) are a wide range of practices that provides an interaction between the mind and body with an intention to promote physical and functional wellbeing. The US national centre for complementary and alternative medicines (NCCAM) includes relaxation, hypnosis, visual imagery, meditation, yoga, biofeedback, *t'ai chi*, qigong, cognitive-behavioral therapies, group support, autogenic training, and spirituality as MBCTs [1]. There is evidence that mind-body interventions can be effective for diseases such as coronary artery disease and pain management among arthritis patients [2, 3]. The benefits of MBCTs in oncology care continued to be investigated. The emotional impact of cancer diagnosis draws a great deal of distress [4]. Cancer patients seek several alternative methods to cope with cancer symptoms. It is evident that mind body therapies can reduce the disease and treatment related symptoms such as chemotherapy induced nausea/vomiting and improve mood and quality of life of cancer patients [5]. Prayers and spiritual ways of healing are viewed and practiced to strengthen religious beliefs after a diagnosis of cancer [6]. Other MBCTs such as meditation, yoga, *t'ai chi* have been reported as having beneficial effects in reducing pain, anxiety and psychological distress [7-9]. Studies that included prayers and spiritual therapies as complementary and alternative medicines (CAM) showed significantly higher incidence of CAM use among cancer patients [10, 11]. Religious practices such as prayers and spiritual therapies have been documented to help patients relieve stress and to cope with psychological symptoms of cancer [12-14]. An increasing interest in faith healing therapies is assumed to be common due to an easy and cheap access to these therapies [15]. In recent years, considerable attention has been given in recognizing the role of MBCTs in Malaysian health care system. MBCTs such as hypnotherapy and psychotherapy are referred as mind body soul therapies and are offered by the Traditional and Complementary Medicine (T&CM) division under the ministry of health, Malaysia [16]. At the same time the T&CM division also focuses in providing physical and spiritual therapies to Muslim patients according to their faith and practices under the category of Islamic medical practices. These therapies are frequently offered to patients with chronic illnesses including cancer. Although much research has been done to investigate the use of CAM among Malaysian oncology patients, relatively few studies have investigated the prevalence of MBCTs use among cancer patients in Malaysia. The current study assessed the prevalence of MBCTs use among a group of cancer patients and compared their HRQoL with MBCTs non-users.

Methods

Adult patients aged 18 years old and above, diagnosed with any type of cancer between 6 months and 5 years before the study date, and able to read or understand Malay (National Language of Malaysia) or English were recruited between August to November 2011. The Calculated sample size was 384, with an additional dropout rate of 10%. A total of 498 patients attended the Oncology Clinic during the study period, out of which 422 met the inclusion criteria and were interviewed. After evaluating the completeness of the survey forms, 393 questionnaires were included for the final analysis, giving a response rate of 93.1%. Out of 393 respondents, 46.8%(n=184) had used CAM for their condition. Those reported to use CAM other than MBCTs were labeled as MBCTs nonusers and vice versa. Patients were assured that refusal to participate in the study or information regarding CAM use would not be disclosed to their physicians and would not affect their treatment. The socio-demographic characteristics and clinical variables such as types and stage of cancer, time since diagnosis and types of conventional therapies received were recorded separately. The face and content validity of the questionnaire were established by experts from School of Pharmaceutical Sciences, Universiti Sains Malaysia. The contents, clarity of language, ease of administration and appropriateness of the items in line with the study's objectives were assessed prior to the pilot study. The study questionnaire was piloted among 20 cancer patients and little modification in the questionnaire was needed. Data from the pilot study was not added to the final analysis.

The HRQoL of MBCTs users and non-users was measured by the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30) [17]. The questionnaire comprised of a total of 30 questions with nine multi-item scales: five functional scales (physical, role, cognitive, emotional and social functioning), three symptom scales (fatigue, pain, nausea/vomiting), and a global health status/QoL scale. Six single item scales are also included (dyspnea, insomnia, appetite loss, constipation, diarrhea and financial difficulties). All scores ranged from a minimum of 0 to a maximum of 100 and were computed using linear transformation by referring to the EORTC scoring manual [17]. Higher scores indicated better functioning and global health status, but higher scores for symptom scales indicated more symptoms. The 30-item questionnaire has demonstrated acceptable psychometric properties, with Cronbach's alpha coefficients for the complete instrument ranging from 0.52 to 0.89. The approval was obtained by the European organization for research and treatment of cancer quality of life and was used in two languages i.e. Malay and English. The validity and reliability of the Malay version has been established previously thus no further validation procedure was undertaken [18].

Ethical approval was obtained from the Medical Research Ethics Committee (MREC), Ministry of Health, Malaysia. Both descriptive and inferential data analyses were applied using SPSS version 16.0 (SPSS Inc., Chicago, IL). Variables were taken to be statistically significant at $p<0.05$.

Results

Socio-demographic characteristics

Among the 184 CAM users, 75(40.7%) reported to use MBCTs. The majority of MBCTs users were female (80%, p=0.01), aged between 38 and 57 (54.6%), and were Muslims (62.6%, p=0.02) of Malay ethnicity (61.3%, p=0.02). Most of the MBCTs users (49.3%) were educated up to secondary school level and were married (85.3%) with no monthly income (37.3%). The socio-demographic characteristics of MBCTs users and non-users are presented in Table 1. Socio-demographic factors including age (rs=0.15, p=0.03) and monthly house hold income (rs= -0.25, p<0.001) were significantly correlated with MBCTs use.

Table 1. Demographic and disease characteristics of the participants.

Variables	MBCTs users N=75	%	MBCTs non users N=109	%	x^2 *p*-value
Age (Mean±SD)=52.48±12.6					
18-27	4	5.3%	3	2.7%	
28-37	8	10.6%	6	5.5%	
38-47	18	24%	20	18.3%	0.27
48-57	23	30.6%	34	31.1%	
58-67	15	20%	38	34.8%	
>67	7	9.3%	9	8.2%	
Gender					
Male	15	20%	40	36.6%	
Female	60	80%	69	63.3%	**0.01**

Race					
Malay	49	65.3%	45	41.2%	
Chinese	19	25.3%	51	46.7%	**0.02**
Indian	9	12%	11	10%	
Others	1	1.3%	2	1.8%	
Educational status					
Never go to school	4	5.3%	8	7.3%	
Primary	16	21.3%	26	23.8%	
Secondary	37	49.3%	54	49.5%	0.37
Diploma/Matriculation	9	12%	10	9.17%	
University degree	6	8%	11	10%	
Postgraduate degree	3	4%	0	0%	
Marital status					
Unmarried	6	8%	13	11.9%	
Married	64	85.3%	91	83.4%	0.43
Divorced	1	1.3%	3	2.7%	
Widowed	4	5.3%	2	1.8%	
Religion					
Islam	47	62.6%	47	43.1%	
Buddhism	15	20%	47	43.1%	
Hinduism	8	10.6%	8	7.3%	**0.02**
Christianity	5	6.6%	5	4.5%	
Others	0	0%	1	0.9%	
Irreligion	0	0%	1	0.9%	
Employment status					
Employed	28	37.3%	32	29.3%	
Unemployed	12	16%	31	28.4%	0.22
Retired	15	20%	23	21.1%	
Home maker	17	22.6%	22	20.18%	
Student	1	1.3%	1	0.9%	
Others	2	2.6%	0	0%	
Monthly income in *MYR/month	28	37.3%	67	61.4%	
No income	13	17.3%	16	14.6%	
<1000	21	28%	19	17.4%	**0.006**
1000-3000	13	17.3%	7	6.4%	
>3000					
Primary cancer site					
Breast	37	49.3%	42	38.5%	
†GIT cancers	17	22.6%	21	19.2%	
¥Gynaecological cancers	7	9.3%	9	8.2%	
Lung	3	4%	10	9.1%	0.45
Naso-pharynx	2	2.6%	10	9.1%	
Prostate gland	3	4%	4	3.6%	
Thyroid	1	1.3%	2	1.8%	
*Others	4	5.3%	11	10%	
Duration of disease (Mean±SD)=2.0±0.91					
6 months-1year	20	26.6%	43	39.4%	
>1 year- 3 years	26	34.6%	40	36.6%	0.14

>3 years- 5 years	23	30.6%	20	18.3%	
Don't Know/Not Sure	6	8%	6	5.5%	
Cancer stage					0.62
Very advanced	21	26.6%	39	35.7%	
Slightly advanced	32	42.6%	39	35.7%	
Not advanced at all	13	17.3%	17	15.5%	
Undetermined	3	4%	2	1.8%	
Don't Know/Not sure	6	8%	12	11%	

**Other cancer sites include carcinoma of tongue, germ cell, skin, bone, brain, and lymphoma.*
†Gastrointestinal Tract cancers include colon, rectum, stomach, and intestine.
¥Gynaecological cancers include ovarian, uterine, cervical cancers.
**1MYR=0.325US$.*

Types of MBCTs used by the study participants

Table 2 summarized the types of MBCTs used by the participants. Prayers for health reasons was the most frequent (27.7%), followed by spiritual practices (10.8%) which included visits to the spiritual healers in line with the patients' faith. Spiritual practices was most common among Malay participants. The spiritual practices reported by patients were visits to spiritual healers where patients were given 'zam zam' (holy) water which was believed to cure diseases and verses from the holy book Al-Quran, recited by a group of people. Meditation was practiced by (5.9%) of the participants. Other MBCTs reported to be practiced were *tai chi* (3.8%), music (2.1%) and yoga (1.6%). *Tai chi* commonly practiced by Chinese cancer patients and was common among the age group 48 to 67 years.

Table 2. Types of MBCTs used by the study participants.

Mind Body Complementary Therapies (MBCTs)	**N**	**%**
Prayers for health reasons	51	27.7%
Spiritual Practices	20	10.8%
Meditation	11	5.9%
Tai Chi	7	3.8%
Music	4	2.1%
Yoga	3	1.6%
Qi Gong	1	0.5%
Hypnotherapy	1	0.5%
Reiki	1	0.5%

†Note: Total percentage may not be 100% due to the choice given for multiple responses.

Monthly MBCTs expenditure and source of information

Table 3 summarized the monthly expenditures and the source of information about MBCTs. Many of the participants (40%) could not estimate their monthly expenditures on MBCTs. However, 21.3% reported spending an average of 50-100 MYR per month on MBCTs. Friends and family members were the most common source of MBCTs recommendations (70%), followed by patient's own free will (29.3%) to use MBCTs.

Table 3. Monthly MBCTs expenditure and source of information.

Variables	N=75	%
Monthly expenditure on MBCTs in MYR*		
Not sure	30	40
<50	10	13.3
50-100	16	21.3
101-500	13	17.3
501-1000	6	8
>1000	0	0
†***Sources of information about MBCTs***		
Friends or family	53	70
Own free will	22	29.3
Health care providers	11	14.6
Mass media	10	13.3
Cancer survivors	4	5.3
CAM vendors	2	2.6

MYR: Malaysian Ringgit, 1MYR=0.325us$*

†*Note: Total percentage may not be 100% due to the choice given for multiple responses*

Health Related Quality of Life (HRQoL) of MBCTs users and non-users

Table 4 shows the comparison of multi-item functional, symptom and global health status scores between MBCTs users and non-users. On the functional scale, we found significant differences in physical (p=0.035), role (p=0.021), emotional (p=0.011), cognitive (p=0.001), and social (p= 0.024) domains between MBCTs users and non-users. For symptoms scale, only fatigue (p=0.01), nausea/vomiting (p=0.04), pain (p=0.031) and insomnia (p=0.01) were significantly different among MBCTs users and non-users. No significant difference was found in Global Health Status/Quality of Life scores between MBCTs users and non-users (p=0.83).

Table 4. HRQOL scores for MBCTs users and MBCTs non- users.

Scale/items	**MBCTs USERS**	**MBCTs NON-USERS**	***P* values**
	Mean(SD)	Mean(SD)	
Functional scales†			
Physical functioning	64.2(33.0)	75.0(26.1)	0.035
Role functioning	64.9 (36.5)	77.8(27.5)	0.021
Emotional functioning	68.7(32.2)	80.8(24.1)	0.011
Cognitive functioning	76.4(27.8)	88.0(19.5)	0.001
Social functioning	77.3(30.3)	87.1(20.3)	0.024

Symptom scales / items¥			
Fatigue	40.0(30.1)	28.8(24.8)	0.011
Nausea and vomiting	21.1(30.3)	11.9(22.5)	0.042
Pain	36.8(33.1)	25.8(25.9)	0.031
Dyspnoea	25.2(35.8)	15.8(26.2)	0.12
Insomnia	37.3(39.1)	23.2(31.3)	0.01
Appetite loss	31.5 (37.1)	22.8(31.6)	0.16
Constipation	16.4(32.1)	12.2(27.0)	0.44
Diarrhoea	14.2(28.5)	9.1(22.6)	0.23
Financial difficulties	27.4(31.2)	25.3(33.3)	0.41
Global health status / QoL*			
Global health status/QoL	56.7(22.4)	57.1(21.8)	0.83

Note: All scores have a potential range from 0 to 100.
† High score for a functional scale represents a high / healthy level of functioning.
* High score for the global health status / QoL represents a high QoL.
¥High score for a symptom scale / item represents a high level of symptomatology / problems.
P-value is calculated using Mann-Whitney test

Discussion

The purpose of this study was to explore the use of MBCTs among cancer patients and to evaluate their health related quality of life (HRQoL). The prevalence of MBCTs use was 40.7 with prayers and spiritual therapies being the most common MBCTs among the participants. Cancer patients are reported to experience a high level of depressive and anxiety symptoms. The emotional impact of cancer diagnosis, fear of cancer therapies' side effects and fear of death brings a great deal of psychological distress to the patients [19-21]. Puchalski & O'Donnell (2005) concluded that the sufferings of dying patients should be addressed and can be dealt with by helping patients to understand the purpose of life which may help them to think about something else other than their own sufferings [22]. Prayer for this study was defined as "human communication with divine and spiritual entities" [23]. In this study, prayers and spiritual therapies were most commonly practised by Muslim patients. Prayers for health reasons included increase in frequency of Salat (a daily recurring prayer ritual among Muslims), recitations of Al- Quran(which Muslims believed to have a healing effect on the mind and body) [24] as well as increased 'zikir' which is the repeated recitation of specific verses from the holy book Al Quran. 'Poja' was practised as prayers among patients from Hindu faith and were performed either at home or at temples. Spiritual therapies for this study included participation in the religious rituals of healing as well as seeking out the help of people who are known for supernatural healing power [25]. In the Muslim faith, prayers are among the common coping strategies to deal with stress and are considered to be a way to seek help from God [26]. As the Al Quran says in chapter 13, Al Rad, verse 28: *They are those who believe and whose hearts find rest in the remembrance of Allah. Lo! in the remembrance of Allah hearts do find rest* [27]. The belief that a cure comes from the Lord (God) helps patients face an illness with patience and courage; as the Al Quran states in chapter 26, Al Shuara, verse 80: *And when I sicken, then He health me* [27]. The diagnosis of cancer brings stress and challenges in different intensities and stages to patients and their care givers. Prayers helps to create a link between man and his creator to communicate and to seek forgiveness for sins during a time of apparent hopelessness, thus giving some solace [27]. Spirituality and prayers are reported to have positive psychological and physical effects on well being of lung cancer patients [28]. Spirituality is believed to reinforce religious beliefs towards life, dying and death. In the Muslim faith, there is a concept of 'life after death', thus to a Muslim this world is a temporary place where one is tested and deeds that are done will be evaluated, as stated in chapter 2 of the Al Quran , Al Baqrah, verse 46: *Who know that they will have to meet their Lord, and that unto Him they are returning* [27]. It is not surprising, therefore, that prayers and spiritual acts become more common among terminally sick patients who aim to seek forgiveness before meeting their lord [29].

