Psychiatric Morbidity among Public Primary School
Teachers at Mogotio Division, in Koibatek District.

Dissertation in Part fulfillment of the requirement for the award of the degree of Master of Science in Clinical Psychology of the University of Nairobi

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July 2008

## DECLARATION

I Eunice Jemalel Nyavanga do declare that this dissertation is my own original work. It has not been presented to any other University for the purpose of obtaining a degree or diploma.

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## APPROVAL OF SUPERVISORS:

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## DEDICATION

To my late father, Kibibwob, my mother Kong'ato, and my late brother Kiprop, for their love and encouragement to further my education.

To my only daughter Ivy, for her love, her, patience and understanding during my long hours of absence from the beginning of this programme to the time of compiling the report. Her joyful spirits and inspiration kept me going even in the most difficult of days.

I would like to dedicate this research to all public primary school teachers in Kenya, I always think of you all.

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Finally, I would particularly like to thank the teachers who participated in this research. Without them this study would not have been possible. I thank them for their honesty in completing questionnaires such that the valuable information gained can be utilized to make changes in public primary teacher service.

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## ABSTRACT

## Introduction:

Every occupation has its own stressors which cause stress leading to psychiatric morbidity. Teachers have been known to be under a lot of stress related to work characteristics, socio-demographic characteristics, professional variables and personality related variables which may cause psychiatric morbidity.

## Aims:

This study was designed to determine the prevalence of the common Psychiatric morbidity and identify factors associated with these disorders among primary school-teachers.

## Methods:

All teachers from Mogotio Division, in Koibatek District were studied with a self administered questionnaire to determine psychiatric morbidity. The questionnaire comprised items used to measure psychiatric morbidity and cover work-related variables, social-demographic characteristics of the teachers and personalityrelated variables.

## Results:

It was found that the life time prevalence of psychiatric morbidity among primary school teacher is $45.5 \%$, while current prevalence is $41.4 \%$. The psychiatric disorders were found to be comorbid with each other and Personality Disorders.

## Discussion

Primary school teachers were shown to suffer psychiatric morbidity. Religious affiliation, decision making, support from supervisors, worry about transfer and the number children/dependants and especially being female were factors associated with psychiatric morbidity among primary school teachers.

## Conclusion

This study found primary teachers to have high prevalence of psychiatric morbidity which is related in part to socio-demographic factors and work related characteristics. The study also found high prevalence of personality disorders which are related to psychiatric disorders (Axis I diagnosis ).

## Recommendation

The Ministry of Education, Science and Technology should employ psychologists in the Districts, or Zones who can easily identify, treat, and refer such teachers for appropriate mental health treatment.

## ABBREVIATIONS

1. AT IV Approved Teacher IV is a teacher, who trained as P1 or P2 but got promoted on merit, or long service or had an A level certificate.
2. Commission refers here to the Teachers Service Commission
3. DSM IV Diagnostic Statistical Manual Version IV
4. ENT Ear, Nose and Throat
5. ICD-10 International Classification of Diseases; the tenth Version
6. IDPs Internally Displaced persons
7. IMIS International Management Information Systems
8. KNH Kenyatta National Hospital
9. P1 Primary One, the highest grade attained by teachers who train as primary school teachers in Primary Teachers College. To attain this grade one must have attained a KCSE C - grade and above. Some long serving P2 may also get promoted to this Grade on Merit.
10. P2 Primary Two, Second highest grade attained by teachers who have not attained KCSE C- before training in a Teachers Training College.
11.P3 Primary three, third highest grade attained by teachers who did not attain a KCSE certificate but trained in a Teachers Training College.
11. TSC Teachers Service Commission
13.UK United Kingdom
12. USA United States of America
15.WHO World Health Organization

## CHAPTER I

### 1.0 Introduction

The DSM IV -R has conceptualized mental disorders as clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and that is associated with present distress, e.g. painful syndrome or disability or with increased risk of suffering death, pain, disability or an important loss of freedom. This syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example death of a loved one. Its manifestation should be behavioural, psychological or biological dysfunction in the individuals.

The burden of mental illness on health and productivity throughout the World has long been profoundly underestimated, Murray \& Lopez, (1996). Data developed by the Massive Global Burden of Disease study, (1990), conducted by the World Health Organization, (WHO), the World Bank and Harvard University, reveal that mental illness including suicide, ranks second at $15 \%$ after cardiovascular conditions, at $18 \%$.

Every job has its own stress which vary in terms of the degree of experience derived from factors such as the task requirements of the job, expectations and demands, relationship with others, career development and organizational structure, (Lloyd, 2001). Occupational stress that might exist in the environment together with individuals' personal characteristics can result in symptoms of physical and psychological illness, (Sutherland and Cooper, 1990).

Studies suggest that factors that may worsen mental health status include occupation and demographic factors, (Stansfeld et al 1998 \& 1999, Ferrie et al 2002 and Cockburn 1996).

Although a person's socio-professional category is acknowledged to be a decisive factor in his or her mental health, Kovess-Masfety et al, (2001), Rogler, (1996) and Susser (1985), very few studies have dealt with the differences in the prevalence of mental health problems according to occupation, Eaton at el, (1990), Colligan et al, (1977) and Grosch and Murphy (1998). Studies which have been done on occupational groups have shown high level of psychiatric disorders connected to the specific aspects of the teachers' profession.

Faber, (1991), and Sharom (2003), found out that teachers in the United States are among those employees who are at risk of job burnout, particularly those teaching high schools and Byrne,(1999) added that teachers experience more burnout than other professionals who serve the public for example nurses and mental health professionals.

The Teachers Service Commission, Kenya, employs the most workers now totaling to 239,000 in public schools. Recent study on the teaching sector has highlighted the mental torment of teachers, (Borges and Faria, 1993). These studies have addressed common mental disorders of anxiety, depression and somatization.

Health examinations for entry into teaching profession are carried out at teacher training colleges with no medical examination, apart from chest-X-ray film; yet some teachers who break down give a history of psychiatric episodes during student days. Some teachers more over are basically unsuitable for the jobs, with possibly inadequate or vulnerable personalities, who have drifted into teaching without proper motivation; and may also be at risk of break down (MacAnespie 1978). Kokkinos, (2007) found out that teachers' individual characteristics as well as job stressors lead to psychiatric morbidity.

Occupational stress has a very severe impact on both individuals' physical and mental health, (Karasek \& Theorell, 1990) it has also been found to have an impact on the organization, the Heath and Safety Executive, (2001) and Siying Wa, (2006).

Psychiatric morbidity in the general population and the work place can be measured with standard screening instruments; one such instrument is the MINI PLUS 5.0.0 developed by Dr, Sheehan D.V. and Dr, Lecrubier (2005) for use as a self administered screening tool in epidemiological studies.

This study is designed to identify psychiatric morbidity and analyze its relationship and variables related with workplace, professional variables, sociodemographic characteristics and personality-related variables of the primary schoolteachers in Mogotio Division, Koibatek District.

### 1.1 Background

Mental health professionals are becoming increasingly aware of the necessity to support their activities using practice-based scientific research. The reasoning behind this is that results of such research will benefit the quality of treatments, as well as subsequent knowledge about psychiatric illnesses and the effectiveness and efficiency of interventions or programs, (Luijsterburg, 2006).

Surveys in many countries have found mental disorders to have a high prevalence and are a major cause of disability in the population, Pithers, (1998), Kovess et al (1992) and Jackson (1983). The Australian National Survey of Mental Health Wellbeing found that close to one in five adults meet the criteria for a mental disorder at some time during the 12 months before the survey. The most common mental disorders were anxiety, (10\%), depression (6\%) and substance use disorders (8\%). These disorders are so prevalent that everyone in
the community can expect to have close contact with someone experiencing a mental disorder.

Occupational stress in the human service professions, particularly teachers, has been focused in several studies, in the last two decades and has been found that teachers are under a lot of stress.

Teaching is considered a highly stressful occupation that has also been related to burnout. Burnout is a negative affective response occurring as a result of chronic work stress. While the early theories of burnout focused exclusively on work related stressors, recent research adopts a more integrative approach where both environmental and individual factors are studied. Never the less such studies on burnout among teachers are scarce, Kokkinos, (2007).

Borg (1990) found out that teaching is a stressful job among $1 / 3^{\text {rd }}$ of British teachers due to overload, inadequate collegial relationships, large class sizes, limited promotion opportunities, little involvement in decision making, lack of community support, role ambiguity and poor image of the profession. These problems have also been found in other countries, Braissie et al, (1998), Bryre, (1999), and Freidman, (1995). These factors easily lead to ill health. This then means that working as an educator may result in illness and is supported by much evidence, Kahn et al, (1992), Marmot et al (1997), Van Dick \& Wagner, (2001).

### 1.2 Justification

Literature found on psychiatric morbidity for teachers were all found in the Western and Eastern countries and none was found in Africa. Heavy psychological strain increases health costs for organizations and leads to decreasing organizational productivity with frequent turnover, absenteeism and accidents, Quick et al, (1997).

Some teachers have continued to teach perhaps for years while suffering from psychiatric illnesses, thus exposing pupils to the prolonged influence of one or more serious psychiatric disturbances, Mac Anespei, (1978).

Wu Wenyan, (2006), has called for more attention to be paid to the mental and psychological health in primary and middle schools as surveys have shown that many are unhappy in their work.

A survey conducted among more than 500 primary and middle school teachers in Beijing, showed that nearly $60 \%$ of teachers have their work bringing about more headaches than happiness. About 70\% of the teachers sometimes could not help getting angry with students and were often in a bad mood.

While the psychological problems of students have attracted considerable attention, teachers' mental health has been neglected, Wu Wenyan, (2006). According to him, just like students, teachers also face fierce competition in schools and feel a lot of pressures from the working environment.

In Kenya some teachers with serious mental problems have not received real treatment and continue to teach in Kenyan schools despite the problem. Such studies have not been done in Kenya and even Africa, so this study will act as a baseline for teachers' mental wellbeing. This study will document the psychiatric morbidity among teachers and recommend way forward as far as the mental health needs of teachers is concerned.

### 1.3 Statement of the Problem

In the last two decades, there has been an increasing amount of research on the impact of work-related stress on employees' health, Ganster \& Schanbroek, (2006). They concluded that although there is no convincing evidence that job stressors cause health effects, they agreed that work plays a significant role in mental and physical health.