Regardless of the faith or religion, prayers and spiritual activities may help patients deviate their attention from their own physical pain and emotional stresses. Balboni et al (2007) reported that majority of the cancer patients in their study considered religion as an important component of their lives and was poorly supported by a religious community or medical system [30]. The same study reported that spiritual support by religious community or medical system was significantly associated with patient's quality of life. It was somewhat surprising to find that this study also revealed that MBCTs users were having poorer emotional and social functioning compared to non MBCT users. However, the cross-sectional design of this study means that we cannot conclude anything about causality or directionality of any associations that are found. The association could be due to poor prognosis of the disease even though no significant difference was found in MBCTs use and stage of cancer; we did not ask patients about their own perceptions of their prognoses which may have been different between the two groups especially as it has been shown that MBCT users had more symptoms. If indeed the perceptions of prognoses by MBCT users were worse than non-users, this would explain the poorer emotional and social functioning and MBCT was being used to cope with the symptoms. Currently, the Malaysian health care system recognizes Islamic medical practices as CAM, but it is important in a multi-ethnic society that the religious and spiritual practices from faiths other than Islam should also be recognized to address the spiritual needs of patients from different faiths.

Meditation which originates from ancient religious and spiritual techniques claims to bring about calmness, physical relaxation and a positive emotional state [31]. Meditation was the third most commonly used MBCTs among the study participants. Despite its religious and spiritual origins, mediation is currently practiced by cancer patients regardless of their faith or religion. The efficacy of mediation has been established through some randomized controlled trials [32]. In a review of mindfulness meditation as a health care intervention the results claimed significant reductions in depressive relapse and recurrence as well as psychological distress [33]. Most of the MBCT users showed significant poorer scores in symptoms scales such as insomnia and fatigue, meditation can be recommended as one of the intervention to help patients cope with such symptoms.

The benefits of *tai chi* are under investigation and the pilot studies are evident to improve neuropsychological functioning among cancer patients [9]. In a review of literature, Mansky et al. (2006), suggested tai Chi as an intervention to benefit cancer survivors combining it with medication and aerobic exercises [34]. Though not many of the participants reported to practice *tai chi*, recommendations can be made to evaluate the effects of *tai chi* on psychological and emotional well being of cancer patients. The monthly expenditure on MBCTs was assessed and patients reported spending only minimal amount of money on these therapies. Easy access to these therapies with minimal charges could be a possible reason of patients' use of

MBCTs compared to other CAM therapies such as dietary and herbal products.

The measurement of the HRQoL confirms that cancer patients suffered a great deal of functional and psychological stress regardless of MBCT use. However, it is important to continually evaluate the potential role of MBCTs to improve cancer patients' quality of life. Carlson et al, (2003) reported significant improvement in overall quality of life, symptoms of stress, and sleep quality of cancer patients after undergoing mindfulness-based stress reduction program that incorporated relaxation, meditation, gentle yoga, and daily home practice [35].

The study has several limitations. The study was conducted in one of the public hospitals in Penang state that caters for the low-to middle income population and therefore cannot be generalized to the entire Malaysian population. EORTC QLQ-C30 was designed as a self administered questionnaire, but some of the terminally ill patients needed assistance to fill up the questionnaire. This might have affected some of the quality of life scores but the situation was unavoidable. The results are subjected to recall bias due to the self reported nature of the study.

Conclusion

In conclusion, the study identified different types of MBCTs commonly used by a group of Malaysian cancer patients. As different types of MBCTs have been listed in the national T&CM policy, additional research is required to clarify the relative efficacy of different mind-body therapies.

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Conflict of interest
There is no conflict of interest in this study.

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ORIGINAL ARTICLE

PERFECTIONISM AND SOCIAL ANXIETY AMONG UNIVERSITY STUDENTS IN MALAYSIA

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Abstract

Objective:* The purpose of this study was to determine the relationship between perfectionism and social anxiety among university students. *Methods:* A cross sectional study was conducted among 250 students from the Management and Science University. The respondents were selected by random using numbering method. Their participation is voluntary and answers given were anonymous. *Results:* A total number of 250 university students participated in this study. The majority of them were female (69.6%), 21 years old of age or younger (52.4%), Malay (71.6%), single (97.6%), from medical and health faculty (60.4%), with Cumulative Grade Point Average, CGPA (40.4%), with monthly income less than 5000 Ringgit Malaysia, 42.8% suffer from severe anxiety and 70.8% have high perfectionism. Univariate and Multivariate analysis showed that social anxiety significantly associated with perfectionism among university students (p<0.001, p<0.001) respectively. *Conclusion:* We conclude that social anxiety among university students are strongly associated with high perfectionism. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 51-58.

Keywords: Perfectionism, Social Anxiety

Introduction

Frost and colleagues [1] defined perfectionism as ‘‘the setting of excessively high standards for performance accompanied by overly critical self-evaluation’’. Such high standards are associated with a fear of failure [2-4]. The evidence suggests a robust and significant relationship between some subscales of perfectionism and suicidal ideation. Studies have found that both self-oriented and socially prescribed perfectionism are associated with increased suicidal ideation in student and psychiatric samples [5-7]. Preventing suicide and suicidal behaviour is a primary concern of the mental health system, and the risk of suicide and parasuicide is elevated amongst people with depression [8].

A report from the National Co-morbidity Survey indicated that social anxiety is the third most common mental illness, following depression and alcohol abuse [9]. The Diagnostic and Statistical Manual of Mental Disorders defines social anxiety (social phobia) as an intense fear of negative evaluation from others, and a chronic concern and self-doubt about one’s social ability and social performance.

Social anxiety in its most severe form can emotionally and physically paralyze the sufferer, with many struggling to cope with other psychological challenges, finding or maintaining employment. For instance, research has found that approximately one half of people suffering from social anxiety have a co-morbid mental, drug, or alcohol problem [10]. Likewise, in a review study by Bruce and Saaed, (1999) [11] found that up to 16% of patients with social anxiety disorder have alcohol abuse problems. In fact, patients presenting for substance abuse treatment often also meet the criteria for social anxiety. Other research has found that the disorder increases a patient's lifetime risk of depression approximately four-fold [12], and that this and other co-morbid conditions increases the lifetime incidence of suicidal ideation and suicide attempts [13]. Left untreated, social anxiety can be chronic and pervasive, not only due to the aforementioned co-morbid conditions, but due to the reliance on social avoidance common for those living with the disorder. Although avoidance and isolation may temporarily minimize or even eradicate the anxiety related symptoms, the underlying fears will often remain. This is demonstrated in the research which has shown that approximately 85% of patients with the disorder experience academic and occupational difficulties caused by their inability to meet the social demands of securing and maintaining employment or relationships [11].

Socially anxious individuals have been found to have high expectations with regards to their social performance, and become overly self-critical when they fail to reach those expectations. For this reason, many of these key components of social anxiety are also central to the definition of perfectionism, which has been defined as the tendency to set excessively high standards and to engage in overly critical self-evaluations [1]. For instance, early studies viewed perfectionism as solely the “setting of excessively high personal standards” [14]. Frost et al. (1990) [1] proposed that perfectionism is best understood across several dimensions that include: having excessively high personal standards; a chronic concern over mistakes; a need for, and pursuit of, organization; and frequent doubts about one’s actions.

Perfectionism has been found to have strong ties with several forms of psychopathology. Studies showed that perfectionism is associated with depression [15], obsessive compulsive disorder [16] trait anxiety [17] anorexia and bulimia [18], and panic disorder [19]. Likewise, studies have also shown that social anxiety sufferers have some of the thoughts, feelings, and behaviours associated with perfectionism among a clinical population [20-22]. In fact, a common feature of social anxiety is the presence of a significant disparity between perceived self-ratings of social performance versus the actual ratings by attending others such as the public, friends, family, and spouse [23].

A great deal of recent attention has been given to the mental health of university students. Although it was once assumed that university students experienced little, if any, psychological disturbance, research from university students counseling centre are telling quite a different story. In a recent national survey, 60% of university counseling centre directors reported record numbers of students using their centre, and for more extended periods of time [24]. Most researchers believe that the root of this crisis is fueled in good part by increasing levels of competitiveness across several systems of the child’s life [25 & 26], and that university students today are often expected to be perfect in many ways. They are expected to get into a good college, make athletic teams, maintain a certain grade point average, make friends, choose an academic major and stay with it, find a job after graduation, and pay off student loans.

Nearly half of all university students report feeling so depressed and anxious during their college experience that they have trouble functioning [27], and according to a study, nearly half of all university students surveyed drank four or five drinks in one sitting within the previous two weeks. In fact, a recent study found that the prevalence of binge drinking and “pre-partying” on campus is most related to social anxiety than any other disorder [28]. Furthermore, university students who rated themselves as perfectionists also had a greater number of depressive episodes and lower self-esteem scores, than students who rated themselves as non-perfectionists [29&30]. Hewitt et al. (1994) [6] found an alarming connection between university students who consistently set high standards for themselves or believed that others expected only excellence in their performance reported significantly higher scores on measures of suicidal ideation.

Methods

A cross sectional study was conducted among 250 university students at the Management and Science University, Shah Alam, Selangor, Malaysia. In the class we distribute, the questionnaires to the tables of students in an alternate method. Random sampling technique was employed where the respondents were selected by random using numbering method. Their participation is voluntary and answers given were anonymous.

The data collected are keyed into Statistical Package for Social Science (SPSS) version 13.0. Before giving the questionnaires to the respondents, we obtained consent from them. If they agreed to be a respondent, an introduction about the objective of this research was given before they answered the questions. After answering the questions, we promised confidentiality on the answers which will be known to the lecturers are the only one that can read the answers provided by the respondents. Last but not least, we thank the respondents for giving such cooperation to answer the questionnaires and help us in bringing out this research.

Instruments

Multidimensional Perfectionism Scale (MPS): The MPS [1] is a 35 item self-report measure which generates an overall perfectionism score as well as scores for the following six dimensions of perfectionism: (1) concern over mistakes (CM); (2) doubts about actions (DA); (3) personal standards (PS); (4) parental expectations (PE); (5) parental criticism (PC); and (6) organization (OR). The subscale CM includes items such as "people will probably think less of me if I make a mistake," and "if I fail at work/school, I am a failure as a person." The subscale DM includes items such as "it takes me a long time to do something right" and "even when I do something very carefully, I often feel that it is not quite right." Frost [1] found that these critical self-evaluation subscales are key components of pathological perfectionism. The PS subscale is the more commonly understood form of perfectionism and refers to the setting of high expectations, and described by the following item examples, "it is important for me to be thoroughly competent in everything I do" and "I expect higher performance in my daily tasks than most people." The *Organization* (OR) scale assesses the tendency to be orderly and tidy, as reflected by the following items, "organization is very important to me" and "I am a neat person." The *Parental Expectations (*PE) subscale includes items such as "my parents wanted me to be the best at everything" and "my parents set very high standards for me," and the *Parental Criticism* (PC) subscale include items such as "my parents never tried to understand my mistakes" and "as a child, I was punished for doing things less than perfectly."

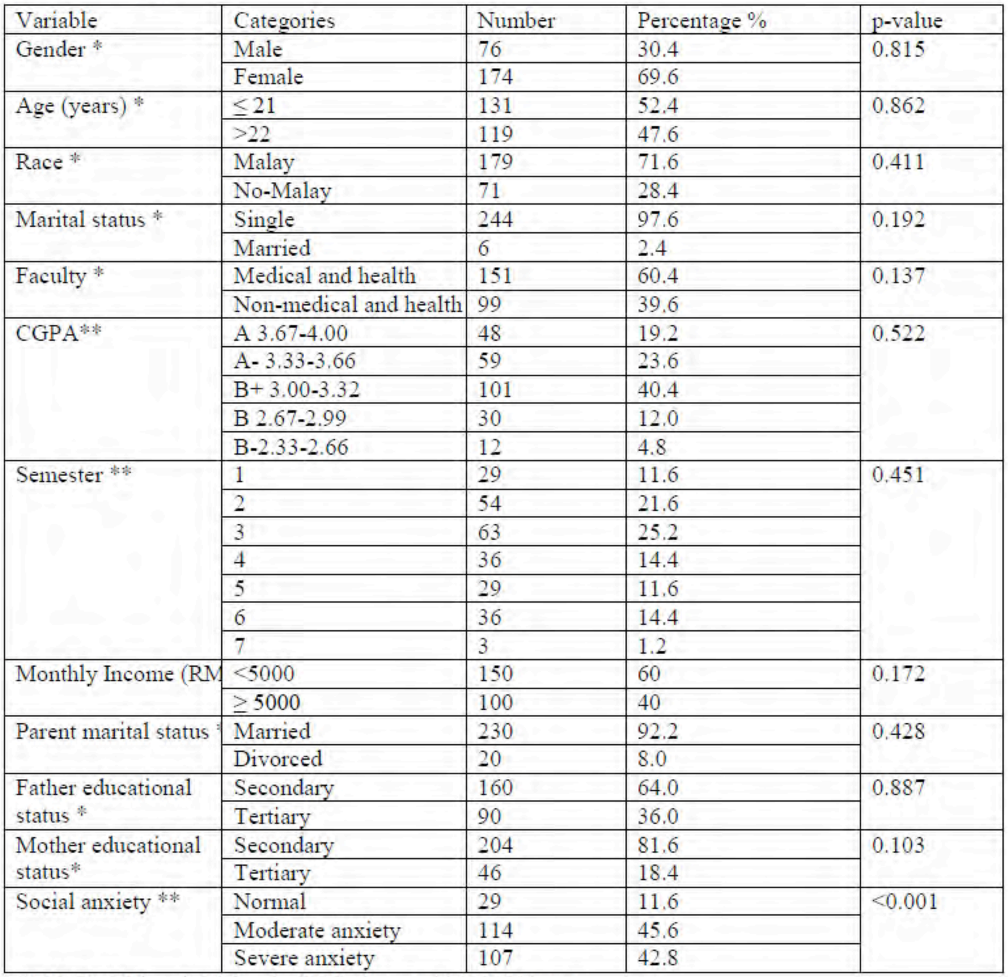
The high frequency with which the MPS is used in the psychological literature is influenced by the strong reliability and validity of this scale. Internal consistency has ranged from good to excellent for each of the subscales (Cronbach alpha ranging from 0.77 to 0.93) and for the total perfectionism score (Cronbach alpha = 0.90) [1]. The total perfectionism score, equal to the sum of all subscales except OR, was significantly correlated with other measures of perfectionism [1]; as cited by Juster et al. (1996)[21]. Participants in the clinical groups had a mean age of 36 years *(SD* = 9.59, range: 18-65), and 49.70% were women. The sample was predominantly White (80.1%) and spanned a range of income levels. Cut-off point for the questionnaire on perfectionism was (1-30) consider low perfectionism, (40-49) moderate perfectionism, (50-69) high perfectionism, >70 very high perfectionism. For social anxiety the cut-off point was (0-10) no phobia, 11-29 moderate, >30 phobia.

Social anxiety Instruments: This project administered two social anxiety measures to each student. These included the *Social Interaction Anxiety Scale* (SIAS) [31] which assesses types of anxiety experienced in social situations (e.g. “I become tense if I have to talk about myself or my feelings;” and “I get nervous when I have to speak to someone in authority (teacher, boss) and the *Social Anxiety Scale* (SPS) [31], which primarily addresses anxiety while being watched (“I become self-conscious when using public toilets;” and “I fear I may blush when I am with others.” These scales are frequently used together in the research literature as both demonstrate high internal consistency with a racially diverse sample (SAIS: Cronbach alpha = .89; SPS: Cronbach alpha = .93) [31]. In addition, Heimberg et al. (1992) [32] found moderate to strong validity with related measures such as the Leibowitz Social Anxiety Scale (ranging from .60 to .92), as well as strong test-retest reliability (Alpha = .91). These findings have been found with a diverse sample of Blacks (12%), Whites (72%), Latin Americans (11%), and Asian Americans (5%) [32].

Results

A total number of 250 university students participated in this study. The majority of them were female (69.6%), 21 years old of age or younger (52.4%), Malay (71.6%), single (97.6%), from medical and health faculty (60.4%), with CGPA (40.4%), with monthly income less than RM 5000 and 42.8% suffer from severe anxiety (Table 1).

Table 1. Socio-demographic characteristics and factors influence the perfectionism of the study participants (n=250)



Variable	Categories	Number	Percentage %	p-value
Gender *	Male	76	30.4	0.815
	Female	174	69.6	
Age (years) *	≤ 21	131	52.4	0.862
	>22	119	47.6	
Race *	Malay	179	71.6	0.411
	No-Malay	71	28.4	
Marital status *	Single	244	97.6	0.192
	Married	6	2.4	
Faculty *	Medical and health	151	60.4	0.137
	Non-medical and health	99	39.6	
CGPA**	A 3.67-4.00	48	19.2	0.522
	A- 3.33-3.66	59	23.6	
	B+ 3.00-3.32	101	40.4	
	B 2.67-2.99	30	12.0	
	B-2.33-2.66	12	4.8	
Semester **	1	29	11.6	0.451
	2	54	21.6	
	3	63	25.2	
	4	36	14.4	
	5	29	11.6	
	6	36	14.4	
	7	3	1.2	
Monthly Income (RM	<5000	150	60	0.172
	≥ 5000	100	40	
Parent marital status	Married	230	92.2	0.428
	Divorced	20	8.0	
Father educational status *	Secondary	160	64.0	0.887
	Tertiary	90	36.0	
Mother educational status*	Secondary	204	81.6	0.103
	Tertiary	46	18.4	
Social anxiety **	Normal	29	11.6	<0.001
	Moderate anxiety	114	45.6	
	Severe anxiety	107	42.8	

#1 USD=3 Ringgit Malaysia (RM). *t-test. **ANOVA test

Univariate analysis showed that social anxiety is significantly associated with perfectionism among university students (p<0.001). Other variables such as gender, age, race, marital status type of faculty, CGPA, semester, monthly income, parent marital status and parent education did not show any statistical differences (p=0.815, p=0.862, p=0.411, p=0.192, p=0.137, p=0.522 , p=0.451 , p=0.172, p=0.428, p=0.887, p=0.103; respectively) (Table 1).

Regarding the perfectionism among university students, the majority of them have high perfectionism (70.8%), followed by very high perfectionism. The lowest percentage (2.8%) of students reported that they have low perfectionism (Figure 1).

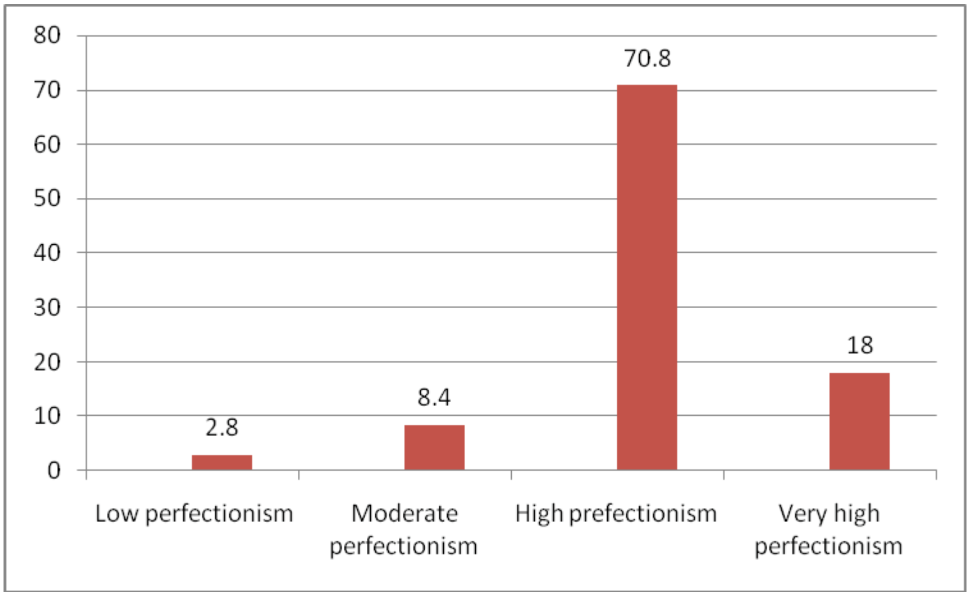


Figure 1. The perfectionism among university students.

Multivariate analysis using multiple linear regression showed that only social phobia significantly associated with perfectionism among university students (p<0.001). That's mean every unit increase in social phobia (according to social phobia scale), perfectionism is expected to increase by 0.276 (Table 2).

Table 2. Factors associated with perfectionism among university students using multiple linear regression (n=250).

Variable	B	SE	Beta	P-value
Constant	1.530			
Social phobia	0.276	0.055	0.301	<0.001
CGPA	0.044	0.034	0.076	0.208

F=24.8, P<0.001, R2=0.097

Discussion

Socially anxious individuals have been found to have high expectations with regards to their social performance, and become overly self-critical when they fail to reach those expectations. For this reason, many of these key components of social anxiety are also central to the definition of perfectionism, which has been defined as the tendency to set excessively high standards and to engage in overly critical self-evaluations [1].

Perfectionism has been found to have strong ties with several forms of psychopathology [15]. The literature has shown that perfectionism is associated with depression [15] obsessive compulsive disorder [16], trait anxiety [17], anorexia and bulimia [18] and panic disorder [19]. Likewise, studies have also shown that social anxiety sufferers have some of the thoughts, feelings, and behaviors associated with perfectionism among a clinical population [20-22] In fact, a common feature of social anxiety is the presence of a significant disparity between perceived self-ratings of social performance versus the actual ratings by attending others such as the public, friends, family and spouse [23]. In other words, socially anxious individuals inaccurately evaluate their own performance and misinterpret the expectations and signs of others. Both of these perfectionist related tendencies are central in the cause and maintenance of social anxiety.

Studies suggest that perfectionism may be important in social anxiety disorder [21]. Juster et al. [21] make several points regarding social anxiety and perfectionism, including: (a) Perfectionism might be a risk factor for social anxiety or exacerbate it and (b) individuals with social anxiety may display perfectionism by holding unreasonably high standards for performance in social settings, interpreting any deviation from those standards as failure. [33] also contend that unrealistically high standards are a common, if not universal feature of people with excessive and disabling social anxiety. Empirical findings, however, have been inconsistent or contrary to this hypothesis [34].

The limitations of this study were that the design of the study is cross-sectional study, self-report questionnaires is another limitation whereby we may the participants overestimate their situation.

Conclusion

Social anxiety among university students is due to high perfectionism. This study showed that social anxiety significantly associated with perfectionism among university students. This problem needs an urgent attention to universities to address this issue through counseling and identify the problem earlier.

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CASE REPORT

DIALECTICAL BEHAVIOUR THERAPY FOR A WOMAN WITH BORDERLINE PERSONALITY DISORDER: A CASE REPORT

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Abstract

Objective: **Borderline personality disorder (BPD) is often manifested by maladaptive behaviours such as self-injury. The interpersonal style characteristic of BPD makes it difficult to maintain stable therapeutic relationships, with the patient often discontinuing treatment. Although dialectical behavior therapy (DBT) has been reported to benefit patients with BPD, reports in Asian countries have been few. We herein describe a 22-year-old female with BPD and a history of attempted suicide and self-injury who underwent DBT at our hospital.** ***Methods:*** **Our 6-month DBT consists of 4 parts: weekly psychotherapy by a psychiatrist, weekly skills training by a clinical psychologist and nurse, emergency consultations, and supervision/consultation meetings. Individual psychotherapy and skills training sessions, respectively, were conducted for this patient 24 times.** ***Results:*** **After completing DBT, the number of self-injuries and frequency of suicidal ideation in our patient decreased.** ***Conclusion:*** **Although more costly than standard treatment for BPD, a trial of DBT might be worthwhile in Japanese patients. ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 59-61.**

Keywords: Psychotherapy, Behaviour Therapy, Borderline Personality Disorder, Mindfulness, Skills Training

Introduction

Borderline personality disorder (BPD), which is characterized by impulsiveness, unstable interpersonal relationships, disturbance in sense of identification, and emotional instability, is often manifested by maladaptive behaviours such as suicidal and/or non-suicidal self-injury. Since a review by Cochrane Collaboration reported lack of efficacy of pharmacotherapy for treatment of the core symptoms of BPD, psychotherapy for BPD has received increased attention in the fields of psychiatry and psychology [1]. Regarding psychotherapy, dialectical behaviour therapy (DBT) is the most often reported and has been shown to decrease the severity of symptoms, including self-injury [2, 3]. However, case reports of patients with BPD treated with DBT among Japanese are few. Thus, we herein report a case of BPD who was treated with DBT at our university hospital.

Case Report

Ms. A, a 22-year-old female, began to slash her wrists at age 15 in her third year of junior high school. Around that time, her absence from school gradually increased. After depressive moods, emotional dysregulation, and feelings of worthlessness and self-blame were pointed out by a physician about 5 years ago, she began to see a psychiatrist irregularly as an outpatient. Although she performed well academically and completed high school and was accepted into a university, she dropped out of the university in her first year because she felt alienated in class. She then took on a part time job, but could not keep it. Since then, she frequently changed jobs and for the 4 months prior to presentation at our hospital, she was unemployed.

After repeated overdoses of medication and suicidal/non-suicidal self-injury, her parents requested that she visited our hospital where she was subsequently hospitalized. The day following admission, she bitterly complained about the administration of medication by nurses and restriction on the possession/use of scissors, and unsuccessfully attempted to return home. She made no attempt to recognize that her emotional instability was within herself, and instead blamed those around her. Then, after bitter quarrels with roommates, she left the ward without permission and attempted suicide at home. As she had deeply slit her wrist down to the fatty tissue, she was taken to hospital by ambulance. She had obvious intense abandonment fears, unstable interpersonal relationships, emotional instability, feelings of emptiness, recurrent attempts at self-injury, and difficulty controlling anger; her condition met the Diagnostic and Statistical Manual of Mental Disorders, 4th edition text revision (DSM-IV-TR) criteria for BPD. The hospital personnel felt that her expression of rage was a means of expressing anxiety or fear, as if she obtruded her fears onto others by the means of psychological 'projection'. We exploited the opportunity afforded by her disturbing actions to discuss her emotional instability and emphasized the need for DBT. We introduced her to DBT to reduce her tendency for self-injury.

We regarded her behaviour problems as the interaction of a pervasive emotional dysregulation system with an invalidating environment. The strategies of our intervention aimed to validate the patient's emotional response and to help her learn an adaptive behavioural pattern. DBT consists of 4 elements: 1) psychotherapy, 2) skills training, 3) 24-h emergency consultations, and 4) supervision/consultation meetings. In our program, individual psychotherapy was provided by a psychiatrist weekly (50 minutes). A psychologist and a nurse held weekly skills training sessions consisting of the following: mindfulness, interpersonal effectiveness, emotional regulation, and distress tolerance. The ward nursing staff provided emergency consultations. Finally, all staff involved in the treatment attended and participated in supervision/consultation meetings. In these meetings, we discussed the treatment plan and expectations for treatment outcome along with supervision of case management for approximately 90 minutes. Pharmacotherapy, which was continued in tandem with DBT, was switched from quetiapine 25 mg/day for 12 weeks to mirtazapine 15 mg/day. Even though the patient was discharged from the hospital 3 months after beginning DBT, she continued DBT as an outpatient. All elements of the DBT took place over a period of 6 months. Of the 24 sessions, she missed only one. After completing DBT, the number of self-injuries per month decreased, and she no longer meets the criteria for BPD. Manifestations of defense mechanisms such as '*splitting*,' called all-or-nothing thinking, have decreased without our direction through her increased use of skills learned. She is continuing to receive follow-up counseling, with a mild sleeping pill as her only medication.