Educator stress and burnout has been found as a widespread problem and a global concern, Borg, (1990), Boyle et al, (1995), Jackson et al, (2006) and Kyriamon, (2001). Educator stress, may lead to psychiatric morbidity, is harmful to the teachers, and can affect their teaching, personal lives and most importantly, their students, Adams, (1999). Several researches have shown increasing evidence that teachers in the course of their careers, experience a great deal of stress that may have obvious implications for their physical and mental health status, Borg, (1990), Bayrne, (1991), Gugliemi and Tahrow (1998).

In Kenya, several teachers are interdicted every year for varied reasons of breach of contract with the employer (TSC) and after facing the Commissions' Disciplinary Committee, they are punished either by dismissal, suspension or demotion. Studies on these teachers' mental health has not been done in Kenya to ascertain their mental health status, assist them in getting help rather than punishment before letting them back to class.

The TSC records have shown that one of the districts with high rate of interdictions is Koibatek District. A conducted research could show whether these teachers are mentally ill. But this research only acts as a baseline to ascertain whether mental illness is present amongst the interdicted and punished teachers.

### 1.4 Research Questions

1. What is the prevalence of psychiatric morbidity among public primary school teachers in, Mogotio Division, Koibatek District?
2. What work characteristics are related to the psychiatric morbidity among these teachers?
3. What socio-demographic factors are associated with the psychiatric morbidity among the sampled of teachers?
4. Is the psychiatric morbidity prevalence among teachers who are interdicted and are later punished by the commission higher than among other teachers?
5. Do the teachers who are interdicted and later punished by the commission have any specific psychiatric morbidity?

### 1.5 Purpose of the Study:

It is hoped that this study will have certain implications pertaining to the mental health of teachers and their working conditions.

1. Results of study should be useful to the Ministry of Education, Science and Technology and the TSC in making decisions for teachers especially on transfers, discipline, promotion and even deployment.
2. Primary and secondary school educational institutions should be guided to attend to the work-related well-being of their teaching staff.
3. Findings have implications for the government especially TSC, a large government employer of teachers in Kenya.
4. To be able to advice the government, (TSC), on how to deal with mentally ill teachers for example, treatment instead of punishment through dismissal, interdiction or suspension.

### 1.6 Objectives:

### 1.6.1 General Objective

To determine the prevalence of common mental disorders and determine factors associated with these disorders.

### 1.6.2 Specific Objectives

1. To determine the prevalence of common mental disorders among public primary school teachers in Mogotio Division, Koibatek District.
2. To determine factors possibly associated with precipitation and maintenance of the illness.
3. To compare the psychiatric morbidity in the male and female teacher populations.
4. To correlate personality factors with psychiatric morbidity among public primary teachers.
5. To determine the association between teachers who have been interdicted and later punished by the commission and psychiatric morbidity.
6. To determine whether any specific psychiatric morbidity is present among teachers who have been interdicted and later punished by the commission.

### 1.7 Hypothesis

### 1.7.1 Alternative hypothesis

The psychiatric morbidity among primary school teachers in Mogotio Division, Koibatek District, is related to work characteristics.

### 1.7.2 Null Hypothesis

Psychiatric morbidity among primary school teachers in, Mogotio Division, Koibatek District is not related to work characteristics.

## CHAPTER II

### 2.0 Literature Review

In 1999 the WHO, reported that workers continued to suffer high levels of work related injuries, mental problems and death. This increase in mental health problems reported by workers in industrialized countries is a result of experiencing psychological stress and excessive job demands in the workplace, [WHO, fact sheet, 84, (1999)].

According to Kleinman (1995), the overall rates of psychiatric morbidity are not constant, cultural factors determine different phenotypic rates of morbidity. Jurado et al (1998) has forwarded the explanation that contextual factors may increase job demands or decrease job satisfaction and may decrease the teachers' psychological well-being.

Social support refers to help from other people (Chaplain, 2001 and Cooper et al 2001). Contradicting results have been reported from several studies on the effect of both support from supervisors and co-workers (colleagues). Social support is often viewed as crucial to the buffering of the experience of stress, to reduce mental ill health (Adams, 2001). Although some studies indicate that coworkers support buffer stress reactions among educators, the study carried out by Jacobssons et al, (2001) reveals that co-workers and supervisors support were not among the important stress buffers as expected. Nevertheless, researchers have found out that people who lack support from others also have more physical and psychological symptoms than those with support, (Rout \& Rout, 2002). Studies have also revealed that lack of principal support was a cause of educator stress reactions, (Jacobsson, et al 2001). Van Dick \& Wagner, (2001) shows that the principals' support can even reduce the perceptions of educators work load, Ferrie, (2006), reported that employees who perceive that they are treated unfairly by supervisors are at increased risk of poor
mental health. Stansfeld et al (1999) found out that lack of support at work among civil servants increased psychiatric morbidity, especially for men.

Pithers, (1995) has suggested that school teachers are exposed to highly stressful situations, which are related to psychological and physical problems. According to Beijing Municipal Committee of the Chinese Peoples Political Consultative Conference, (CPPCC); the governments' advisory body, psychological problems, of teachers affect students.

Although several studies have tested buffering of social support in organizations, significant interactions indicate simple effects in directions opposite the expected, (Schaubroeck \& Frank, 1998). This then means however that increasing social support may not have the intended buffering effect; because it may in effect increase distress to the individual.

By contrast, high levels of social support at work from colfeagues and supervisors are protective of both cross-sectional, (Brout et al 1992) and longitudinal studies, (Parkes et al 1994, Niedhammer at el 1998, La Rocco et al 1980 and Stansfeld, et al 1999).

Study of health at work has been increasingly concerned with the potential effect of employment practice and conditions on employee health. Cass et al, (2003) did a meta-analysis of over 500 studies in various workplaces across a range of industries and countries and found out that low moderate sized relationship between a range of employee health measures and job satisfaction, job control, job security, supervisor support at and working hours affected the mental health of employees.

Throughout the past two decades, there has been an increasing amount of research on the impact of work-related stress on employees' health. Ganster \& Schanbroek, (2006) concluded that there is no convincing evidence that job
stressors cause health effects, but agreed that work plays a significant role in mental and physical health.

Scientific evidence suggests that working as an educator may result in illness, Khan \& Byosiere, (1992), Marmot et al (1997) and Van Dick \& Wagner, (2001). Yaosaka et al, (2000), De Frank \& Stoup, (1989), and Miller et al, (2005) have proposed job insecurity, effort reward imbalances, job dissatisfaction and compromised general health as stressors for teachers particularly female, Nadaoka et al,1995 and Sekine et al, (2006). These studies have shown that occupation and demographic factors may worsen mental health status.

The Whitehall II study, Stansfeld et al (1999) found out that high efforts in combination with low rewards are strikingly associated with an increased risk of psychiatric disorder. They also found out that high job demands are related to an increased risk of psychiatric disorder in both men and women. Other studies have also suggested that work demands may be important determinants of mental health, Loscocco \& Spitze, (1991), Eshelinen et al (1991), and Fletcher \& Jones, (1991).

Burke et al, (2006), identified five groups of predictor variables of teacher wellbeing of individual demographic and situational variables, work stressors, role conflict and social support and components of psychological burnout.

Other studies have found high levels of social support at work to be predictive of better mental health in employees, Stansfeld et al, (1997) \& La Rocco et al (1980).

The idea that teachers suffer from excessively high rate of mental health problems is widely accepted among not only the general public, but among teachers themselves, Pithers \& Soden (1998). Teachers report that they are exposed to a high risk of stress and occupational "burnout", Kovess et al, (1997),
which they claim leads them to suffer from psychiatric disorders more than the average. However this seems to run contrary to well-established epidemiological data in psychiatry which show that the middle classes (where the majority of teachers fall) are relatively better protected against psychiatric disorders than the underprivileged classes of society where the highest prevalence rates are found, Rogler, (1996), Stansfeld at el, $(1998,1999)$ and Perry, (1996).

Occupational stress in human service professions, particularly teachers, has been the focus in the last two decades, Jurado et al, (1997). Teachers have been found to be under stress; which leads to psychiatric morbidity, Beer \& Beer, (1992), Boyle et al (1995), Hammen \& de Mayo (1982).

Studies have shown that organizational contexts of teaching, is more stressful than the job itself, Borg, (1990,) Hart, (1994), Hart et al (1995), and Kyriacou, (1987). Various studies from different countries have shown high levels of stress and mental distress among teachers, Pedrabissi et al (1991) \& Wang et al (2002). Teachers especially those in the primary schools are engaged in a complex and mentally stressful job because of insufficient personnel, heavy responsibilities, poor employment conditions and high expectations from society and parents. This may in turn create a highly tense state over a long period of time. Excessive stress may damage their mental and physical health and decrease their work ability. Wang et al (2002) found out that role overload and poor physical environment are the main primary school teacher stressors. The mental research on teachers' mental health is scarce, recent and focuses predominantly on stress and burnout, Delcor et al (2004).

Moreno-Abril et al, (2007), conducted a research on factors associated with psychiatric morbidity in Spanish School teachers in Spain. The study was designed to evaluate the association between psychiatric morbidity and workplace, socio-demographic and personality related variables in school teachers. They found out that psychiatric morbidity was associated with heavy
workload, physical assault from students, high stress and female gender. Personality characteristics of harm avoidance, novelty seeking had high scores and low scores were found for self directedness. Bauer et al, (2007), studied working conditions, adverse events and mental problems in a sample of 949 German school teachers. They found out that $29.8 \%$ of the sample reported significant mental health problems. They concluded that to be a teacher is hard work and requires coping of considerable amounts of adverse events.

Jurado at el (1998), found out that primary school teachers in Spain have higher risk of depressive symptoms. Eaton at el, (1990) had also shown earlier that primary school teachers in comparison with secondary school teachers have a higher prevalence ( 5 vs 1 ) of major depressive disorder.

In contrast with other studies found so far, Kones-Masfety et al, (2006), conducted a cross-sectional postal survey among 3,679 teachers and 1,817 nonteachers aged 20-60 years old in France. They found out that teachers do not seem to have poorer mental health, although their physical condition is characterized by a higher prevalence of health problems related to the ENT tract.