Discussion

In this case report, we firstly highlight the importance of the technique of mindfulness taught through skills training sessions. Mindfulness essentially originated with Western contemplative and Eastern meditation practices. Mindfulness skills focus on the patient's observing and describing external stimulus and/or internal sensations. Then, the patient is encouraged to focus attention on a particular task or activity without intrusion of thoughts of the past or the future. Further, judgmental expressions and feelings, whether positive or negative, are discouraged. DBT includes mindfulness skills to increase the capability to consciously experience oneself and events. When a serious problem occurred in our course of treatment, the 'here and now technique' in relation to mindfulness allowed our patient to recognize that the problem of emotional instability existed within herself and motivated her to face her problems, and set goals for therapy. Secondly, we placed special emphasis on the role of supervision/consultation meetings. Treatment could proceed without confusion among staff on therapeutic relationships or staff 'burnout'. These meetings acted to maintain the framework of the therapy. As therapeutic relationships in psychotherapy for BPD usually become wobbly and threaten to break down, supervision/consultation meetings that stabilize the framework of therapy were quite effective. Thirdly, self-injury that is often observed in adolescence will have adverse effects on mental health in young adulthood [4]. Early intervention in adolescence may be crucial for suicide prevention in young adulthood. Fourthly, to our knowledge, there is no validated questionnaire in Japan such as the Zanarini Rating Scale for Borderline Personality Disorder to assess the severity of BPD even though a credible scale is indispensable for studies of interventional effectiveness [5]. It, therefore, is necessary to translate this scale into Japanese and validate it. Although DBT costs more than standard pharmacotherapy in the Japanese medical insurance system, a trial of DBT in Japan might be worthwhile. Also, in Asian countries, a study of its efficacy such as a randomized controlled treatment trial might provide interesting results.

Conflict of Interest

None.

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CASE REPORT

INNOVATIVE TREATMENT OF A RARE EXAGGERATED OBSESSIVE-COMPULSIVE REACTION TO SMELL

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Abstract

Objective: **This case report highlights about a patient with OCD (Obsessive-Compulsive Disorder) patient who presented with exaggerated compulsions related to bad smell.** ***Methods:*** **We report a case of a cleaner who encountered bad odors and responded with compulsive showering and wearing fresh clothes. His disorder is differentially diagnosed with similarities and differences between his disorder and that of olfactory reference syndrome, bromidrophobia and obsessive disgust to smell.** ***Results:*** **The treatment of choice for OCD is exposure and prevention therapy (EPT). We started the treatment with cognitive restructuring combined with our innovative spiritually oriented mindfulness and acceptance therapy. And to avoid the shortcoming of EPT of excessive anxiety to full-blown exposure and prevention, we have introduced novel adaptations that rendered our therapy to be more of the classical reciprocal inhibition and the gradual systematic desensitization techniques of Wolpe than the straight forward EPT. The reciprocal inhibition was presented by asking the patient to smell a rotten fish in a plastic bag and whenever his anxiety became unbearable the bag was closed and he inhaled the opposite fragrance of sprayed perfume while relaxing and breathing abdominally. Similar to systematic desensitization therapy, we repeated the whole process but gradually increased the time of smelling the rotten fish before enjoying its opposite fragrance. His improvement was dramatic, observed from the first session. After 4 sessions, he resumed his job and had no relapse, but he carried a bottle of his preferred perfume to counteract the bad smell.** ***Conclusion:*** **OCD reaction to smell may respond well with only cognitive-behaviour therapy.** ***ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 62-65.***

Introduction

OCD is classified by the DSM-1V as an anxiety disorder characterized by recurrent disturbing thoughts and/or repetitive, ritualized behaviors that the person feels driven to perform. For a long time, psychiatrists and mental health workers considered OCD an incurable chronic disorder. This pessimistic belief was however positively changed with the introduction of behavior therapy and antidepressants with serotonin reuptake inhibiting properties such as clomipramine and fluoxetine. The influence these drugs in reducing the symptoms of OCD have been established by experimental studies comparing patients taking the active drugs with patients on placebo [1]. On the other hand, it was found that atypical antipsychotic drugs can exacerbate the symptoms of OCD patients with comorbidity. This was verified by Atul Khullar and his colleagues in a case study in which quetiapine increased obsessive compulsive symptoms (OCS) in an OCD patient suffering from other disorders [2]. Another disadvantage of medication treatment of OCD, is the very high relapse rate when the drugs are discontinued. On the contrary, behavior therapy by exposure and prevention was found to have long-lasting benefits [2].

Case report

We report a 43-year-old Indian man who worked as a cleaner in Hospital Kuala Lumpur Municipality (Dewan Bandar Kuala Lumpur) presented with bad odors and responded with compulsive showering and wearing fresh clothes. He was referred to me by his psychiatrist for the treatment of an obsessive-compulsive disorder related to bad smell. His main complaint was compulsive showering and wearing fresh clothes in response to the offensive smell of dead rats or other stink he encountered in his work. Malaysia is a warm humid country, so it is not uncommon for Malaysians to take showers during their lunch hour. The patient used to come to work with a bag of clean clothes and engaged in his compulsive rituals whenever he encountered an offensive odor. However, all kinds of non-smelly trash and dirt did not bother him even if it looked disgusting to other cleaners. The root of his disorder seems to have started in his childhood. His mother, who was over-sensitive to the bad smell of fish used to express her disgust in dramatic ways and she used to ask him as a little boy to quickly wash his hands to deodorize the smell of fish. Smell of rotten fish became one of his most abhorrent odors.

Compulsive reaction to smell is generally diagnosed as OCD, but showering and changing into clean clothes is indeed a rare exaggerated response to a bad smell. Repetitive showering is often observed in the OCD known as olfactory reference syndrome (ORS). However, in ORC the patient's cleansing compulsions are not due to an external offensive odor that he smells but to his irrational fear that he is emitting a foul or unpleasant odor such as bad breath or foul overall body odor. The obsession of olfactory reference syndrome may be an exaggerated concern with a natural body smell, or may appear as an imagined odor. Though similar in some respects, our patient is not precisely an olfactory reference syndrome case. Another OCD related to smell that is similar to our case is bromidrophobia. It is a form of obsessional fear of body odors.

The patient was first referred to the Psychiatry Department of the University of Malaya Hospital. The medicine prescribed to him caused him headache and difficulty to urinate. The latter might have been a rare side effect of tricyclic drugs. He stopped the treatment and was feeling that his condition was becoming worse. He was then sent to Ampang Clinic in which the psychiatrist prescribed an antianxiety drug that greatly improved his condition, however his OCD continued unabated. His psychiatrist then referred him back to Dewan Bandar Kuala Lumpur Hospital for psychotherapy.

Discussion

Meyer developed EPT from observing that frightened animals got over their phobias when they were exposed for a long time to what scared them while preventing them from escaping [3]. Many patients avoid being treated by EPT because of the excessive anxiety encountered when strictly prevented from their compulsions. In discussing this issue, Professor Adam Radomsky stated that ”Refusal rates for ERP are unacceptably high, which is why we need to develop a new refined treatment[4].”

Our treatment created much less anxiety because we followed a gradual approach and we neutralized the offensive smell with its opposite; the perfume. This is similar in some ways to reciprocal inhibition and our gradual exposure resembled systematic desensitization therapy of Wolpe [5]. Furthermore, the cognitive restructuring and our psychospiritual technique of mindfulness and acceptance were repeated after each sniff of the bad odor and the spraying of perfume. Combining these therapeutic strategies may be of great help to patients with similar psychopathology by benefiting from the combination of different therapeutic strategies and by reducing the excessive anxiety of EPT.

The treatment of choice to OCD is the behavioral therapeutic technique known as the

Exposure and Prevention therapy (EPT) in which the patient is exposed to the noxious stimulus that triggers his obsession while strictly preventing him or her from engaging in his or her compulsions [6]. This ingenious technique was first developed by Dr. Victor Meyer [7]. I wish to record here that I had the privilege of directly observing the treatment of Meyer's first OCD case that led to the birth of this novel treatment. This was in 1966 in the Department of Psychiatry of the Middlesex Hospital Medical School where I was then serving as a clinical assistant and a trainee of Dr. Meyer.

The first patient of Meyer was a man and not a woman as mentioned by Professor Jack Rachman [8]. He was a London pathologist who accidentally spilled germs of a dangerous disease on the seat of his car. He panicked and washed and rewashed the seat with all kinds of disinfectants. His trauma ended up as an incapacitating fear of infectious diseases and dirt, particularly sticky substances. He spent most of his day cleaning and washing his hands and any object that he touched before washing.
He was exposed to dirt and his hands smeared with sticky jam and prevented from engaging in his cleaning rituals since the water in his room was turned off. He became extremely anxious; almost panicky. Valium was prescribed for him to reduce this unbearable anxiety. In a few days his improvement was dramatic.

In closely applying EPT to our patient, we would have simply subjected him to bad smell and prevented him from showering or changing his dress. Though this was essentially the therapeutic strategy that we followed, we have introduced novel adaptations that rendered our therapy to be more of the classical reciprocal inhibition and systematic desensitization techniques than the straight forward exposure-prevention therapy. We have also combined our therapy with cognitive restructuring and some aspects of what is now known as the third wave of CBT. Third wave CBT which is still in the process of taking its final shape in the West, has always been used by Muslim therapists and traditional healers. I have been using mindfulness and acceptance within a spiritual therapeutic context since 1967 without realizing that a day will come when it becomes a "third wave" [9].

We started with cognitive restructuring. He was encouraged to realize that his compulsion of washing away a bad smell by showering and changing into clean clothes was irrational and childish rooted in his mother's exaggerated response to bad smell. CBT helped him to realize that his real problem was not specifically the bad smell. The problem was his attempt to get rid of his discomfort in an irrational manner. Our mindfulness and acceptance therapy helped him to accept his predicament as a Divine fate and a test for which he would be spiritually rewarded. The aim of this introductory phase of the treatment was to give him a cognitive rational foundation for the exposure-prevention therapy. The second phase was to apply the modified EPT. For this, the therapist came to the clinic with a rotten fish in a plastic bag together with a bottle of perfume that could be sprayed. As already mentioned, rotten fish was his most abhorrent bad smell. The patient was initially asked to smell the fish for a few seconds. As he did so and his anxiety mounted, the therapist closed the bag and sprayed the perfume near his face and asked him to relax his muscles and breathe abdominally and enjoy the comforting fragrance and to contemplate on the absurdity of his irrational thought and compulsions and to dwell on imaginal acceptance of bad smell. The irrationalness of feeling dirty and contaminated because of bad smell was exposed by showing the ridiculousness of being clean in body and attire just because of inhaling the nice smell of the perfume.

The whole process was repeated with gradually increasing the time of smelling the rotten fish. His progress was dramatic; observed from the very first therapeutic session. He was given the rotten fish and the perfume and asked to practice at home and to bring them to the clinic for further sessions. After 4 sessions the patient was able to tolerate sniffing the bad odor of the fish continuously for more than 5 minutes and to spray the perfume only for a few seconds without having the compulsive urge to shower. He resumed his job as a cleaner but kept a bottle of his preferred perfume in his bag to inhale its refreshing fragrance if he encountered any offensive smell. He expressed his wish to terminate the therapy since he felt confident that he has improved. His improvement was sustained until I left my part-time job as a clinical psychologist in 2004.

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CASE REPORT

ISOLATED SLEEP PARALYSIS AND GENERALIZED ANXIETY DISORDER: A CASE REPORT AND REVIEW

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Abstract

Objective:* This case report highlights a case of isolated sleep paralysis, a transient, generalized inability to move or speak that usually seen during the patient's transitions between sleeping and wakefulness. *Method:* We report the case of a 44-year-old man with long standing recurrent isolated sleep paralysis and generalized anxiety disorder who sought help almost 20 years after the first onset of symptoms. The presenting manifestations of this disorder and its management are also discussed. *Results:* Isolated sleep paralysis is reported to occur with co-morbid anxiety disorders especially panic disorder. Its presentation may confuse the psychiatrist with other psychiatric disorders. *Conclusion:* It is important for psychiatrists to be aware of the presentation of a patient with isolated sleep paralysis and simultaneously understand the cultural undertones in such cases. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 66-70.

Keywords: Isolated Sleep Paralysis, Recurrent Isolated Sleep Paralysis, Narcolepsy, Generalized Anxiety Disorder

Introduction

Sleep paralysis is a transient, generalized inability to move or speak that usually seen during the patient's transitions between sleeping and wakefulness. It forms one of the important components of narcolepsy tetrad that in addition comprises excessive daytime sleepiness, cataplexy and hypnagogic hallucinations. The earliest detailed account of sleep paralysis associated with hypnagogic illusions was given by the Dutch physician *Isbrand van Diemerbroeck* in 1664 [1]. Isolated sleep paralysis (ISP) is a rapid eye movement (REM) sleep parasomnia and is diagnosed if there is absence of other clinical features of narcolepsy. Isolated events of ISP and experiences of individual symptoms seen in ISP are a common reported phenomenon [2], with a prevalence of anywhere between 20-60% but recurrent isolated sleep paralysis (RISP) or chronic ISP is a relatively less known and uncommon disorder [3-5]. We report the case of a patient with recurrent isolated sleep paralysis that gradually progressed in severity over 20 years and also had co-morbid generalized anxiety disorder. To our knowledge this is the first case report of RISP with GAD from India.

Case Report

A 44-year-old unmarried man working as a gardener came to the psychiatry outpatient department with chief complaints of episodes of inability to move limbs at night while asleep since the past 20 years. The patient described all these episodes occurred during his sleep and lasting about 5-15 minutes whereby he was unable to move his limbs or turn in bed or even call for help, all of which he would desperately wanted to do each time he had these episodes. During the episodes he felt as if someone was sitting on his chest and making it difficult for him to move or breathe. On further probing, he accepted an occasionally feeling that a *shaitaan* (*Hindi* for ghost) was sitting on his chest. These episodes had left him feeling powerless and extremely frightened. He explicitly described that during these episodes, he could very clearly hear other family members talking in the room, but he could not respond to any of them. Each time he would feel that a simple pat or touch by any family member would terminate this episode, which actually did happen on a few occasions, while on others they subsided on their own. The episodes would usually occur when he was about to get up from sleep. He reported the earliest episodes in his early 20s, most distinctly around 22 years of age, but said that the episodes then were occasional (around 1-2 times in three months) and did not distress him. However since the past 2 months (without any apparent stressor) their frequency had increased to almost daily episodes resulting in subsequent insomnia and distress. He estimated his total nocturnal sleep time to be about 2-4 hours but at the same time did not complain of excessive daytime sleepiness; his Epworth Sleepiness Scale score was only 6 suggestive of normal range. He described his sleep quality as poor, with anxiety and excessive worry and denied of any visual or auditory hallucinations during daytime. Although the patient denied of having any fatigue, he did complain specifically of having memory difficulties; he also appeared distressed about his condition but did not seem depressed. He denied symptoms suggestive of restless leg syndrome or cataplexy.

Initially he had gone to certain faith healers but when nothing helped, he consulted a psychiatry clinic. On further history, he also showed anxiety symptoms and fulfilled criteria of generalized anxiety disorder, but none of any other psychiatric disorder. There were no reported panic attacks by him. There was no current use of alcohol although he had a past history of occasional drinking 5 years back followed by complete abstinence since then. He was not on any regular medications either for sleep complaints or any other problems and had no family history of sleep disorders.