Cropley et al, (1999), found out that job strain is associated with psychiatric morbidity among primary and secondary school teachers in Britain. According to them, this is consistent with previous research that has found teaching to be highly stressful occupation.

Rugulies et al, (2005), in a cohort study of work environment, found out that Danish work environment influences the risk factors of developing severe depressive symptoms and that different factors play a role for men and women.

Burke and Greenglass, (2006), identified five groups of predictor variables. These are work satisfaction, emotional and physical well-being, work stressors, role conflict, social support, components of psychological burnout and individual
demographic and situational variables as stressors for teachers in Canada. Khan et al (2006) found out that there is a relationship between the contents of emotional social support and job burnout while controlling for affective dispositions, among high school teachers in USA, Illinois.

A survey conducted by the Chicago Teachers' Union, Landsmann, (1979), disclosed that $56.6 \%$ of the participating teachers had suffered mental illness symptoms related to their teaching occupations.

Parslow et al, (2004), concluded that measures of work stress and not employee level affect the mental health and well-being of government employees in Australia and governments should be responsible to fund health care services for own employees so as to benefit.

Work overload has been of concern not only in the Western countries, Boyle et al, (1995), but also in Japan, Michiko Nagai et al (2007) and Dussault et al (1999). According to them, poor mental health is associated with decreased job dissatisfaction and shorter times spend on leisure activities especially among female teachers in Japan.

Gasparini et al, (2006), studied the prevalence of common mental disorders, among teachers in the Municipal Education System in Belo, Brazil. They assessed common mental disorders in the target population using General Health Questionnaire (GHQ-12) on 751 participants. They found out that mental disorders were associated with positive history of violence, deficient work place conditions and comfort, low creativity and autonomy for development of work, and insufficient time for preparatory course work. Their results showed that mental disorders are important health problems among school teachers.

Porto et al, (2001), found a 44\% prevalence of mental disorders among teachers in Brazil in an investigation of the association between work-related psychosocial
factors and the prevalence of mental disorders. They also found out that prevalence of mental disorders among high-strain teachers was 1.5 greater than low strain teachers.

Claro \& Bedregal, (2003), explored mental health of teachers from local primary schools in Chile. They found out possible emotional problems was thirty two percent (32\%). They concluded that age and number of working hours were two risk factors for mental problems identified in that sample.

Jackson et al, (2006), found out that school educators might be important targets for interventions to promote work related well being, and suggests that interventions should be aimed at reducing job demands and increasing job resources.

The epidemiology of personality disorder is still hampered by poor case definition. They are highly comorbid with each other and with Axis I clinical syndromes therefore challenging current diagnostic constructs. Current diagnostic classifications are therefore temporary.

Waswa, (1990), in a study on psychiatric morbidity among students training as teachers at Kenya Teachers College health services found a point prevalence of psychiatric morbidity to be seventeen percent (17.0\%).

## CHAPTER III

### 3.0 METHODOLOGY

Based on lists from TSC IMIS Department, the effective population for study was estimated to be 265 primary school teachers in 26 primary schools from Mogotio Division, Koibatek District,.

### 3.1 Study Design

A cross-Sectional survey study was conducted among consenting public primary school teachers aged 20-55 years of both sexes in Mogotio Division, Koibatek District.

### 3.2 Study Area

The study area was public primary schools in Mogotio Division, Koibatek District. This area was identified due high records of interdictions of teachers compared to other parts of the country.

### 3.3 Study Population

The study population was among 210 public primary school teachers in Mogotio Division, Koibatek District.

### 3.4 Sampling

All consenting teachers in Mogotio Division, Koibatek District were studied.

### 3.4.1 Inclusion Criteria

Teachers employed by the TSC in public primary schools who consented took part in the study in, Mogotio Division, Koibatek District.

### 3.4.2 Exclusion Criteria

1. Public Primary School teachers employed by the Parents Teachers Association (PTA) or other employers
2. Public Primary School teachers who did not consent to the study.

### 3.5 Data Collection Instruments

Three major instruments were used

### 3.5.1 Social Demographic Instrument

Researcher designed social demographic instrument to collect data on sociodemographic factors like age, gender, family composition, education level, place of residence, occupational status, present grade, household income, workrelated characteristics, social support from supervisors and coworkers, job security and feelings about work etc.

### 3.5.2 Personality Disorders Screen

Personality Disorders Screen ( P ) was used to identify the personality disorders of the participants.

### 3.5.3 MINI Plus

MINI-Plus is used in diagnosing of psychiatric disorders among the participants. The MINI Plus has a MINI SCREEN which is self administered and is used to identify the psychiatric disorder likely to be present in an individual before the use of a clinician administered MINI Plus. The MINI Plus is a psychiatric structured interview that takes approximately 15-20 minutes to administer. It is a skipping clinician questionnaire where after identifying the disorder in the mini screen one is expected to skip only to the identified area of the disorder. It uses decision tree logic to assess the major adult Axis I disorders in DSM-IV and ICD-10. It elicits all the symptoms listed in the symptom criteria for DSM IV and ICD-10 for 24 major Axis I diagnostic categories, one Axis II disorder and suicidality. Its diagnostic
algorithms are consistent with DSM IV and ICD-10 diagnostic algorithms. In contrast to many studies, rates of psychiatric morbidity in the present study were assessed using the MINI PLUS (adult disorder with the exclusion of psychotic disorders).

### 3.6 Implementation

The researcher visited the District Education Office Headquarters, and requested for permission to collect data from public primary school teachers using the socio-demographic questionnaires and standardized instruments in Mogotio Division. The researcher with an introduction letter to the Assistant Education Officer visited the Division in question and trained three clinicians on how to administer the questionnaires and instruments to consenting teachers in the public primary schools. These trained clinicians visited the schools, explained the purpose of study, confidentiality, sought consent from the respondents and eventually administered the questionnaires and instruments to the consenting teachers. The questionnaire and instruments were administered to the teachers in each school at the same time.

### 3.7 Data Collection

To test the logistics of the study, a pre-testing was carried out on part of the population, three weeks before the actual study. This assisted the researcher to acknowledge and prepare for possible obstacles that may occur during the actual study. It also assists the researcher in training and sensitizing the clinicians on how to carry out the actual study.

In the actual study, the researcher liaised with the District Education Officer, the Division Education Office (Mogotio Division) by presenting a copy of the letter and permit from the Ministry of Education, Science and Technology giving permission to carry out the study. A copy of the approval letter from the KNH ethical committee was also presented to them.

The researcher then consulted with the Divisional Education Officer, Mogotio Division and Zonal Officers to make a schedule on days and time of visit to each school, in order to allow each Zonal officer to organize the teachers to meet the researcher and other clinicians who presented the Questionnaires.

The clinician visited the schools on schedule, explained the research study and sought written consent before presenting the socio-demographic questionnaire and the standardized instruments to the respondents. The respondents were assured of confidentiality in handling of the completed questionnaires. This was achieved by ensuring that the questionnaires were identified by an anonymous serial number.

These consenting teachers in each school sat in one or more classrooms at the same time to complete them and eventually put them in envelopes sealed them and put them in a ballot box that was placed in front of the room. Each ballot box was marked with a code number only held by the researcher and assisting clinicians, to ensure data was collected from each school.

### 3.8 Data Management

Data collected was managed through storage in a computer, analyzed, presented and a discussion on the results was done.

### 3.8.1 Data Entry

After the data was collected, it was checked and coded accordingly. Data entry templates were developed for the data entry. All data collecting instruments were keyed into the SPSS Entry Builder.

### 3.8.2 Data Analysis

Data collected was stored in a computer and analyzed using the SPSS Version 12 leading to answering the research questions.

### 3.8.2.1 Logistic regression

This was used to evaluate the association between independent variables of employment, age, sex, number of dependants, level of education, religion, present grade, marital status, position held, leisure, other jobs, undertaking studies, decision making participation, social support, worry and workload was analyzed with regressive analysis to find out their relationship with the development of mental illness on other socio-demographic factors, which are dependent variables.

### 3.8.2.2 Prevalence

This was the measure used for frequency.

### 3.8.3 Results Presentation

The analyzed data is presented using frequencies, tables, pie charts, histograms and descriptive form.

### 3.9 Ethical Issues

Approval to carry out study was sought from

1. The Department of Psychiatry, the University of Nairobi
2. The Ethics Committee Kenyatta National Hospital

Permission to carry out study was sought from the Ministry of Education, Science and Technology.

The purpose of the study was explained to the study subjects and a written informed consent was obtained before participants were included in the study. It was explained that participation was voluntary and failure to volunteer would not affect the teacher in anyway.

The study subjects were assured of their confidentiality and that they were identified by a randomly assigned number that would not be traceable to them.

Only public primary school teachers well enough to give consent were included into the study.

There were no physically intrusive procedures, but some of the questions may have been emotionally painful. Those who needed help were provided with a contact line. Apart from this, there would be no other benefits but the society will benefit from the findings of the study that will hopefully result in better management by the TSC on teachers with mental illness.

## Flow chart of Procedures



## CHAPTER IV

### 4.0 RESULTS

A total of 250 teachers were expected to take part in the study, but some of the respondents were absent at the day of study from their schools. A total of 210 respondents were presented with the questionnaires and only 191 questionnaires were valid for analysis giving a response rate of $90.95 \%$. Nineteen (19) questionnaires (9.05\%) were discarded because the respondents had been filled incorrectly. 23 schools were visited out of the 26 identified schools. The three schools which were not visited could not be accessed due to bad weather and poor road network at the time of study. One other school had only one TSC teacher who was absent at the time of study.

### 4.1.1 Gender

Figure 1: Sex of the respondents


112 (59\%) of the respondents were female while 79 (41\%) were males.

Table 1: Prevalence of different psychiatric morbidity by different socio-demographic factors

| Demographic factor | Groups | Major Depressive Episode | Dysthamia | Suicidality | $\begin{aligned} & \text { (Hypo) } \\ & \text { Manic } \\ & \text { episode } \end{aligned}$ | Panic disorder | Agora phobia | Social phobia | Specific phobia | OCD | PTSD | Alcohol abuse and dependence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age group (years) | 20 to 35 | 0 | 14.3 | 0 | 0 | 3.6 | 14.3 | 0 | 10.7 | 10.7 | 0 | 0 |
|  | 36 to 50 | 14.2 | 12.8 | 1.4 | 8.5 | 2.8 | 8.5 | 5 | 9.2 | 6.4 | 1.4 | 0.7 |
|  | over 50 | 14.3 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 0 | 21.4 | 7.1 |  | 7.1 |
|  | Overall | 12 | 12.6 | 1.6 | 7.1 | 3.3 | 9.3 | 3.8 | 10.4 | 7.1 | 1.1 | 1.1 |
| Number of other schools taught | 0 to 4 | 10.8 | 12.1 | 1.3 | 7 | 3.2 | 9.6 | 3.2 | 10.2 | 8.3 | 0.6 | 0.6 |
|  | 5 or more | 14.7 | 11.8 | 2.9 | 5.9 | 2.9 | 8.8 | 5.9 | 8.8 | 0 | 2.9 | 2.9 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |
| Sex | Female | 13.4 | 11.6 | 0 | 5.4 | 1.8 | 8.9 | 4.5 | 13.4 | 8.9 | 0.9 | 0 |
|  | Male | 9 | 12.8 | 3.8 | 9 | 5.1 | 10.3 | 2.6 | 5.1 | 3.8 | 1.3 | 2.6 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |
| Marital status | Single | 7.7 |  |  | 15.4 |  | 7.7 |  | 15.4 | 7.7 | 7.7 |  |
|  | Married | 11.3 | 13.1 | 1.8 | 6 | 3.6 | 8.9 | 4.2 | 8.9 | 6.5 | 0.6 | 1.2 |
|  | Separated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Widowed | 28.6 | 0 | 0 | 14.3 | 0 | 14.3 |  | 28.6 | 14.3 | 0 | 0 |
|  | Not stated | 0 . | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |
| Home district | Koibatek | 12.2 | 12.7 | 1.7 | 6.6 | 2.8 | 9.4 | 3.9 | 10.5 | 6.6 | 1.1 | 0.6 |
|  | Other | 0 | 0 | 0 | 12.5 | 12.5 | 12.5 |  |  | 12.5 |  | 12.5 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |

Table 1: Prevalence of different psychiatric morbidity by different socio-demographic factors (Cntd)

| Demographic factor | Groups | Major Depressive Episode | Dysthamia | Suicidality | (Нуро) <br> Manic episode | Panic disorder | Agora phobia | Social phobia | Specific phobia | OCD | PTSD | Alcohol abuse and dependence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level of education | Primary teachers training | 12.7 | 11.4 | 1.9 | 7 | 3.2 | 10.8 | 3.8 | 11.4 | 5.7 | 1.3 | 1.3 |
|  | Diploma | 11.1 | 11.1 | 0 | 11.1 | 5.6 | 5.6 |  | 5.6 | 11.1 | 0 | 0 |
|  | Technical | 0 | 33.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | University | 0 | 16.7 | 0 | 0 | 0 | 0 | 8.3 | 0 | 16.7 | 0 | 0 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |
| Present grade | P2 | 17.1 | 12.2 |  | 7.3 | 2.4 | 9.8 | 4.9 | 19.5 | 4.9 |  | 0 |
|  | P1 | 11.5 | 15.4 | 1.9 | 5.8 | 2.9 | 10.6 | 3.8 | 8.7 | 4.8 | 1 | 1.9 |
|  | AT IV | 13.6 | 4.5 | 4.5 | 18.2 | 4.5 | 13.6 |  | 9.1 | 18.2 | 4.5 |  |
|  | Diploma | 0 | 0 | 0 | 0 | 11.1 | 0 | 0 | 0 | 11.1 | 0 | 0 |
|  | University Degree | 0 | 16.7 | 0 | 0 | 0 | 0 | 16.7 | 0 | 16.7 | 0 | 0 |
|  | Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Overall | 11.5 | 12 | 1.6 | 6.8 | 3.1 | 9.4 | 3.7 | 9.9 | 6.8 | 1 | 1 |
| Number of children/dependants | Less than 5 | 9.2 | 9.2 | 0 | 3.9 | 1.3 | 11.8 | 2.6 | 11.8 | 6.6 | 1.3 | 0 |
|  | 6 to 10 | 12.6 | 14.6 | 2.9 | 7.8 | 3.9 | 7.8 | 4.9 | 9.7 | 7.8 | 1 | 1.9 |
|  | More than 10 | 22.2 | 11.1 |  | 22.2 | 11.1 | 11.1 | 0 | 0 | 0 | 0 | 0 |
|  | Overall | 11.7 | 12.2 | 1.6 | 6.9 | 3.2 | 9.6 | 3.7 | 10.1 | 6.9 | 1.1 | 1.1 |

### 4.1.2 Age Group

Figure 2: Age Distribution


Most teachers 141 ( $77 \%$ ) were between the ages of $36-50$ years, 28 (15.3\%) were between the ages of $20-35$ and 7.7 (4\%) were over the age of 50 . the mean age was 41.28 , minimum age was 30 , maximum age 55 and range was 25 .

### 4.1.3 Marital status

Figure 3: Marital Status


168 (88\%) were married, 13 (7\%) single, 7 (4\%) widowed, 2 (1\%) separated and 1 did not state marital status.

### 4.1.4 Teaching Experience

Figure 4: Teaching experience


118 (62.1\%) had a teaching experience of 10-20 years, 57 (30.0\%), teaching experience of over 20 years while 14 (7.0\%) had teaching experience of less than 10 years. Mean teaching experience was 17.79 , and range was 34 years,

### 4.1.5 Level of Education

Figure 5: Level of education


158 (82.7\%) had primary school teacher training education, 18 (9.4\%) Diploma in Education, 3(1.6\%) had Technical Education and 12(6.3\%) had University Degree Education.

### 4.1.6 Religion of respondents

Figure 6: Religion of the respondents


150 (78\%) were protestants, 36 (19\%) were Catholics and 5 (3\%) were Muslims

### 4.1.7 Respondents Present Grade

Figure 7: Respondents present grade


41 (21.5\%) had present grade of P2, 104 (54.5\%) had P1, 22 (11.5\%) had AT IV, 9 (4.7\%) had Diploma in Education, 3 (3.1\%) had Technical Education and 12 (4.7\%) had University Education

### 4.1.8 Source of Income

Figure 8: Other source of income other than teaching


167 (87\%) did not have any other income apart from salary but 24 (13\%) had other income. Those who had other income specified as poultry keeping, dairy farming, horticulture, "matatu" business, "kiosk business", retail shop business "mitumba" goods business among others

Table 2(a): Prevalence of different psychiatric morbidities by the different work related characteristics

|  | Position held at school |  | Teaching experience (years) |  |  | Number of schools taught |  | Interdictio n |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Administrative | Other | < 10 | 10-20 | > 20 | 0-4 | $\geq 5$ | No | Yes |
| Major Depressive Episode | 10.2 | 12.0 | 0.0 | 11.9 | 14.0 | 10.8 | 14.7 | 11.4 | 25.0 |
| Dysthamia | 10.2 | 12.7 | 6.7 | 12.7 | 12.3 | 12.1 | 11.8 | 12.4 | 0.0 |
| Suicidality | 2.0 | 1.4 | 0.0 | 1.7 | 1.8 | 1.3 | 2.9 | 1.6 | 0.0 |
| (Hypo) Manic episode | 14.3 | 4.2 | 0.0 | 7.6 | 7.0 | 7.0 | 5.9 | 7.0 | 0.0 |
| Panic disorder | 2.0 | 3.5 | 0.0 | 2.5 | 5.3 | 3.2 | 2.9 | 2.7 | 0.0 |
| Agoraphobia | 10.2 | 9.2 | 0.0 | 10.2 | 8.8 | 9.6 | 8.8 | 9.7 | 0.0 |
| Social phobia | 0.0 | 4.9 | 0.0 | 5.1 | 1.8 | 3.2 | 5.9 | 3.8 | 0.0 |
| Specific phobia | 4.1 | 12.0 | 6.7 | 9.3 | 12.3 | 10.2 | 8.8 | 9.7 | 0.0 |
| Obsessive-Compulsive disorder | 6.1 | 7.0 | 6.7 | 5.9 | 8.8 | 8.3 | 0.0 | 7.0 | 0.0 |
| Posttraumatic Stress Disorder | 0.0 | 1.4 | 0.0 | 0.8 | 1.8 | 0.6 | 2.9 | 1.1 | 0.0 |
| Alcohol abuse and dependence | 0.0 | 1.4 | 0.0 | 0.8 | 1.8 | 0.6 | 2.9 | 1.1 | 0.0 |

Table 2 (b): Prevalence of different psychiatric morbidities by the different work related characteristics

| Psychiatric Disorder | Work related factors |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Do you have time for leisure? |  | Do you do other jobs other than teaching? |  | Are you studying at the moment as well? |  | Are you involved in planning your work? |  |  |  |
|  | No | Yes | No | Yes | No | Yes | Always | Usually | Usually not | Never |
| Major Depressive Episode | 13.2 | 9.4 | 10.9 | 6.8 | 10.4 | 14.3 | 8.5 | 18.0 | 0.0 | 0.0 |
| Dysthamia | 13.2 | 11.3 | 11.8 | 13.6 | 10.4 | 16.1 | 11.7 | 13.1 | 14.3 | 12.5 |
| Suicidality | 0.8 | 3.8 | 1.7 | 1.7 | 0.7 | 3.6 | 0.0 | 4.9 | 0.0 | 0.0 |
| (Hypo) Manic episode | 7.0 | 5.7 | 5.0 | 6.8 | 5.9 | 8.9 | 5.3 | 4.9 | 7.1 | 37.5 |
| Panic disorder | 3.1 | 1.9 | 2.5 | 3.4 | 4.4 | 0.0 | 3.2 | 1.6 | 7.1 | 0.0 |
| Agoraphobia | 7.0 | 15.1 | 11.8 | 6.8 | 8.9 | 10.7 | 10.6 | 11.5 | 7.1 | 0.0 |
| Social phobia | 3.9 | 3.8 | 3.4 | 3.4 | 3.7 | 3.6 | 3.2 | 3.3 | 7.1 | 0.0 |
| Specific phobia | 10.1 | 9.4 | 8.4 | 13.6 | 11.1 | 7.1 | 10.6 | 9.8 | 7.1 | 12.5 |
| Obsessive-Compulsive disorder | 6.2 | 7.5 | 5.9 | 10.2 | 6.7 | 7.1 | 7.4 | 4.9 | 14.3 | 12.5 |
| Posttraumatic Stress Disorder | 1.6 | 0.0 | 1.7 | 0.0 | 1.5 | 0.0 | 1.1 | 1.6 | 0.0 | 0.0 |
| Alcohol abuse and dependence | 0.8 | 1.9 | 1.7 | 0.0 | 1.5 | 0.0 | 1.1 | 1.6 | 0.0 | 0.0 |