His general and systemic examination were within normal limits and on mental state examination he was alert and fully oriented. Affect was anxious but showed full range and was appropriate to mood. His routine blood investigations, thyroid function tests and electroencephalogram were normal.

Using International Criteria of Sleep Disorders criteria (2001) [6] he was diagnosed to have chronic isolated sleep paralysis, severe type and comorbid generalized anxiety disorder (GAD) as per Diagnostic and Statistical Manual IV edition, Text Revision.

We educated him about the importance of sleep hygiene and advised him to avoid any sort of sleep deprivation. He was taught relaxation exercise to be practiced regularly at home. He was started on amitriptyline 25mg night dose, but he returned complaining of heaviness of head and giddiness and in spite of advising him to continue the medications as the side effects may subside with time, he refused to take it. He was then started on paroxetine 25 mg night dose. He was followed regularly when he reported that he has not experienced further episodes of sleep paralysis; he also reported that his anxiety problem was fully resolved; improvement in both the disorders was sustained at 6 months follow up. When an attempt to reduce paroxetine was made, he redeveloped both the sleep and anxiety problems and hence it was planned to continue him on long term medication.

Discussion

This patient had symptoms of recurrent isolated sleep paralysis that occurs in the absence of any other symptoms of narcolepsy and also had comorbid GAD. Sleep paralysis is not present in all patients of narcolepsy and tends to be more transitory as compared to other symptoms [7,8]. We did consider narcolepsy as a differential diagnosis for our patient but since there was no history suggestive of cataplexy, it was ruled out, as only cataplexy exhibits a high specificity for diagnosis of narcolepsy [9].

The episodes in ISP are more likely to occur during awakening from sleep (hypnopompic) while episodes of narcolepsy associated sleep-paralysis tend to occur commonly during sleep onset (hypnagogic) [5]. An explanation given for sleep paralysis which seen especially in narcolepsy is the spillover of REM sleep atonia into wakefulness [9]. Majority of the cases reported point towards the episodes occurring more commonly in supine sleeping position, although the mechanism for this is not clear [1]. Although our patient did not specifically complain of having these episodes more in the supine position, but he did give a history of sleeping in a supine position most of the times.

Hallucinatory experiences both in visual and auditory modalities are common in ISP. Patients may complain of feeling as if someone is touching or stroking their bodies or someone is standing by their side or at their head. Their hallucinations may include people, animals, intruders, demons, spirits, or even vampires in their bedrooms. They hear footsteps getting closer to them and fear they would be killed [1]. Most patients report reported that they are aware of other people present in the room and can hear their voices and other noises around, but usually complain of complete inability to move any part of their bodies including an inability to speak out or scream [10,11]. Patients may commonly complain of breathlessness and classically describe it as a choking sensation or as if someone is sitting on their chest, which frightens them in darkness of the night.

Appropriately diagnosing a case of ISP is important for psychiatrists as the frightening features and associated anxiety reported by patients may mislead the clinician into diagnosing such patients with a psychotic spectrum or anxiety spectrum disorder, especially in the absence of a history of snoring [12]. One should probe into reported symptoms such as a ghost sitting on the chest in sleep (as in our patient) and associated features such as suspiciousness, since it could easily mislead the diagnosis. In view of this symptom and the belief in *shaitaan* (ghost), our patient had initially gone to certain faith healers who confirmed his belief of the presence of a *shaitaan* but nothing suggested by them helped, because of which he consulted a psychiatry clinic. These beliefs of our patient were mere cultural and not delusional; they were easily targeted by psycho-educating him about the disorder. Various cross cultural case reports and studies have reported of similar phrases being used by patients to describe the choking or breathlessness in ISP [13]. In this context, one also needs to know that ISP is a part of the mythology of certain cultures and has been attributed to supernatural forces such as ghost oppression phenomenon in Hong Kong Chinese witchcraft [5,14,15]. Gangdev (2004) pointed this in a case report of a woman who developed paranoid beliefs and sadness of mood during her experience of sleep paralysis and hypnic hallucinations [16]. Ohaeri (1992) highlights the clinical presentation and treatment approaches to sleep paralysis and points out its importance especially in developing countries where a belief in supernatural causation of illness is prevalent [17].

Hsieh *et al* (2010) [18] demonstrated that ISP was independently associated with excessive daytime sleepiness, worse sleep quality, and impaired mental health-related quality of life in their Chinese-Taiwanese subjects. In addition, ISP has been reported in association with other psychiatric disorders such as panic disorder [18], PTSD [20,21] and other anxiety disorders [22]. When dealing with a case of ISP/RISP, clinicians need to rule out nocturnal panic attacks which are non-REM-related events and occur without an obvious trigger in 18-45% of panic disorder patients [23].

Different patients cope differently with this disorder; some may resort to prayers or a faith healer for their complaints while others may do nothing to prevent their paralytic attacks [24]. Demystification of parasomnias and reassurance is an important aspect of clinical intervention [25] as it is avoiding sleep deprivation and use of serotonergic antidepressants that help reduce the frequency of ISP episodes [5,26]. Other drugs like amitriptyline (75-100 mg) in association with l-tryptophan (2-4g) at bedtime have also been recommended [27]. However, since our patient refused to take amitriptyline owing to its side effects, he was started on paroxetine, keeping in mind that he also had comorbid GAD; both of these disorders responded to paroxetine.

Conclusion

Recurrent isolated sleep paralysis is a rare disorder that may present either to sleep specialists or to psychiatrists and can be easily misdiagnosed as some other sleep or psychiatric disorder. It is important for psychiatrists to be aware of ISP as a diagnostic entity and also any accompanying co-morbidities. Cross cultural awareness of patient reports of different symptoms of ISP is also important for clinicians to help further the patient management. RISP is precipitated by sleep deprivation and stress which makes addressing these two issues all the more important in the management of RISP.

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CASE REPORT

BEHAVIOURAL VARIANT FRONTOTEMPORAL DEMENTIA: A CASE REPORT

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Abstract

Objective:* This case report highlights the challenges encountered in arriving at the diagnosis of a case with 'behavioural variant Frontotemporal Dementia'. *Methods:* We report a case of 'behavioural variant Frontotemporal Dementia' diagnosed in a 49 year old Chinese lady. *Results:* This patient was misdiagnosed as Obsessive Compulsive Disorder (OCD), Parkinson Disease and Psychotic Disorder Not Otherwise Specified (NOS), deemed not responding to medications which was later complicated with Neuroleptic malignant syndrome (NMS). Her diagnosis was revised only after 2 years, after which her behavioural problems stabilised, bringing some relief to her family's distress. *Conclusion:* Though not rare, 'behavioural variant Frontotemporal dementia' is often misdiagnosed and patients and their families suffer unnecessary suffering before the condition is finally diagnosed. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 71-75.

Keywords: Behavioural Variant, Frontotemporal, Dementia, Diagnosis

Introduction

Frontotemporal dementias (FTD) are a group of clinical neurodegenerative syndromes characterised by prominent changes in behaviour, language and frontal functions [1-3]. Unlike dementia of the Alzheimer's type, the onset of FTD occurs earlier, often before the age of 65 years and memory is relatively preserved until late. The prevalence of FTD is estimated to be 3-15 per 100000 [4,5], with 20-40% being familial [3]. On brain imaging, there is focal atrophy over the frontal and anterior temporal regions of the brain [3]. Three distinctive variants have been described: behavioural variant FTD (bvFTD), semantic dementia (SD) and progressive non-fluent aphasia (PNA); of which bvFTD is the commonest. Though not rare, diagnosis is often delayed [6]. Rosness et al (2008) found that it took an average of 59.2 months and 49.5 months to arrive at a clinical diagnosis of Frontotemporal Dementia in Norway and Sweden respectively [6]. This is likely due to the heterogenous presentations of FTD which can mimic psychiatric disorders [7]. This is a case report highlighting the challenges in arriving at a diagnosis of a case of bvFTD.

Case Report

T, a 49 year old Chinese seamstress was hospitalised in May 2011 for a 2-year history of progressive 'restlessness and disorganized behaviour' which did not improve on high dose antipsychotic medication. She was initially brought to the neurology clinic a year ago for prominent changes in behaviour associated with some forgetfulness. The neighbours complained that T kept returning to the shops insisting on getting the 'correct change'. She barged into her neighbours' homes uninvited 'to chat', causing considerable distress when she failed to take hints to leave. She had repetitive behaviour such as taking the laundry in and then putting them out again, rearranging the furniture at home and repeatedly showering. She also hoarded newspapers and bits of string. She was well apart from 'iron deficiency anaemia' secondary to fibroid-associated menorrhagia. T did not have any family history of dementia or neurological diseases.

At the time, she was not found to have any physical problems or any neurological deficits. She scored 25/30 in the Mini-Mental State Examination (MMSE) (losing 4 marks to serial 7s and 1 to 5-minute recall), 16/18 in the Frontal Assessment Battery and 13/15 in the Geriatric Depression Scale. Her blood investigations did not reveal any abnormal findings. Lumbar puncture results were normal. MRI Brain was reported as generalised cerebral atrophy.

Within the same year (2010), she lost her job due to the poor quality of her sewing. Premorbidly from a friendly person who was gentle, easy-going and mild mannered; she had become someone who complained a lot, acted on impulse without regarding the opinion or feelings of others and hoarded things. She was not able to perform her usual house chores. She kept buying food even though some had rotted in the fridge. She spent hours recalculating her telephone credits but could not get them right. Her day was spent either collecting bits of paper or string which she hoarded as a compulsion.

She was referred to the psychiatrist and prescribed with Sertraline 100mg OD for Obsessive Compulsive Disorder. Albeit a lot quieter, she did not improve. Her family had to instruct her on when to shower or eat. On the other hand, she displayed hyperorality - she gobbled up whatever food or drinks on sight and would not stop unless her family stopped her. Her behaviour caused considerable embarrassment to her family as she would impulsively take food or drinks of other patrons when they brought her out for dinner. She displayed utilization behaviour; her continually tipping a cup into her mouth even when the cup was empty. She was not able to sustain any meaningful conversation except to say repetitive words to indicate her needs.

Her diagnosis was revised to 'Psychotic Disorder NOS'. She was treated with Risperidone 3 mg OD but she developed secondary parkinsonism. In between, another doctor started her on generic T.Madopar for presumed Parkinson Disease. Her medication was switched to generic T. Aripiprazole and T. Madopar was stopped in 2011. However, she continued to deteriorate, becoming more impulsive and restless despite maximal dose of Aripriprazole. She showered almost every hour, drank water repetitively and hoarded objects. She had no regard for the frustration of her family. Her affect was blunted. She did not otherwise have any psychotic or mood symptoms. She scored 13/30 on Montreal Cognitive Assessment, and 25/30 in the MMSE. A repeat MRI Brain in 2011 (Figure 1) showed further atrophy of the brain. A provisional diagnosis of Frontotemporal Dementia was made. Aripriprazole was tapered off and T was started on Fluvoxamine 50mg OD.

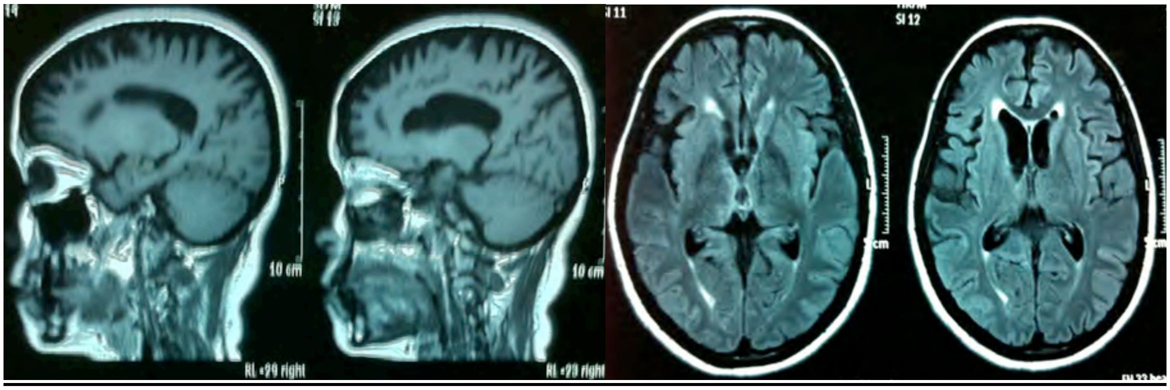

Figure 1. MRI Brain of T Images July 2011: reported as generalised atrophy

Unfortunately, T developed fever, generalised rigidity and markedly elevated serum creatinine kinase 3 days later. Her other laboratory investigations were normal. She was treated for Neuroleptic Malignant Syndrome. She was later restarted on T. Fluvoxamine; and gradually improved; being less impulsive and able to follow instructions. She was referred to the clinical psychologist for behavioural management. Her family was given psycho-education and empowered on how to manage her behavioural symptoms at home. T was finally discharged home with T. Fluvoxamine 25 mg ON, T. Memantine 5 mg OD and T. Clonazepam 0.25mg PRN. On her follow-up visit, the family reported that she still had repetitive behaviour, but was no longer as impulsive and able to follow instructions. Her family was relieved that they had an answer and were now able to cope with her. Her son even found her a job as a sweeper (closely supervised by her husband) at a nearby apartment block. She is still working now and stable on T. Fluvoxamine 100mg BD. Her CT Brain a year later (Figure 2) revealed preferential frontotemporal atrophy.

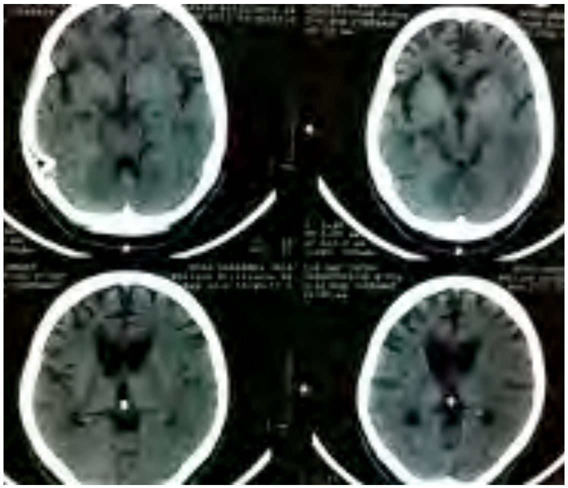

Figure 2. CT Brain Images of T August 2012 showing preferential temporoparietal atrophy

Discussion

For T, her diagnosis was reached at after a period of slightly more than 2 years. She fulfilled the International Consensus Criteria for bvFTD [8] – she had progressive deterioration of her behaviour and cognition; early behavioural disinhibition, early loss of empathy, early repetitive or compulsive behaviour, hyperorality, objective evidence of executive deficits with relative sparing of memory and visuospatial functions; exhibited significant functional decline and had imaging results consistent with bvFTD. Although her diagnosis was reached earlier compared to the Norwegian and Swedish cohort, she and her family underwent significant distress during the 2 years of uncertainty. T visited at least 4 different doctors, was misdiagnosed with Obsessive Compulsive Disorder, Parkinson Disease and Psychotic Disorder NOS; treated inappropriately with high doses of neuroleptics and later antiparkinsonian medication. She also unfortunately developed Neuroleptic Malignant Syndrome, a life threatening condition in the process.

Why does it take so long to come to a diagnosis of Frontotemporal Dementia? Firstly, the disease may mimic primary psychiatric disorders, misleading doctors into treating patients as such [7]. Secondly, in early bvFTD, changes are often subtle and may not be picked up by insensitive, conventional brain imaging[8]. For T, her MRI was initially reported as generalised atrophy, and only after 2 years did her brain CT began to show the classical frontotemporal preferential atrophy. Thirdly, FTD is a neurodegenerative disease without cure; hence the hesitancy on the part of the attending doctor to proclaim such a 'damning' diagnosis to the patient. Fourthly, although there are existing diagnostic criteria for the diagnosis of FTD such as the Lund-Manchester Criteria and Neary's Consensus Criteria, the former criteria lacked precision while latter criteria was relatively insensitive with ambiguous behavioural descriptors and rigid core criteria [8, 9]. While it is now possible to say that Madam T fulfilled all the criteria, at the time when her symptoms started to emerge, such a conclusion would not have been so clear-cut. Also, the previous 2 criteria catered to the all types of FTD. It is only of recent that the International Consensus Criteria for behavioural variant FTD have been developed [8].

Although there is no cure for FTD at present, symptomatic medication such as SSRIs for the impulsivity and repetitive behaviour; creating activities tailored to the needs of the patient and both educating and empowering the family has dramatically turned their suffering and uncertainty into relief and some degree of satisfaction that they are able to help their loved one. T had tremendous family support and this has resulted in T's improved quality of life. Instead of being locked at home or restrained in a facility for her impulsivity, she is now earn some income as a sweeper and help with simple chores in the kitchen under the supervision of her devoted husband, while retaining some degree of dignity in her life. Perhaps we should all learn from this case - on how to cope and make the most of life despite the 'damning' nature and course of the disease.

Conclusion

The early symptoms of bvFrontotemporal dementia may resemble those of primary psychiatric disorders and bvFTD is often misdiagnosed. As such, one needs to have a high index of suspicion and greater awareness about this condition. A meticulous and comprehensive review of the available evidence, with frequent communication with the patient's family is essential to come to the diagnosis and prevent unnecessary delay and suffering.

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Schizoaffective Disorder – An Issue Of Diagnosis
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OPINION

SCHIZOAFFECTIVE DISORDER – AN ISSUE OF DIAGNOSIS

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Abstract

Objective:* To highlight the diagnostic challenges in diagnosing a patient with schizoaffective disorder under DSM-IV-TR and to evaluate the effectiveness of changes in DSM-V in addressing these issues. *Methods:* We present the evolution of the diagnosis from its inception, outline its complex nosology, review the diagnostic difficulties under DSM-IV-TR and critique the proposed changes made in DSM-V. *Results:* A complex nosology, varied thresholds of diagnosis under DSM-IV-TR, and the inherent difficulty in obtaining a detailed longitudinal history from a patient contribute to the challenge of diagnosing a patient with schizoaffective disorder. Changes in DSM-V attempt to increase the reliability of the diagnosis by specifying and raising temporal thresholds, moving the time of disease observation away from a single episode but towards the lifetime of illness. *Conclusion:* Changes made in DSM-V only address a small part of the difficulties raised and clinicians will continue to face challenges in diagnosing schizoaffective disorder under DSM-V. However, there might still be value in the proposed changes under DSM-V. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 76-81.

Introduction

The term ‘schizoaffective disorder’ is commonly used to refer to the patient who exhibits psychotic symptoms as well as mood symptoms. When vaguely defined, it can seem to be an easy way to pigeonhole patients who have a mixture of both mood and psychotic symptoms but cannot be easily categorized into either schizophrenia or major mood disorders. However, under stringent criteria, there is a challenge for diagnosing patients with schizoaffective disorder. This can be, in part, attributed to the confusing and diverse nosology of schizoaffective disorder; the similarities between schizoaffective disorder and schizophrenia with mood symptoms or major mood disorder with psychotic symptoms; and the poor clinical reliability of the DSM-IV criteria, which can be ambiguously vague.

In this commentary, we explore these challenges by tracing the history and evolution of the diagnosis, its nosology, and the clinical challenges in utilizing DSM-IV to diagnose schizoaffective disorder and how the proposed changes for the DSM-V criteria for schizoaffective disorder would aide the challenge of diagnosis.

Evolution of the Diagnosis

Kasanin proposed the term ‘schizoaffective disorder’ in 1933 on the basis of 9 detailed case histories (republished in 1994) [1]. In his lecture he described nine cases of acutely psychotic patients who were diagnosed to suffer from dementia praecox (now known as schizophrenia) but did not quite fit the traditional Kraepelinian two-entity diagnosis of schizophrenia (dementia praecox) or manic-depressive psychosis (affective psychosis) [2]. The term “schizoaffective” did not appear in the text. However, it was mentioned that Claude [3] had described cases of “schizomania” (pre-dating Kasanin’s “schizoaffective” psychoses) that developed into schizophrenia and finally ended in dementia. Kasanin’s accounts of the nine cases were descriptive, narrative and psychodynamic; he summarised the features common to the group as follows: (i) blending of schizophrenic and affective symptoms; (ii) ages 20-39; (iii) usually a history of a previous attack in late adolescence; (iv) normal pre-morbid personality; (v) good social and work adjustment; (vi) very sudden onset in a setting of marked emotional turmoil with a distortion of the outside world and presence of false sensory impression in some cases; (vii) definite and specific environmental stress; (viii) absence of any passivity or withdrawal; (ix) duration of a few weeks or months and followed by recovery.

Kasanin acknowledged that Bleuler had recognised such cases many years earlier. If the established major psychoses of schizophrenia (with a deteriorating course) and manic-depressive psychosis (recurring and recovering) are considered “typical”, then other psychotic conditions would form an “atypical” category. Some of these atypical psychoses have a number of common characteristics such as acute onset, polymorphic symptomatology and good prognosis.

Vaillant [4] identified in a selected list of 16 studies of remitting schizophrenics common salient features that could be found in most, detailed as follows: (i) picture resembling schizophrenia but with symptoms of psychotic depression; (ii) acute onset; (iii) confusion or disorientation during acute onset; (iv) good pre-morbid adjustment; (v) clear precipitating event; and (vi) remission to the best pre-morbid level of adjustment. Notably, there was a close correspondence of Kasanin’s description of “schizoaffective” psychoses to Vaillant’s observations of these atypical psychoses.

Syndromes and Concepts

However, these similar clinical syndromes have been given different names by different people, in different cultures and during different periods of time. Thus Kendell [5] remarked, “… as a result we do not know to what extent, for example, the French term bouffée délirante, the Scandinavian term psychogenic psychosis, the Anglo-American term schizoaffective illness and Leonhard’s term cycloid psychoses all refer to the same group of patients.” And one may add to the list the Japanese Mitsuda’s “atypical psychoses” linking to epilepsy as well. On the other hand, the same term may undergo changes in usage over time or apply to different conditions. A study by Brockington and Leff [6] looked into 8 alternative definitions of schizoaffective psychosis in a sample of psychotic first admissions and found their mutual concordance to be very low indicating very poor agreement about the meaning of the term “schizoaffective”.

There is also a hierarchical approach in which a dominant disorder is diagnosed eventhough contaminated with symptoms from another disorder. To Bleuler [7], Fould’s and Bedford’s [8] and Welner [9] presence of distinct schizophrenic symptoms takes precedence over affective symptoms and patients with mixed symptoms should be diagnosed schizophrenic rather than schizoaffective. Others, Stephens, Astrup and Mangrum [10]; McCabe, Fowler et al. [11] thought schizoaffective disorder was a misdiagnosed or variant of affective disorder.

Another hypothesis is the continuum model in which schizoaffective disorder occupies a midway position between schizophrenia and affective disorder. Robin Murray is of the opinion that the Kraepelinian dichotomy of distinct schizophrenia and bipolar disorders are actually part of the same continuum in which bipolar patients experience psychosis and schizophrenic patients experience depression or manic episodes [12].

Nosology of Schizoaffective Disorder/Psychosis

For decades, researches and reviews have been carried out on the nosological entity of schizoaffective psychosis or disorder. Studies have been conducted on its concepts; its definitions and criteria; its incidence; its environmental factors and onset; its course; its outcome or prognosis; its follow up and treatment response; its genetic and family studies; its boundary with and differentiation from related disorders, etc. However, there have been no conclusive findings or common agreement on its distinct entity. This is not surprising when the two major categories of "typical" psychoses *viz.* schizophrenic disorders and affective psychoses are themselves not universal and static in its definitions, criteria and classifications.

Under current diagnostic systems, a patient may be diagnosed with schizoaffective disorder if he or she falls into one of the following categories: (i) A form of schizophrenia with some incidental affective symptoms, (ii) A form of affective disorder with some incidental schizophrenic symptoms, (iii) A co-morbid disorder with both schizophrenia and affective psychosis, (iv) A third unrelated psychosis, (v) A genuine inter-form between schizophrenia and manic-depressive illness, and (vi) A heterogeneous illness with some combination of the above.

Diagnosis and Clinical Difficulties under DSM-IV-TR

Under the DSM-IV-TR criteria, a person is diagnosed with schizoaffective disorder if he or she has prominent psychotic and affective symptoms during the same period of illness, fulfilling the following 4 criteria (A-D):

A. An uninterrupted period of illness during which, at some time, there is either a Major Depressive Episode, a Manic Episode, or a Mixed Episode concurrent with symptoms that meet Criterion A for Schizophrenia.

Note: The Major Depressive Episode must include Criterion A1: depressed mood.

B. During the same period of illness, there have been delusions or hallucinations for at least 2 weeks in the absence of prominent mood symptoms.

C. Symptoms that meet criteria for a mood episode are present for a substantial portion of the total duration of the active and residual periods of the illness.

D. The disturbance is not due to the direct physiological effects of a substance(e.g., a drug of abuse, a medication) or a general medical condition.

Specify type:
Bipolar Type: if the disturbance includes a Manic or a Mixed Episode (or a Manic or a Mixed Episode and Major Depressive Episodes)
Depressive Type: if the disturbance only includes Major Depressive Episodes

There is some difficulty in distinguishing between schizoaffective disorder and a severe psychotic bipolar disorder or a schizophrenic illness with a mood episode. The DSM-IV-TR attempts to address these issues by the inclusion of criterion B and C. To differentiate between a psychotic bipolar disorder and schizoaffective disorder, Criterion B states that there has to be a period of at least 2 weeks whereby the patient is acutely psychotic but not displaying any affective symptoms. If this can be identified in a patient, it rules out the diagnosis of a psychotic bipolar disorder.

Criterion C requires that mood symptoms are present for a substantial portion of the duration of the illness. This is in attempt to exclude a brief mood episode that the patient may present with together with an underlying schizophrenia. For example, a patient with a 10-year history of schizophrenia may present with a new onset of manic symptoms lasting for 3 weeks. At the time of observation, the patient would have fulfilled criterion A (having both psychotic episode and manic episode) and criterion B but would not be diagnosed with schizoaffective disorder because he failed to fulfil criterion C.

In order for a diagnosis of schizoaffective disorder to be made, a detailed temporal history of the onset and offset of mood and psychotic symptoms has to be taken. The clinician must not only ensure that the criteria for either a manic or depressive episode are met, but also delineate the exact length of each episode. This is critical in order to assess whether there are psychotic symptoms in the absence of mood symptoms (criterion B) and to assess the relative distribution of mood symptoms over time (criterion C). There is a difficulty in obtaining this longitudinal information from either the patient or from direct clinical observation because both psychotic and mood symptoms can begin and end rather insidiously. One would have to rely on multiple sources of information such as the patient's own memory, previous medical and mental health records and from friends or relatives of the patient. This can be particularly challenging when trying to obtain a history from a patient who has suffered from a long-standing psychotic illness [13].

Even if such data can be accurately obtained, there is no quantitative measure to allow clinicians to judge if a mood symptom is present for a "substantial proportion" of the duration of illness. The term "substantial portion" is poorly defined is and is open to interpretation by clinicians. It is found that clinicians and researchers often use different thresholds when applying the diagnostic criteria for schizoaffective disorder [14]. This leads to poor clinical reliability and limited clinical utility for the diagnosis [15].

Proposed Changes in DSM-V

Under the proposed DSM-V [16], the criteria for schizoaffective disorder has been modified to:

SCHIZOAFFECTIVE DISORDER, Updated April 30, 2012

A. An uninterrupted period of illness during which, at some time, Criterion A symptoms of Schizophrenia are present, and there is also either a Major Depressive Episode or a Manic Episode.
Note: The Major Depressive Episode must include Criterion A1: depressed mood.

B. During the lifetime duration of the illness, delusions and/or hallucinations are present at least for 2 weeks in the absence of a major mood episode (depressive or manic).

C. A major mood episode is present for the majority ($\geq 50\%$) of the total duration of the time after Criterion A has been met. (Note: periods of successfully treated mood symptoms count towards the cumulative duration of the major mood episode).

D. Disturbance is not due to direct physiological effects of a substance (e.g., a drug of abuse, medication) or a general medical condition.

Some of the changes are highlighted as the following: (1) Under Criterion B, "during the same period of illness" (DSM-IV) has been replaced with "during the lifetime duration of the illness" (DSM-V). Under DSM-IV, the term "period of illness" was an episodic designator, which could refer to a single episode of illness that lasted a minimum of 1-month duration up to the lifetime duration of the illness. This can result in a patient, over time, being diagnosed with multiple conditions such as schizoaffective disorder, schizophreniform disorder, schizophrenia, or psychotic mood episodes. In the study conducted by Schartz et al. [17], he reported that in a follow-up of patients diagnosed with schizoaffective disorder at initial psychiatric assessment, only 36% of these patients had a stable diagnosis after a 24-month period. Thus, the change to using "lifetime duration of the illness" as the timeframe for a diagnostic criterion would increase the reliability of the diagnosis, (2) Under Criterion B, "major mood symptoms" (DSM-IV) has been replaced with "major mood episode" (DSM-V). The change helps to clarify that instead of requiring an absence of any mood symptoms whatsoever, what is required to meet criterion B rather, is the absence of psychopathology that would cross the threshold of a diagnosis of a depressive or manic episode (under DSM-V), (3) Under Criterion C, the term "substantial portion of the total duration of the active and residual portion of the illness" (DSM-IV) has been replaced with "majority (> 50%) of the total duration of the illness" (DSM-V).