Table $2(c)$ : Prevalence of different psychiatric morbidities by the different work related characteristics (support from supervisors and colleagues)

|  | Do you receive support from supervisors? |  |  | Do you receive support from your <br> coworkers? |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Always | Usually | Usually not | Never | Always | Usually | Usually <br> not | Never |
| Major Depressive Episode | 6.3 | 12.8 | 16.7 | 6.7 | 7.9 | 13.3 | 30.0 | 0.0 |
| Dysthamia | 16.7 | 8.5 | 13.3 | 20.0 | 7.9 | 15.6 | 20.0 | 0.0 |
| Suicidality | 2.1 | 1.1 | 0.0 | 6.7 | 2.2 | 1.1 | 0.0 | 0.0 |
| Hypo) Manic episode | 6.3 | 5.3 | 10.0 | 6.7 | 7.9 | 6.7 | 0.0 | 0.0 |
| Panic disorder | 4.2 | 2.1 | 0.0 | 13.3 | 4.5 | 2.2 | 0.0 | 0.0 |
| Agoraphobia | 6.3 | 8.5 | 10.0 | 26.7 | 11.2 | 7.8 | 10.0 | 0.0 |
| Social phobia | 8.3 | 2.1 | 3.3 | 0.0 | 4.5 | 3.3 | 0.0 | 0.0 |
| Specific phobia | 8.3 | 12.8 | 0.0 | 20.0 | 12.4 | 6.7 | 10.0 | 50.0 |
| Obsessive-Compulsive disorder | 8.3 | 6.4 | 6.7 | 6.7 | 9.0 | 5.6 | 0.0 | 0.0 |
| Posttraumatic Stress Disorder | 2.1 | 1.1 | 0.0 | 0.0 | 1.1 | 1.1 | 0.0 | 0.0 |
| Alcohol abuse and dependence | 2.1 | 1.1 | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 |

Table 2(d): Prevalence of different psychiatric morbidities by the different work related characteristics (repetition of work)

|  | Does your work require that you repeat the same work tasks many times per hour? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Almost all working hours | 3/4 of working hours | $1 / 2$ of working hours | $1 / 4$ of working hours | Seldom | Never |
| Major Depressive Episode | 7.7 | 17.4 | 6.9 | 7.1 | 11.9 | 9.1 |
| Dysthamia | 0.0 | 13.0 | 34.5 | 4.8 | 9.0 | 18.2 |
| Suicidality | 0.0 | 0.0 | 6.9 | 2.4 | 0.0 | 0.0 |
| (Hypo) Manic episode | 7.7 | 13.0 | 6.9 | 4.8 | 4.5 | 0.0 |
| Panic disorder | 0.0 | 8.7 | 3.4 | 2.4 | 1.5 | 0.0 |
| Agoraphobia | 7.7 | 0.0 | 17.2 | 9.5 | 9.0 | 18.2 |
| Social phobia | 0.0 | 8.7 | 3.4 | 2.4 | 4.5 | 0.0 |
| Specific phobia | 15.4 | 17.4 | 3.4 | 9.5 | 11.9 | 0.0 |
| Obsessive-Compulsive disorder | 0.0 | 8.7 | 3.4 | 7.1 | 10.4 | 0.0 |
| Posttraumatic Stress Disorder | 7.7 | 0.0 | 3.4 | 0.0 | 0.0 | 0.0 |
| Alcohol abuse and dependence | 0.0 | 4.3 | 3.4 | 0.0 | 0.0 | 0.0 |

Table 2(e): Prevalence of different psychiatric morbidities by the different work related characteristics (Job security)

| Psychiatric disorder | Are you worried about becoming unemployed? |  | Are you worried about being transferred against your will? |  | Are you worried about becoming redundant because of new technology? |  | Are you worried about having difficulty in securing another job if you become unemployed? |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Yes | No | Yes | No | Yes | No | Yes |
| Major Depressive Episode | 13.2 | 10.6 | 7.7 | 12.1 | 14.5 | 9.8 | 13.5 | 11.0 |
| Dysthamia | 11.8 | 12.2 | 7.7 | 12.7 | 13.0 | 11.5 | 16.2 | 11.0 |
| Suicidality | 1.5 | 1.6 | 3.8 | 1.2 | 2.9 | 0.8 | 5.4 | 0.7 |
| (Hypo) Manic episode | 5.9 | 7.3 | 23.1 | 4.2 | 4.3 | 8.2 | 0.0 | 7.5 |
| Panic disorder | 2.9 | 3.3 | 0.0 | 3.6 | 4.3 | 2.5 | 2.7 | 3.4 |
| Agoraphobia | 7.4 | 10.6 | 3.8 | 10.3 | 5.8 | 11.5 | 2.7 | 11.6 |
| Social phobia | 4.4 | 3.3 | 3.8 | 3.6 | 4.3 | 3.3 | 5.4 | 3.4 |
| Specific phobia | 7.4 | 11.4 | 0.0 | 11.5 | 7.2 | 11.5 | 10.8 | 10.3 |
| Obsessive-Compulsive disorder | 7.4 | 6.5 | 3.8 | 7.3 | 4.3 | 8.2 | 8.1 | 6.8 |
| Posttraumatic Stress <br> Disorder | 2.9 | 0.0 | 0.0 | 1.2 | 2.9 | 0.0 | 2.7 | 0.7 |
| Alcohol abuse and dependence | 1.5 | 0.8 | 0.0 | 1.2 | 2.9 | 0.0 | 0.0 | 1.4 |

Table 2(f): Prevalence of different psychiatric morbidities by the different work related characteristics (Job satisfaction)

| Psychiatric disorder | How would you describe your workload? |  | Are you satisfied <br> with your job? |  | Possibility of taking <br> another same paying job <br> outside teaching |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Overworked | Under worked | Normal | No | Yes | Will not | Will take |
|  | $10.6 \%$ | $0.0 \%$ | $12.9 \%$ | $9.8 \%$ | $12.5 \%$ | $14.3 \%$ | $8.3 \%$ |
| Dysthamia | $17.0 \%$ | $0.0 \%$ | $8.2 \%$ | $11.5 \%$ | $11.6 \%$ | $12.2 \%$ | $12.5 \%$ |
| Suicidality | $2.1 \%$ | $0.0 \%$ | $1.2 \%$ | $0.0 \%$ | $1.8 \%$ | $1.0 \%$ | $2.8 \%$ |
| (Hypo) Manic episode | $6.4 \%$ | $20.0 \%$ | $5.9 \%$ | $6.6 \%$ | $8.0 \%$ | $8.2 \%$ | $5.6 \%$ |
| Panic disorder | $3.2 \%$ | $0.0 \%$ | $3.5 \%$ | $3.3 \%$ | $2.7 \%$ | $3.1 \%$ | $2.8 \%$ |
| Agoraphobia | $8.5 \%$ | $20.0 \%$ | $10.6 \%$ | $8.2 \%$ | $8.9 \%$ | $8.2 \%$ | $9.7 \%$ |
| Social phobia | $2.1 \%$ | $20.0 \%$ | $4.7 \%$ | $3.3 \%$ | $3.6 \%$ | $4.1 \%$ | $4.2 \%$ |
| Specific phobia | $7.4 \%$ | $20.0 \%$ | $11.8 \%$ | $8.2 \%$ | $9.8 \%$ | $7.1 \%$ | $12.5 \%$ |
| Obsessive-Compulsive <br> disorder | $6.4 \%$ | $0.0 \%$ | $8.2 \%$ | $8.2 \%$ | $5.4 \%$ | $5.1 \%$ | $6.9 \%$ |
| Posttraumatic Stress <br> Disorder | $1.1 \%$ | $0.0 \%$ | $1.2 \%$ | $0.0 \%$ | $0.9 \%$ | $1.0 \%$ | $1.4 \%$ |
| Alcohol abuse and <br> dependence | $1.1 \%$ | $0.0 \%$ | $1.2 \%$ | $1.6 \%$ | $0.0 \%$ | $1.0 \%$ | $1.4 \%$ |

4.2.1 Interdiction of the respondents

Figure 9: Interdiction of the respondents


187 (97.9) had not been interdicted by the employer and only $4(2 \%)$ had been interdicted at some time in their teaching career.

### 4.2.2 Position Held in the school

Figure 10: Position Held in the school


49 (25.7\%) held administrative positions in the school while 142 (74.3\%) did not hold any administrative positions (head-teachers, Deputy head teachers and senior teachers) in the school. $7.9 \%$ were head teachers, $9.4 \%$ deputy head teachers, $67.0 \%$ class teachers while $7.3 \%$ held other positions in the school.
4.3 Psychiatric Morbidity among respondents

### 4.3.1 The current prevalence of psychiatric morbidity

Figure 11: Current prevalence of psychiatric morbidity


> Have Do nothave

Prevalence of current psychiatric morbidity was $41.4 \%$.
4.3.2 Life time Prevalence of Psychiatric disorders (Axis I) among respondents

Figure 12: Prevalence of Axis I Psychiatric Morbidity


It was found out that the life time prevalence of Axis I Psychiatric Morbidity among teachers was 45.5 \%, while $54 \%$ have had no Axis I Psychiatric Morbidity

Table 3: Psychiatric Morbidity Cormobidity

|  | Major <br> Depressive <br> Episode | Dysthamia | Suicidality | Manic <br> episode | Panic <br> disorder | Agora <br> phobia | Social <br> phobia | Specific <br> phobia | OCD | PTSD | use |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major depressive <br> episode | $100.0 \%$ | $36.4 \%$ | $4.5 \%$ | $13.6 \%$ | $0.0 \%$ | $13.6 \%$ | $13.6 \%$ | $9.1 \%$ | $4.5 \%$ | $4.5 \%$ | $4.5 \%$ |
| Dysthamia | $34.8 \%$ | $100.0 \%$ | $8.7 \%$ | $4.3 \%$ | $0.0 \%$ | $17.4 \%$ | $13.0 \%$ | $4.3 \%$ | $8.7 \%$ | $4.3 \%$ | $4.3 \%$ |
| Suicidality | $33.3 \%$ | $66.7 \%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $0.0 \%$ | $33.3 \%$ | $33.3 \%$ |
| H-Manic episode | $23.1 \%$ | $7.7 \%$ | $0.0 \%$ | $100.0 \%$ | $0.0 \%$ | $7.7 \%$ | $7.7 \%$ | $0.0 \%$ | $7.7 \%$ | $0.0 \%$ | $0.0 \%$ |
| Panic disorder | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ | $16.7 \%$ | $0.0 \%$ | $33.3 \%$ | $16.7 \%$ | $0.0 \%$ | $0.0 \%$ |
| Agoraphobia | $16.7 \%$ | $22.2 \%$ | $5.6 \%$ | $5.6 \%$ | $5.6 \%$ | $100.0 \%$ | $5.6 \%$ | $22.2 \%$ | $0.0 \%$ | $5.6 \%$ | $5.6 \%$ |
| Social phobia | $42.9 \%$ | $42.9 \%$ | $14.3 \%$ | $14.3 \%$ | $0.0 \%$ | $14.3 \%$ | $100.0 \%$ | $28.6 \%$ | $14.3 \%$ | $14.3 \%$ | $14.3 \%$ |
| Specific phobia | $10.5 \%$ | $5.3 \%$ | $5.3 \%$ | $0.0 \%$ | $10.5 \%$ | $21.1 \%$ | $10.5 \%$ | $100.0 \%$ | $15.8 \%$ | $5.3 \%$ | $5.3 \%$ |
| OCD | $7.7 \%$ | $15.4 \%$ | $0.0 \%$ | $7.7 \%$ | $7.7 \%$ | $0.0 \%$ | $7.7 \%$ | $23.1 \%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| PTSD | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $0.0 \%$ | $0.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $0.0 \%$ | $100.0 \%$ | $50.0 \%$ |
| Alcohol use | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $0.0 \%$ | $0.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $0.0 \%$ | $50.0 \%$ | $100.0 \%$ |

This study has revealed high comorbidity between Psychiatric Disorders (Axis I)

Figure 13: Prevalence of psychiatric disorder by gender


Prevalence of psychiatric disorders among female is $48.2 \%$, while that of male is 42.3\%

Figure 14: Prevalence of different psychiatric disorders by gender


Table 4: Prevalence of different psychiatric morbidity by gender was found to be as follows

|  | Psychiatric morbidity | Female | n | Male | n |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Major Depressive Episode | $13.4 \%$ |  | $9.0 \%$ |  |
| 2. | Dysthamia | $11.6 \%$ |  | $12.8 \%$ |  |
| 3 | Suicidality | $0.0 \%$ |  | $3.8 \%$ |  |
| 4. | Hypo (Mania) Episode | $5.4 \%$ |  | $9.0 \%$ |  |
| 5. | Panic Disorder | $1.8 \%$ |  | $5.1 \%$ |  |
| 6. | Agora Phobia | $8.9 \%$ |  | $8.9 \%$ |  |
| 7 | Specific Phobia | $13.4 \%$ |  | $2.6 \%$ |  |
| 8. | OCD | $8.9 \%$ |  | $3.6 \%$ |  |
| 9 | PTSD | $0.9 \%$ |  | $1.3 \%$ |  |
| 10. | Alcohol abuse and | $0.0 \%$ |  | $2.6 \%$ |  |

Same prevalence in Agoraphobia (8.9\%) \& dysthamia (11.6\% vs.12.8\%). Female higher prevalence in depressive episode ( $13.4 \%$ vs. $9.0 \%$ ), specific phobia ( $13.4 \%$ vs. $2.6 \%$ ), OCPD (8.9\%vs.3.6\%); male higher in suicadility ( $3.8 \%$ vs. $0.0 \%$ ) manic Episode ( $9.0 \%$ vs. $5.4 \%$ ) panic disorder (5.1\% vs.1.8\%) and PTSD (1.3\%vs.0.9\%)

### 4.3.3 Life time Prevalence of Psychiatric Morbidity (Axis I) per Disorder

Figure 15: Lifetime Prevalence of Psychiatric Morbidity (Axis I)


Table 5: Psychiatric Morbidity Prevalence Types

| Psychiatric Morbidity Type | Prevalence | n |
| :--- | :---: | :---: |
| Major Depressive Episode | $11.5 \%$ | 22 |
| Dysthamia | $12.0 \%$ | 23 |
| Suicidality | $1.6 \%$ | 3 |
| Hypo) Manic episode | $6.8 \%$ | 13 |
| Panic disorder | $3.1 \%$ | 6 |
| Agoraphobia | $9.4 \%$ | 18 |
| Social phobia | $3.7 \%$ | 7 |
| Specific phobia | $9.9 \%$ | 19 |
| Obsessive-Compulsive disorder | $6.8 \%$ | 13 |
| Posttraumatic Stress Disorder | $1.0 \%$ | 2 |
| Alcohol abuse and dependence | $1.0 \%$ | 2 |

Prevalence of Axis I Disorders were found to be as follows; Major Depressive Episode 11.5\%, Dysthamia 12.0\%, Suicidality 1.6\%, (Hypo) Manic Episode 6.8\%, Panic Disorder 3.1\%, Agora Phobia 9.4\%, Social Phobia 3.7\%, Specific Phobia 9.9\%, Obsesive Compulsive Disorder 6.8\%, Posttraumatic Stress Disorder 1.0\%, Alcohol abuse and Dependence 1.0\% and non-alcoholic psycho-active substance disorders $0.0 \%$.

### 4.3.4 Personality Disorders (Axis II Psychiatric Disorders)

Figure 16: Personality disorder


Table 6: Personality Disorders (percentages and frequencies)

|  | PERSONALITY | Percentage | Number |
| :--- | :--- | :--- | :--- |
| 1 | Borderline personality | $22.5 \%$ | 42 |
| 2 | Anti-Social Personality | $3.7 \%$ | 7 |
| 3. | OCPD | $23 \%$ | 43 |
| 4 | Paranoid Personality | $52.4 \%$ | 99 |
| 5. | Dependent Personality | 19.45 | 36 |

Prevalence of Personality Disorders (Axis II Psychiatric Disorders were found to be as follows Borderline 22.5\%, Anti-social 3.7\%, OCPD 23\%, Paranoid 52.4\% and Dependant Personality 19.4\%.

Figure 17: Prevalence of personality disorders


Prevalence of personality was found to be 67.5\%

Figure 18: Prevalence of personality disorders by gender


Female 67.9\% while male 66.7\%

Figure 19: Prevalence of different personality disorders by gender


Table 7: Personality per gender (percentages and frequencies)

| personality | Female <br> $\%$ | Female <br> number | Male <br> $\%$ | Male <br> Number |
| :--- | :---: | :---: | :---: | :---: |
| Borderline | 20.5 | 23 | 24.4 | 19 |
| Anti-social | 1.8 | 2 | 6.4 | 5 |
| OCPD | 24.1 | 27 | 20.5 | 16 |
| Paranoid | 56.3 | 63 | 46.2 | 36 |
| Dependent | 17.9 | 20 | 20.5 | 16 |

Prevalence of personality disorders showed higher prevalence in males in borderline,( $24.4 \%$ vs.20.4\%), anti-social ( $6.4 \%$ vs. $1.8 \%$ ) and dependent ( $20.5 \%$ vs. $17.9 \%$ ) while female prevalence was shown to be higher in OCPD ( $24.1 \%$ vs. $20.5 \%$ ) and paranoid (56.3\% vs. $46.2 \%$ )
4.3.5 Prevalence of Axis I Psychiatric Disorders by Axis II Psychiatric Disorders

Figure 20: Prevalence of psychiatric disorder (Axis I) by personality (Axis II)


Those who have personality disorder also have Axis 1 Psychiatric Morbidity,
thus: borderline personality disorder 60\%, Anti social 71\%, OCPD 55\%, Paranoid $53 \%$, Dependent 41\%.

### 4.4 Multinomial-logistic regression:

A Multinomial-logistic regression model was used to examine whether the socio demographic factors affect the psychiatric morbidity of teachers. A model was generated from the factors and a chi-square statistic was generated to find the significance of the effects of the different factors. Table 8 below was generated to obtain the following likelihood ratio of how the factors affect the psychiatric morbidity of teachers.

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table 8: Likelihood Ratio Tests

|  | df (degree of |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Effect | Chi-Square | freedom) | Sig. |
| Intercept | .000 | 0 | . |
| Age | .063 | 1 | 0.802 |
| Number of dependents | 4.509 | 1 | $0.034^{* *}$ |
| Number of schools taught | 1.942 | 1 | 0.163 |
| Teaching experience | .503 | 1 | 0.478 |
| Marital status | 7.517 | 4 | 0.111 |
| Sex | 3.002 | 2 | 0.223 |
| Level of education | 1.394 | 3 | 0.707 |

** Significant effect on psychiatric morbidity at 95\% significance level

From the table 8 (above) it can be seen that from the model, the only socio demographic factor that significantly affects the morbidity of teachers is the
number of dependants. The other factors may have an effect on the psychiatric morbidity but it may not be significant.

Table 9 (below) gives further details on the estimated parameters from the model generated from the multinomial logistic curve of the socio-demographic factors and the psychiatric morbidity. The significance of the effect of a variable is shown in the last column, the factors with a p-value of less than 0.05 are considered significant.

The reference used in the table 9 (below) is having a psychiatric disorder, so the value of "B" shows how the variable has an effect on the psychiatric disorder, i.e. if the value of " B " is negative it means that if an individual falls within that category s/he is less likely to have psychiatric disorder, but if its positive it means that the individual with that is at risk of having a psychiatric disorder. In table 9 (below) the only factor with a significant effect is number of dependents, the value of $B$ is negative so it means that the higher the number of dependents the lower the risk of having psychiatric disorder. The other factors have no significant effect on the psychiatric morbidity of an individual since the significance in all the rest is more than 0.05 (considering that we are testing the significance at $95 \%$ Confidence level).