As mentioned previously, the use of the term "substantial portion" in the DSM-IV criteria has been fraught with much difficulty, partly due to the use of different thresholds by clinicians and researchers to define "substantial" [18]. There is some common consensus that a "substantial portion" of the illness would mean mood symptoms to being present during 15 to 20 percent of the total illness duration [19]. The change in DSM-V overcomes this variation of thresholds used by different observers by stating a fixed value (> 50%) for which mood symptoms have to be present. However, this is also an increase from the previous definition of the duration of mood symptoms that need to be present in order for criterion C to be met. This means that patients previously diagnosed as having schizoaffective disorder might now, under this new criteria, fall outside of the diagnostic range hence resulting in a decreased prevalence of schizoaffective disorder. Also, the change will probably cause patients with a more temporally unstable course of schizoaffective disorder to be excluded from the new diagnosis until sufficient historical data can be obtained and a detailed timeline of both psychotic and mood symptoms can be clearly outlined. However, whether this change will improve the clinical reliability of the diagnosis remains to be seen.

Conclusion

By tracing the history and evolution of schizoaffective disorder, we can see that there is a real need for this category of illness to define a distinct group of patients who lie somewhere between the psychotic and affective spectrum. However, there is insufficient data to accurately pinpoint the nosology of schizoaffective disorder, with many different theories held by different clinicians with regards to the entity of schizoaffective disorder. Furthermore, the challenges of obtaining an accurate longitudinal history and the variability of thresholds used by clinicians to diagnose schizoaffective disorder all culminate in a real diagnostic challenge for clinicians. The changes made in DSM-V aim to increase the reliability and clinical utility of the diagnosis by giving clinicians firm handles on which to make their diagnosis and by changing the schizoaffective diagnosis from a more episodic approach to a more longitudinal one. However, this increased emphasis on a longitudinal history can in itself be a difficult task for clinicians. Only time will tell if the changes made will ultimately lead to an increase in reliability, clinical utility and validity of the diagnosis of schizoaffective disorder.

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EDUCATION SECTION

MOCK MODEL ANSWER FOR CRITICAL REVIEW PAPER: CONJOINT EXAMINATION FOR MALAYSIAN MASTER OF MEDICINE (PSYCHIATRY) AND MPM JUNE 2012

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Abstract

Objective:* This paper aims to discuss the answers to Review Paper Mock Exam for the Malaysian Master of Medicine (Psychiatry) May 2012 theory examination. The paper studied the psychotropic prescription practice in cancer patients using a health care registration database. *Methods:* One of the papers presented during the journal club presentation was picked-up for evaluation of student's critical appraisal. *Results:* Model answers were provided at the end of the Mock Critical Review Paper. *Conclusion*: This review paper evaluates students' understanding and critical thinking on the topic of Psychotropic Drugs in cancer patients. This paper may serve as a guideline to teach students how to critically appraise topic related to psychiatry. *ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 82-87.

TITLE OF PAPER: "Prescription Patterns for Psychotropic Drugs in Cancer Patients; A Large Population Study in the Netherlands."
(*Psycho-Oncology 2012 Early View)*

Objective

To study the psychotropic prescription practice in cancer patients using a population-based health care registration database. The prescription rates of three common psychotropic drugs among cancer patients, namely benzodiazepines, antidepressants and antipsychotic drugs were examined. It also investigate each drug class separately prescription trends after the cancer diagnosis is set and in the terminal phase of life.

Methods

Data

The data used in this study were extracted from database of a main health insurance companies in the Netherlands. The database contains demographic and health care consumption data of the clients as well as extensive records of the pharmaceutical prescriptions. In the Netherlands, all inhabitants are by law obliged to have medical insurance coverage. The compulsory health-care insures covers all care for cancer patients and all psychotropic medication.

Cancer and control cases

Study subjects were identified in the database between January 1st, 2006 and December 31st, 2008. Selection was based on the presence of a diagnostic-treatment combination-code (In Dutch: DBC-codes) for cancer (including nonmelanoma skin cancer). In the Dutch medical system all cancer patients consult an oncologist. All diagnostic and treatment activities of these specialists will be paid by the insurance company. These activities are registered. Therefore in the period 1st Jan 2006 to 31st Dec 2008, all new cases of cancer were identified as cases in this study. Only cancer patients with complete follow up were included in the study (only allowed exit was death). In addition a random sample of control patients without cancer was taken in the same time period, matched by gender and age. Cancer cases were also determined by the date of diagnosis and - if applicable-, by date of death.

Variables

Drug prescriptions were recorded according to the Anatomical Therapeutic Chemical (ATC) classification system codes. The following ATC codes were included NO5B, N05C (benzodiazepine), N06A (antidepressant) and N05A (antipsychotic).

Psychotropic drug use was defined as at least one prescription of any of the psychotropic drugs during the study period. New user of each psychotropic drugs was defined as no use or use less than 30 defined daily dose (DDD)(assumed average dose per day) in the previous year. The numbers of new user among cancer patients in the 3 months after the cancer diagnosis and in the 3 months before death were calculated separately. Those who identified as new users will not be counted as new users again in the terminal stage.

The pre-existing psychiatric and medical conditions were identified using the prescription patterns among the index and control patients in the five years preceding diagnosis as proxy-indicator. Thus, psychiatric comorbidity was defined as the use of at least 90 DDD of psychotropic drugs in any of the five years before the diagnosis of cancer. For example patients diagnosed for cancer in 2006 are screened for psychotropics use from 2001-2005, while patients diagnosed in 2008 are screened for the period from 2003-2007. Similarly, the presence of comorbid chronic medical conditions was identified using the proxy-indicator for any prescribed drugs starting with R03A, R03B, R03D for pulmonary disease, A10A, A10B for diabetes mellitus and C01A, C01B, C01D, C03, C07, C08, C09 for cardio-vascular disease. The use of more than 180 DDD of these drugs annually in 2005 of subsequent years was taken as a cut-off point.

Covariates

The following information about the cancer and control patients was gathered: age, gender, non-western immigrant and socioeconomic status. The age of the cancer patients was determined at the date of the cancer diagnosis. The age of the control group was taken at January 1st, 2006. Subpopulations according to cultural background were analysed separately. The first generation of non-western immigrants which consists of Moroccan, Turkish and Surinamese patients is registered in the AHD (Agis Health Database)= Insurace company database. The subsequent generations were identified by matching the surname and by visual control of the surnames. The socioeconomic status Socioeconomic status (SES) of the subjects was based on the postal code of the neighborhood. SES was dichotomised into subjects from deprived and non-deprived area.

Analyses

The prevalence of psychotropic use for the cancer and control group was calculated for the study period (January 1st, 2006 to December 31st, 2008). The number of psychotropic drugs used in the cancer and the control group was compared. A logistic regression model was used to analyze the determinants of psychotropic drugs use in cancer patients, reported in adjusted odds ratio‘s. The mean numbers of new users and average monthly use for each psychotropic drug for the users for the 3 months after the cancer diagnosis and 3 months before death were compared. All the tests were two sided at the alpha level of 0.05.

Results

Table 1. Baseline Characteristic of the Cancer Patients and Control Group.

	Cancer Patients (N= 113,887)	**Control Group (121,395)**
Age (SD)	60.45 (18.27)	58.90 (19.65)
Female (%)	71,293 (62.6)	75,265 (62.0)
Non Western Immigrant (%)	10,819 (9.5)	11,290 (9.3)
Deprived Area (%)	17,425 (15.3)	16,146 (13.3)

After removing cases with incomplete dataset and repeated cases, a total of 113,887 cancer patients and 121,395 control subjects were included in this study (Table 1).

As compared to patients without cancer, there was a significantly higher percentage of cancer patients was prescribed at least one psychotropic drug during the study period.

Co-prescription of one or two psychotropic drugs to patients with cancer was more frequent than in the control group (OR= 1.658, 95% CI=1.624-1.693). There were significantly more patients in the control groups with co-prescription of all three types of psychotropic drugs. (OR= 0.552, 95% CI= 0.542-0.562).

The chance of cancer patients being prescibed a psychotropic drug for the first time was higher in the terminal disease stage (3 months before death) as compared to the first 3 months after the cancer diagnosis, especially for antipsychotic. However, the average dose used was lower in the terminal stage for antidepressant and antipsychotic drugs. There was no difference in the average dose used for benzodiazepine in the two disease stages.

Table 2. Use of psychotropic drugs in cancer and control subjects, mean difference (95% CI).

	Cases N=113,887	**Control N=121, 395**	**Crude OR (95% CI)**	**Adjusted OR (95% CI)**
Any Drug	37450 (32.9)	25842 (21.3)	1.81 (1.78-1.85)	1.67 (1.64-1.71)
Benzodiazepine (%)	32,458 (28.5)	21,487 (17.7)	1.85 (1.81-1.88)	1.70 (1.67-1.74)
Antidepressant (%)	12,414 (10.9)	9,347 (7.7)	1.47 (1.43-1.51)	1.38 (1.34-1.42)
Antipsychotic (%)	5,353 (4.7)	3,278 (2.7)	1.77 (1.69-1.85)	1.70 (1.62-1.77)

Adjusted OR = Odds ratio adjusted for gender, immigrant status, neighborhood socio-economic status, age and premorbid chronic medical conditions (diabetic, cardiovascular and pulmonary conditions).
The presence of premorbid chronic medical condition is defined as the use of more than 180 DDD of the proxy-indicator medication in subsequent years from 2005 backwards to 2005.
The use of psychotropic drugs is defined as at least once prescription during the study period (2006-2008).

Questions ALL Questions (20 marks)

1. What is the study design? (2 marks)

A retrospective case- control study.

2. Give two advantages of this study design. (2 marks)

Save cost, save time, fewer subjects required, suitable for rare disease, can evaluate multiple exposures.

3. What is a good control? (2 marks)

A subject that have equal chance to be identified as a case, if develop the outcome of interest.

4. Please describe TWO (2) types of matching. (4 marks)

Group matching – based on proportions. Select a control group with certain characteristic identical to cases in the same proportion as it appeared in the cases.

Individual matching – for every individual case, a control is selected who is identical to the case on certain charateristics.

5. Please state the null hypothesis of the study (2 marks)

Comparison between cancer and control, there are equal rate of psychotropic drugs (benzodiazepine, antidepressant and antipsychotic) prescription.

6. Please interpret Table 2. (5 marks)

There was a significantly higher percentage of cancer patients was prescribed at least one psychotropic drug as compared to control.

Benzodiazepine was the most commonly prescribed psychotropic drug to cancer patients (28.5%).
The adjusted odds of benzodiazepine prescribed in cancer patients were 1.70 as compared to control.
Cancer patients were prescribed antidepressant drugs, with the adjusted odds of 1.47 compared to the control group.

Although the percentage of cancer patients with antipsychotic drugs prescriptions was relatively low (4.7%), it was significantly higher than in the control group. Adjusted odds is 1.70.

7. Please state THREE (3) limitations of this study. (3 marks)

The study period was restricted to the first three years after the diagnosis of cancer. Patients who received psychotropic prescription after the study period are not identified. This may underestimate the prescription rates in these patients.

The study on prescription in the terminal cancer phase was confined to the patients who deceased during the study period. These patients were mostly likely to be in advanced and more aggressive disease stages, resulting in a possible overestimation of prescription to all cancer patients.

Social and family support which may help the patients to cope with their psychological problem was not measured in this study.

Different types of psychotropic have their own safety and efficacy profile. The types of antidepressants, benzodiazepine and antipsychotics prescribed were not available in this study.

Clinnical data, such as cancer stage and physical disability were not documented in this study. These factors might confound the result in the analysis of psychotropic drugs prescription rates.

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LETTER TO THE EDITOR

THE CHALLENGES OF INDEXATION OF ASEAN JOURNAL OF PSYCHIATRY: NOW AND FUTURE

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Ever since its inception twenty one years ago, the ASEAN Journal of Psychiatry has achieved growing success. It has been just over two years since this journal discussed the need for indexation (1). In a more recent editorial, the editor reported indexation in six major databases (2), a commendable feat in such a short duration. This achievement acknowledges the work that local researchers in psychiatry within the ASEAN region have contributed for the betterment of this journal and the region as a whole.

In another article (3), I wrote a reply about the challenges faced by Malaysian Journal of Psychiatry amongst Malaysian Psychiatrists in publishing in support of local research. I feel that those comments are applicable here. In the article I commented that the “fixation” on university ranking and the shunning of local platforms for publication to boost local universities was detrimental to the development of local capabilities and capacity. I compared this with New Zealand, a member of the Organization for Economic Cooperation and Development (OECD), a developed nation, where local research work published in a local platform highlighted local issues for debate and discussion thus driving local policies. The ASEAN Journal of Psychiatry could do this for our ASEAN region.

In our quest to support more established journals, there is also an obligation as ASEAN Psychiatrists to report research and clinical work which may benefit the region. The journal being free and easily accessible online may be one of the few international journals available to some within ASEAN or those from lower to lower-middle-income countries which may not have funds to subscribe to expensive databases. Clinical experiences that we encounter and the findings of research in our region may not be applicable to other parts of the world but are important for Psychiatrists practicing in the region. Therefore, there needs to be a balance in publishing our work across local, regional and international journals.

Indexation is a multifaceted matter as the author states (2). Often within the region we are faced with similar difficulties, namely funding, language, support and scientific content (3). Having a journal that is aware of our regional needs is vital to successful research work being reported and disseminated. With a growing number of Young Psychiatrists within the region (4,5), one avenue that the journal could consider is a Young Psychiatrist section which may increase publication output and more successful indexation.

ASEAN has been reported as an “emerging economic powerhouse” (6), I feel it is time that it emerges as a “psychiatric powerhouse” in terms of research and clinical care through quality and continuous publications in this journal.