Table 9: Parameter Estimates

|  |  | B | Std. Error | df | Sig. (p-value) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teaching experience |  | -. 042 | 0.060 | 1 | 0.486 |
| Number of schools taught |  | . 104 | 0.082 | 1 | 0.202 |
| Age |  | . 012 | 0.065 | 1 | 0.847 |
| Number of dependants |  | -. 123 | 0.061 | 1 | 0.045 |
| Sex | Female | -. 631 | 2.203 | 1 | 0.775 |
|  | Male | -. 245 | 2.284 | 1 | 0.914 |
| Level of education | Primary teachers college | -. 637 | 0.656 | 1 | 0.331 |
|  | Diploma in education | -. 365 | 0.825 | 1 | 0.658 |
|  | Technical education | -. 026 | 1.639 | 1 | 0.987 |
|  | University education | O(b) | . | 0 | . |
| Marital status | Single | 1.791 | 1.305 | 1 | 0.170 |
|  | Married | 1.916 | 1.177 | 1 | 0.104 |
|  | Separated | 20.621 | 0.000 | 1 |  |
|  | Widowed | O(b) |  | 0 |  |

** implies that the factor has a significant effect on the psychiatric morbidity
a The reference category is: Have.
b This parameter is set to zero because it is redundant.

### 4.4.2 Work related factors.

Assuming that psychiatric morbidity is as a result of work related factors, we used the Multi-nomial logistic regression to try and come up with a model from the work related factors and examine how significantly each of the work related factors contribute to psychiatric morbidity. Among the factors considered include the position held by the teacher, if the teacher has ever been interdicted, leisure time, other jobs, studies working routine among others. Table (10) below was generated to show the likelihood of a factor having an effect if the work related factors were to be considered in generating a model for determining the
psychiatric morbidity of a subject. The results indicate that though the factors have an effect on the morbidity, the only work related factors that seem to have a significant effect on the psychiatric morbidity are participation in decision making and support from supervisors. The other factors that have some effect but not significant include worrying about being transferred among others.

Table 10: Likelihood Ratio Tests

| EFFECT | Chi-Square | df | Sig. |
| :--- | ---: | ---: | ---: |
| Position | .664 | 1 | .415 |
| Interdiction | 3.125 | 2 | .210 |
| Having time for leisure | 3.364 | 2 | .186 |
| Do you do other jobs other than teaching? | 2.344 | 2 | .310 |
| Undertaking studies | .921 | 1 | .337 |
| Decision making participation | 11.459 | 5 | .043 |
| Repetition at work | 7.089 | 5 | .214 |
| Support from supervisor | 8.377 | 3 | .039 |
| Support from colleagues | 1.181 | 3 | .758 |
| Worrying about unemployment | 1.457 | 1 | .227 |
| Worrying about transfer | 3.009 | 1 | .083 |
| Worrying about redundancy | 1.379 | 1 | .240 |
| Worrying about securing another job | 2.207 | 2 | .332 |
| Workload | 1.504 | 2 | .471 |
| Job satisfaction | .050 | 2 | .975 |
| Willingness to take up another same paying job | .622 | 2 | .733 |
| Social support | .200 | 2 | .905 |

Further details on how the factors affect the psychiatric morbidity is shown in table 11 (below) and how each work related factors affect psychiatric disorder. It can be noticed that most work related factors did not have any significant effect on the psychiatric morbidity of the subjects. The factors which had included participation in decision making, where it can be seen that the teachers who said
they participated in some way in making decisions at the work places at least more than half the time were less likely to have psychiatric disorders (since the value of " B " is negative and the reference is having a psychiatric disorder). Then the factor of receiving support from supervisors is also seen to be significant, it was found that those always or usually receiving support from supervisors tend to have psychiatric disorders. It may not necessarily mean that receiving support from one's supervisor is a risk factor, but it may mean that supervisors tend to give more support to those who have psychiatric disorders, in that the support from supervisors comes as a result of one having a psychiatric disorder. The other factors were not significantly varying between the ones having psychiatric disorders and those that did not have.

Table 11: Parameter Estimates

| Have at least one disorder(a) |  | B | Std. Error | df | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Position | Administrative | 17.317 | 3.169 | 1 |  |
|  | Non-administrative | 16.889 | 3.112 | 1 |  |
| Interdiction | Never interdicted | - | 000 | 1 |  |
|  | Ever interdicted | 0(b) |  | 0 |  |
| Having time for leisure | No | -. 939 | 644 | 1 | 145 |
|  | Yes | 0(b) |  | 0 |  |
| Decision making participation | Almost all working hours | -1.597 | 768 | 1 | .038** |
|  | 3/4 of working hours | -1.891 | 769 | 1 | .014** |
|  | 1/2 of working hours | -2.173 | 874 | 1 | .013** |
|  | 1/4 of working hours | . 400 | 1.288 | 1 | 756 |
|  | Seldom | -. 850 | . 818 | 1 | . 299 |
|  | Never | 0(b) |  | 0 |  |
| Support from supervisor | Always | 2.875 | 1.085 | 1 | .008** |
|  | Usually | 2.284 | 1.054 | 1 | .030** |
|  | Usually not | 2.277 | 1.187 | 1 | 055 |
|  | Never | 0(b) |  | 0 |  |
| Worried about transfer | No | 1.289 | 765 | 1 | 092 |
|  | Yes | O(b) |  | 0 |  |

** Significant effect
a The reference category is: Have.
b This parameter is set to zero because it is redundant.

## CHAPTER V

### 5.0 DISCUSSION

### 5.1 Introduction

The aim of this study was to find out the prevalence of psychiatric morbidity among public primary school teachers, employed by the TSC To the authors' knowledge, this is the first study focusing on work characteristics and sociodemographic factors associated with mental health problems in Kenyan primary school teachers.

### 5.2 Prevalence of Psychiatric Morbidity

The life time prevalence of psychiatric morbidity (Axis I) which was found to be $45.5 \%$ among the respondents is an important finding because this is the first time for such a finding in Kenya. The life-time prevalence found in this study is higher than the world's life-time prevalence as reported by WHO 2004, (25\%) and higher than that found in many other countries (33.33\%). Women have normally been found to have higher prevalence rates than males. This study has also found a higher prevalence in females (48.2\%) than males (42.3\%). WHO 2004, reports that Anxiety is the most common (2.4-18.2\%), followed by Mood Disorders ( $0.8 \%-9.6 \%$ ). While substance abuse disorders ( $0.1 \%-6.4 \%$ ) and impulse control disorders ( $0.0 \%-6.8 \%$ ) is consistently less prevalent. This is in line with findings in this study.

The current prevalence of Psychiatric morbidity of $41.4 \%$ among the respondents in this study is similar to that by Porto et al (2001) and Delcor et al, (2004) among teachers in Brazil, which found psychiatric morbidity at $44 \%$ and $41.5 \%$ respectively. It is however lower than that found by Landsmann (1979), among teachers in Chicago, (56.6\%), and that found by a different researchers; Nakai et al (2007)- (62.9\%), Kanai et al, (2005)- (50.8\%) and Kiatazoe \& Inoue (2004)(53.8\%) among Japanese teachers. It is however higher than what Moreno-Abril, (2007) (33\%), Claro \& Bedregal (2003) (32\%) and Perez et al, (2003) (29.8\%)
found among Spanish teachers, and that found by Waswa in (1990) (17.0\%), among student teachers at Kenya Teachers Training College.

The findings of this study seem to run contrary to the well established epidemiological data in psychiatry which show that the middle classes, ( where the majority of teachers fall) are relatively better protected against these disorders than the under privileged classes of the society where the highest prevalence rates are found, Rogler (1996), Stansfeld at el $(1998,1999)$ and Perry, (1996).

### 5.2.1 Depression

It was found that the prevalence of Major Depressive Episode among respondents was 11.5\%. Depression has been associated with other disorders such as substance abuse, Panic attacks and personality Disorders (Davidson \& Neal 2000). This is in line with this study where depression is also cormobid with same psychiatric disorders. According to DSM IV-R, prevalence of depressive disorder varies between $10 \%-25 \%$ for women and $5 \%-12 \%$ for men and is unrelated to education, income or marital status. The prevalence of depression in other studies was found to be $11.8 \%$ in females, $12.0 \%$ in males among Spanish teachers (Jurado et al 1998), which was similar to value found by Schonfeld (1990) among male New York teachers 13.0\%, and lower than that found by Hammen \& de Mayo (1982) among Los Angeles teachers (15.6\%). The latter figure was similar to the score (15.5\%) of the individuals reporting a problem with depression in Japan (Yokopenic et al 1983).

### 5.2.2 Dysthymia

Life time prevalence of Dysthymia was found to be $12.0 \%$. This is higher than the DSM IV-R lifetime prevalence which stands at $6 \%$. The author attributed this to the political climate at the time; the area was affected by election violence at the beginning of the year.

### 5.2.3 Suicidality

It was found that suicidality was $1.6 \%$ among the respondents. There was an interesting gender variation in suicidality as the prevalence was none recorded among the female teachers. This may also be related to the election violence. The researcher postulated that this could be because the males being the head of families may have been affected more by the violence because most of the IDPs in the Division are likely to be male than female.

### 5.2.4 Hypo (Manic) Episode

The life-time prevalence of Hypo (Manic) /Hypomanic episode was 6.8\%. This is higher than community samples $0.4 \%$ to $1.6 \%$ (DSM IV-R)

### 5.2.6 Panic Attack

This study found out that the prevalence of panic attack among the respondents was $3.1 \%$. This is lower than the DSM IV reported at $3.5 \%$ and higher than that found in other studies, which have found rates of between $1 \%$ and $2 \%$. Cropley et al, (1999), however found panic attack as one of the most prevalent psychiatric symptoms in school teachers, unlike this study which did not find panic attack as the most prevalent psychiatric symptom.

### 5.2.7 Anxiety

Anxiety symptoms were found to be higher than other psychiatric symptoms among the respondents. Crompton et al (1991) found that anxiety is higher in more traditionally oriented rural population; this is in line with this study. Anxiety disorders are comorbid with each other, (Davison and Neal, 2000). This was also found in this study (table 3).