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Annual Review Clinic: A Chronic Disease Management Model Of Care For Schizophrenia And Delusional Disorder In Singapore
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COUNTRY REPORT

ANNUAL REVIEW CLINIC: A CHRONIC DISEASE MANAGEMENT MODEL OF CARE FOR SCHIZOPHRENIA AND DELUSIONAL DISORDER IN SINGAPORE

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Abstract

Objective: **Schizophrenia and delusional disorders are recognised as chronic mental conditions. During this time, the clinical course may fluctuate and co-morbidities may set in. Individuals with these conditions often lack insight and have high rates of default. We report the need to develop a chronic disease model of care to cater to this unique group of individuals in Singapore.** ***Methods:*** **The Ministry of Health in Singapore recently funded the Institute of Mental Health to develop a model of psychiatric care for individuals with schizophrenia and delusional disorders. Crucial to the success was the development of an information technology (IT) enabled platform to track and monitor the clinical status of this group of individuals. On a yearly interval, patients undergo a comprehensive review and needs analysis of their psychiatric and medical needs in the Annual Review Clinic (ARC). Clinical ratings and metabolic parameters of every patient were obtained, and every patient was assigned a case-tracker or case manager to monitor their engagement with the relevant services.** ***Results:*** **In the first year of operations, ARC reviewed 1525 patients with schizophrenia and delusional disorders. The median GAS score for the cohort seen was 75 (slight impairment in functioning). The median CGI-S score was 2 (borderline mentally ill). 48.5% of reviewed patients were classified as overweight and above with BMI ≥ 25. After the needs analysis, 100 patients received referrals to primary healthcare services for medical conditions that were recently diagnosed or for which they have defaulted medical treatment.** ***Conclusions:*** **In the first year of this program, a snapshot of the clinical status of the outpatient population was obtained and we also identified a high prevalence of obesity among the patients. Through this program, we can continuously monitor the health status of every patient and monitor for developing trends so as to plan the necessary interventions.** ***ASEAN Journal of Psychiatry, Vol. 14 (1): January – June 2013: 90-94.***

Introduction

Schizophrenia is a chronic mental disorder that afflicts approximately 0.7% of the population [1]. The peak age of onset of schizophrenia in Singapore lies within the range of 16 to 25, and almost all patients went on to require lifelong antipsychotic medications with up to 42% of patients did not adhere to their medications [2,3]. There are numerous challenges in managing patients with schizophrenia as the course of the schizophrenic illness is plagued with multiple relapses, incomplete remissions, impaired cognitive, psychosocial and vocational functioning. Increasingly, it has been found that patients with schizophrenia are at increased risk of metabolic disorders and premature cardiovascular mortality as a result of disease and medication related factors [4]. The Institute of Mental Health (IMH) is the largest provider of mental healthcare for this group of patients and frequently encounters the above challenges. One of the main gaps identified was a lack of a centralised system to monitor the physical and mental health of each patient and the health status of the collective group of patients.

In 2010, the IMH launched the integrated patient assessment and continuous engagement (iPACE) program, which sought to develop a structured and seamless continuum model of care for patients with schizophrenia and delusional disorder. The iPACE aims to enhance the current care delivery framework for patients with schizophrenia and delusional disorders through an integrated mental health care system with the following objectives: (i) to ensure appropriate level of care through a comprehensive needs and risk assessment, (ii) to ensure compliance of treatment through case management and case tracking, (iii) to ensure integration between the IMH and community partners through right-siting, (v) to develop a robust information technology (IT) system that facilitates achievement of the above objectives, enable information sharing among members of the multidisciplinary team, and serve as a mental health registry in the longer term.

Methods

Annual Review Clinic

The Annual Review Clinic (ARC) is the main outpatient service in the iPACE program charged with initiating and accomplishing most of the objectives in the outpatient setting. This multidisciplinary clinic was officially started in April 2010 and comprised of doctors, advance practice nurses (APN), case managers, pharmacists and administrators. On top of the specific objectives listed under the iPACE program, the ARC aims to comprehensively review all patients with schizophrenia and delusional disorder annually, assess patients for co-morbidities, adherence to pharmacotherapy and side effects to medications. A snapshot of the overall clinical status of the patient is also captured via clinical scales such as the Global Assessment Scale (GAS) and Clinical Global Impression – Severity (CGI-S) [5,6]. One of the ARC objectives is to link patients up with available hospital and community resources such as vocational training and employment opportunities, financial assistance, continued medical care for acute and chronic medical ailments. Patients are also offered screening for fasting lipids and glucose to evaluate overall metabolic risks and identify those with metabolic disorders requiring lifestyle or medical intervention. After the review, patients are categorised into 2 levels of care. Those requiring higher level of care, either because of clinical or risk related reasons, will be seen by a psychiatrist and case manager for further management. The other group who require normal level of care will have their clinic attendance monitored by a case-tracker. Patients who fail to turn up for their appointments will be flagged to the case manager or case-tracker and appropriate actions taken to ensure they receive follow up care. Subsequently, with the clinical repository, we would be able to identify the individual patient whose health is deteriorating and observe for trends on which to focus further interventive efforts.

Results

Outcomes of the ARC: The first year

In its first year of operations from April 2010 to March 2011, audited data from the ARC saw an attendance of 1525 patients of which 99 were identified as requiring higher level intervention (Table 1). A total of 100 patients were referred to primary healthcare services for medical conditions that were recently diagnosed or for which they have defaulted medical treatment.

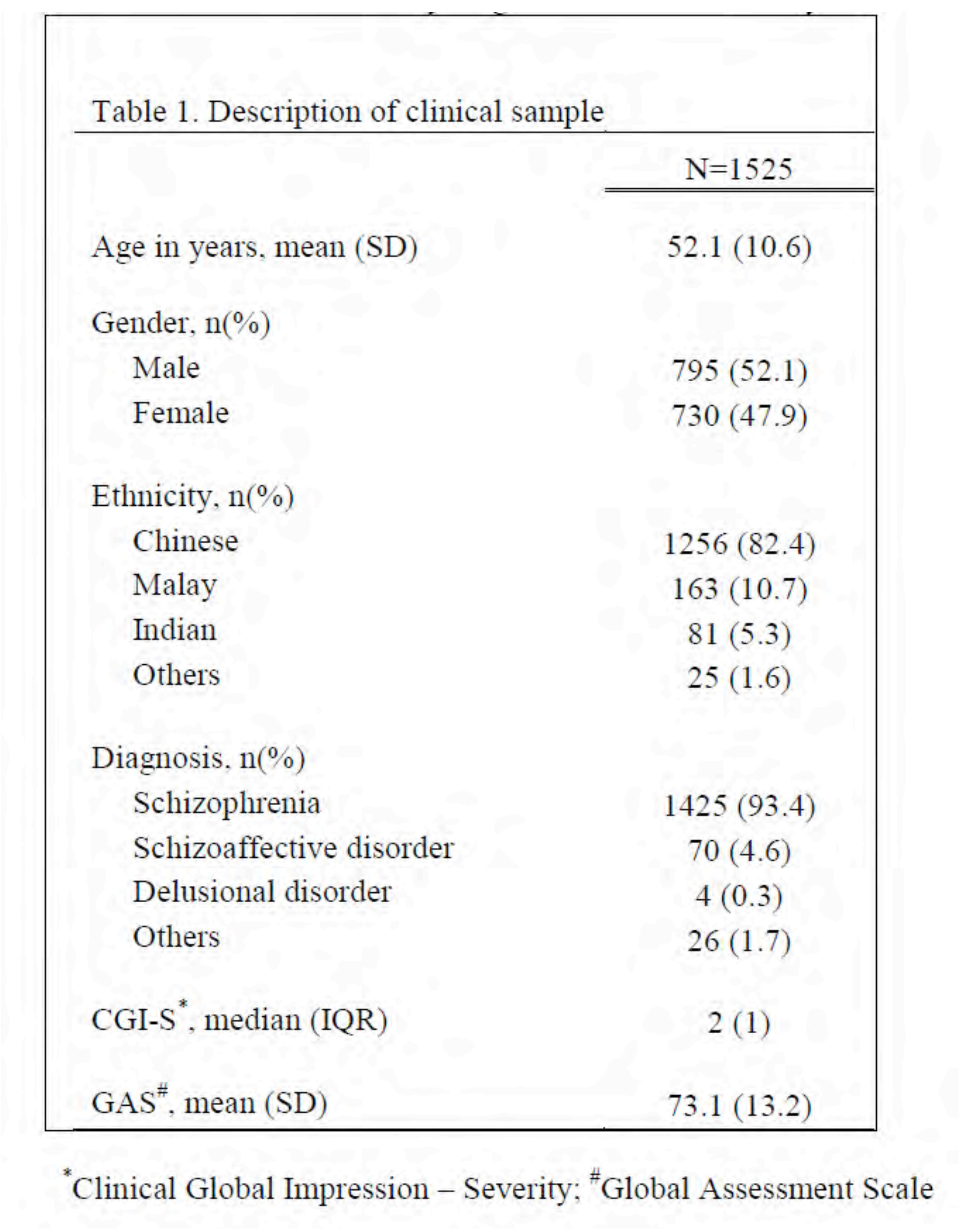

Table 1. Description of clinical sample

	N=1525
Age in years, mean (SD)	52.1 (10.6)
Gender, n(%)	
Male	795 (52.1)
Female	730 (47.9)
Ethnicity, n(%)	
Chinese	1256 (82.4)
Malay	163 (10.7)
Indian	81 (5.3)
Others	25 (1.6)
Diagnosis, n(%)	
Schizophrenia	1425 (93.4)
Schizoaffective disorder	70 (4.6)
Delusional disorder	4 (0.3)
Others	26 (1.7)
CGI-S*, median (IQR)	2 (1)
GAS#, mean (SD)	73.1 (13.2)

*Clinical Global Impression – Severity; #Global Assessment Scale

The median GAS score for the cohort seen was 75 (slight impairment in functioning). The median CGI-S score was 2 (borderline mentally ill). 23.8% of patients reported having some form of employment, including part-time employment. 31.3% of reviewed patients were classified as overweight (25 ≤ BMI < 30) and 17.2% as obese (BMI ≥ 30). The prevalence of obesity among the patients was higher than the 10.8% reported in the Singapore National Health Survey in 2010. When the patient sample was stratified by gender, 13.9% of males and 22.2% of females had a BMI $\geq$ 30. While the trend towards patients being more obese was similar to that of Caucasian populations, the overall rates of obesity in the Singaporean sample were lower [7,8,9].

The team piloted a checklist to capture comprehensive information on reviewed patients, and worked to create an ARC module in the iPACE IT system. We took this opportunity to examine the validity of the electronic database for diagnoses of schizophrenia and delusional disorder and report an accuracy of 98.3% with 26 (1.7%) of the attendees were wrongly classified. This compares favourably to other validation studies reported for electronic diagnostic databases.

Discussion

Role of Information Technology

With the large patient population and voluminous amount of data, it becomes necessary to harness IT to achieve the ARC objectives for improved patient outcomes. Prior to this, it was a manual process to identify eligible patients for the ARC, document their clinical parameters, and track their follow up appointments. Clinicians have to rely on a manual checklist of items to evaluate eligible patients, and administrative staff downstream has to enter the data into a database. Such laborious processes are prone to errors and subsequent lapses in care.

The iPACE system enables configuration of criteria to identify suitable patient for ARC based on the electronic database diagnoses. In addition, with enhancement done to the IT system, patients' weight and height, and basic parameter information taken from the machines, will be interfaced and captured in the iPACE system directly for the clinical team to view. During consultation, the clinician would be prompted by the iPACE system that a particular patient is due for his annual review and an online ARC module would open for the clinician to complete. The iPACE system will also be integrated with the other available clinical IT applications that stores laboratory results, prescription and hospitalisation information from within IMH and outside IMH. Based on pre-determined criteria, the iPACE system will route the patients to the case trackers or case managers accordingly, thus removing the need for manual data entry and manual routing process flow. Data can then be extracted from the iPACE system for evaluative or research purposes.

Conclusion

Schizophrenia and delusional disorders are complex chronic mental disorders that require long term multidisciplinary treatments, monitoring of health states and side effects of treatments. In its first year, the ARC has obtained a snapshot of the mental and physical health status of a large group of outpatients receiving treatment at the IMH. Of significance, we have shown a high prevalence of obesity in patients with schizophrenia and delusional disorders. This is important as obesity is associated with various cardio-metabolic morbidity and mortality, and is potentially modifiable [4]. Currently, the ARC is in its second year of operations where patients will be reviewed a second time and longitudinal trends can then be observed. In addition, we propose the iPACE IT system as a model on how IT can be harnessed and integrated into clinical care for the betterment of patient outcomes.

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A Good Psychiatrist: In Memory Of Associate Professor Dr Ruzanna Zam Zam - The Associate Editor, ASEAN Journal Of Psychiatry
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TRIBUTE

A *GOOD PSYCHIATRIST*: IN MEMORY OF ASSOCIATE PROFESSOR DR RUZANNA ZAM ZAM - THE ASSOCIATE EDITOR, ASEAN JOURNAL OF PSYCHIATRY

18th January 2012 was a date strongly remembered by all in the field of psychiatry in Malaysia, when we grieved upon the loss of Associate Professor Dr Ruzanna Zam Zam who passed away. It seemed just like yesterday when she was with us, cheerfully carrying out her role as one of the respected lecturers in Department of Psychiatry, Universiti Kebangsaan Malaysia Medical Centre (UKMMC).

She was born on the 26th of November 1968 and graduated as a psychiatrist in the year 2000. Her contribution to psychiatry in Malaysia cannot be denied. She shouldered her responsibility as UKMMC Head of Community Psychiatry Unit, UKMMC Program Coordinator for the psychiatry post graduate programme, and Assistant Head of Personal & Professional Development Unit, UKMMC. Not to forget the multiple national and international recognitions she had received such as Advisory Board member of Centre for International Mental Health, University of Melbourne, Member of National Counsel of Mental Health Promotion, Ministry of Health Malaysia, and her long involvement as Secretary of Malaysian Psychiatric Association. Her numerous contributions in publication and research all through her years in psychiatry were indisputable as well. She was known not only in the field of psychiatry, but also by the rest of the medical fields.

Till date, there has never been a clear guideline as to what constitutes a *good psychiatrist*. Even our opinions differ as to what should or should not be counted as 'good'. It could be that the effort to make a clear distinction between good and not good is not an easy task after all. Just as we have been enthusiastic enough to fit our psychiatric diagnoses in the well established Diagnostic and Statistical Manual, still in the end, because of the complexities of human beings, most symptoms seem to be not clear cut.

Psychiatrists are thought to have the highest level of EQ as compared to the rest of the medical fields. Some papers have come up with students' opinions regarding what constitutes a *good psychiatrist*, and some of the reasons include clinical competency, good communicator and listener, and also the ability to bring empathy, encouragement and hope to patients and their carers. As I reflect the days of my own mentorship under the supervision of the late Dr Ruzanna, I realized that true enough, knowledge and wisdom can come in many forms including learned from another person. She modelled to her students how to do the healing and in the process feeling healed as well. She left a message that no total cure can be given without adequate respect and empathy for the patients. She also demonstrated that the basis of treatment can be done with sincerity in the heart of the therapist. Even as her illness progressed further, I realized that the passion and devotion she had did not wither along, and that taught me about bravery and determination.

There are no easy answers as to why I categorize her as a *good psychiatrist*. Perhaps, it is because of her compassion to patients and others. Maybe, it is due to the strength that was seen in her. It could also be for her unrelenting ways to motivate her students for excellence. In short, I believe those who knew her shared the same kind of feeling; the feeling that we have lost a *good psychiatrist*. May she be blessed eternally.. Alfatihah.

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