### 5.2.8 Substance abuse and alcoholic use

Substance use and dependence was found to be very low (1.0\%). The most likely reason for this is probably underreporting. It is possible also that they may have reported what they thought was appropriate to the employer. The researchers experience is that many primary school teachers abuse alcohol and will never
report this. Even when they come to the TSC headquarters to sort out issues with the employer they would be under the influence of alcohol but would not admit.

The respondents did not report any use of non-alcoholic psycho-active substances. This again may be because the teachers reported what they thought was appropriate for them to report.

### 5.3 Association of Psychiatric morbidity with Social Demographic Factors

In this study the social demographic factors of age, gender, number of children/ dependants, marital status, home district, level of education, and present grade were used in the analysis.

### 5.3.1 Age

It was also found that there were very few teachers of ages between 20-35 years because of the unemployment due to the freezing of employment of teachers in the country and the overstaffing of teachers in the district which did not allow for replacement of those who exit service due to natural attrition and retirement.

### 5.3.2 Number of schools taught

Unexpectedly, the number of schools taught in was not a factor associated with psychiatric morbidity in this study. No known study to the author on this factor was found in the literature to compare findings.

### 5.3.3 Number of children/dependants

Teachers in this study with higher number of children/dependants were found to be less likely to have psychiatric morbidity. To the authors' knowledge, no comparison data are available in the literature. The researcher postulated that the large number of dependants in our social setting is supportive or protective in a way.

### 5.3.4 Gender

Being female has been associated with higher levels of psychiatric morbidity in other studies, (Orpinas \& Horne 2004, and Gater et al 1998). An explanation for this gender variation was advanced by by Mauner-Dorsch \& Eaton et al (1998), who found that women were more sensitive to psychological stress at the workplace in addition to being exposed to more job stress than men. Earlier research has also shown that women suffer higher psychiatric morbidity due to factors such as poor adaptation to life events (Kendler et al, 2001), or to the family or work setting (Hammen 2003). When a woman starts working outside the home, she bears dual responsibility. If she cannot discharge her duties effectively, tension creates stress that in turn may affect her mental health status. At the age of $40-45$ years, kinds of dual responsibility may in turn generate irritation, frustration, anxiety and depression (Singh \& Singh, 2006). Roxburgh (1996), advanced the explanation that may be it is due to differences in perception or vulnerability to work conditions.

This study however, did not find a significant difference between males and females. Although it was found that the females experienced more psychiatric morbidity ( $48.2 \%$ ) compared to the their male counterparts ( $42.3 \%$ ), there was no statistically significant difference.

The author postulated that lack of significant finding may be reflecting that gender issues in work stress are a non-issue in the study environment. This would be in keeping with the findings of Beer \& Beer (1992), on depression among primary school teachers in the developed world.

### 5.3.5 Marital status

This study found that there is no association between marital status and psychiatric morbidity. This is unlike other reports of Gone et al, (1983) and Thoits (1987), which found that married persons experience more psychological wellbeing than unmarried persons; and this was also confirmed by Rivicki \& May (1989) among staff nurses. This may be attributed to married persons having
more supportive resources and viewing events, including job related events in a manner that enhances well-being (Decker, 1997).

### 5.4 Association of Psychiatric morbidity with Work Characteristics

Work characteristics of position held at school, teaching experience, interdiction, time for leisure, workload, involvement in planning, support from supervisors, and coworkers and job security.

### 5.4.1 Position Held in the school

No significant effect was found between position held in the school and psychiatric morbidity in this study. This study suggests that teachers' mental health is less affected by the position within structural hierarchy.

### 5.4.2 Teaching Experience

Although teaching experience does not show a significant effect on psychiatric morbidity, the higher the experience one has the higher the presence of psychiatric morbidity. This can be explained by the fact that those with a higher experience may have had work stress longer than the other less experienced teachers.

### 5.4.3 Interdiction

It was also found out that, although Koibatek it is one of the Districts with many recorded interdicted teachers at the Commission that such teachers could not be found in this sample of teachers. The reason being no teachers were posted back to teach in this district after the said interdiction probably because of the overstaffing referred to earlier among other reasons. However, it was found that all the 4 teachers who reported they had been interdicted had suffered Major Depression Episode.

### 5.4.4 Time for leisure

Nagai et al, (2007), found that there is an increased likelihood of psychiatric morbidity among Japanese teachers with shorter time spent in leisure activities. This study found no association of psychiatric morbidity with more or less time spent on leisure activities. The author postulated that the way these teachers may have understood leisure may be different from those in previous study.

### 5.4.5 Workload

Perceived increase in workload was not associated with psychiatric morbidity among teachers in this study, unlike other studies among teachers in Western countries, Cropley et al (1999), Boyle et al (1995) and Dussault at el (1999) and Japan, Hata, (2000), who found that increased work load led to teacher psychiatric morbidity. This was also found in other occupational studies, Lee et al 1997 among Korean-Chinese hospital workers. In this study significant effect of workload does not show an effect on psychiatric morbidity in teachers. An explanation for this may be that Koibatek District has been overstaffed for over 10 years, and real overload may not exist as such. Records at the Commission show that it is overstaffed by over 600 teachers at the moment and the IDPs may have likely increased the teacher population. Job demands are likely to increase psychiatric morbidity, (Stansfeld et al 1999, Muirungi, 2008).

### 5.4.6 Involvement in planning work

No significant effect on psychiatric morbidity on this study was found on teachers who get involved in planning their work. The speculative explanațion given by the researcher is that teaching unlike other occupations, planning of ones work is always an individual's responsibility well stressed even during training

### 5.4.7 Decision making participation

Decision making participation was found to be unlikely to be associated with psychiatric morbidity, unlike in other cross-sectional studies of Warr, (1990) and Mausaer-Dorsch \& Eaton, (2000) and longitudinal studies of Niedhammer et al
(1998) and Stansfeld et al (1999). The author concluded that those who do not participate in making decisions already have other factors which make them to be mentally ill.

### 5.4.8 Support from supervisors and Co-workers

It is interesting, that in this study, support from supervisor was associated with psychiatric morbidity. Those who receive support always and usually were more likely to have psychiatric morbidity. The association was statistically significant for both sexes. While on face value this might imply that decreasing support on teachers by supervisors may be an effective strategy for improving mental health status among primary school teachers, it may actually be a false interpretation, because it could be that those responding by indicating they receive support from supervisors may be those who already have mental health problems. It is also common knowledge that teachers who keep seeing their supervisors especially the head-teachers are avoided by the other teachers because of the belief that they are "traitors" who report them to the head-teachers. This could then lead to isolation from other teachers and consequently poor mental health.

Although co-workers social support does not have any significant effect on the psychiatric morbidity of teachers in this study, more teachers who receive social support from co-workers have lesser psychiatric morbidity than those who do not receive social support from co-workers. Kones-Masfe'ty, (2006) found that lack of social support from colleagues was a factor for poor mental health status of teachers.

### 5.4.9 Job security

Contrary to expectations, worry about transfer was not found to have any significant impact on mental health in this study. Comparative research data on transfer in the literature was not available to compare findings.

This study, found no association between job dissatisfaction and psychiatric morbidity. The inability to secure another job was not likely to predict for
psychiatric morbidity in this study, for even older age or longer teaching experienced teachers. The researcher postulated that may be this is related to a system that makes it unlikely that a new employment opportunity will not be found if the teacher opts to change jobs. Studies have shown that work characteristics such as insecurity have an adverse effect on mental health among British civil servants, (Stansfeld, 1998, 1999 and Ferrie, 2002).

### 5.5 Association of Psychiatric morbidity with Personality

### 5.5.1 Prevalence

This study has revealed high comorbidity among personality disorder as well as Axis I clinical syndromes. Respondents found with at least one personality disorder were also found to have high prevalence of Axis I psychiatric morbidity (fig. 19).

The study found a prevalence of personality disorder of $67.5 \%$ among respondents. This is higher than the estimated $20 \%$ of people in the general population who are also known to have one or more personality disorders, Encarta (2006). There was no other study to compare this finding with.

### 5.5.2 Borderline Personality Disorder

Prevalence of borderline was found to be $22.5 \%$. This was higher than what was found by Coid (2001) among population in England and Wales. It was also found to be higher among males than females which were in agreement with findings of Coid, (2001), but contrary to Encarta (2006), which reports $75 \%$ to be female. This disorder has been found to be more prevalent in younger age groups, is associated with poor work history, and single marital status. It is co morbid with substance misuse, phobia and anxiety disorder and has a 9\% suicide rate (by age 30), Paris et al (1987, 1989; Stone 1990 \& Encarta 2006). This was in line with what was found in this study.

### 5.5.3 Anti-social Personality Disorder

Prevalence of anti-social personality disorder was found to be $3.7 \%$, higher among younger age group and about three times more in males than females, and highly comorbid with alcohol dependence. This is similar to what has been found in the Western societies, Coid (2001) \& Encarta (2006). In the Western countries prevalence has been found to be $3 \%$ in males and $1 \%$ in females.

### 5.5.4 OCPD

Prevalence of OCPD was found to be $23 \%$. This finding his higher than what has been found by studies in the West which stands at 1.7\%-2.2\%. Disorder was found to be higher in males, those with higher level of education, the married, and comorbid with anxiety disorders. This is similar to what has been found in Western studies, Coid, (1999).

### 5.5.5 Paranoid Disorder

Prevalence of paranoid disorder was found to be 56.3\%, higher than studies in the West and higher in females than males. Coid, (1999) found this category to be more common in males and cormobid with anti-social personality disorder. This finding may also be associated with election violence, because teachers who have just faced election violence are likely to be more paranoid than not.

### 5.4.6 Dependant Personality

Prevalence of dependant personality disorder was found to be 19.45\%, higher in males than females and comorbid with borderline personality disorder just like in the studies done in the Western countries, Coid, (1999).

## CHAPTER VI

### 6.0 Limitations, Conclusions and Recommendations

## 6. 1 Limitations

1. The selection of the study area may have been inappropriate in two ways thus: one, Koibatek District has been an over-staffed district for over 10 years therefore do not have interdicted teachers. Those who have been interdicted are later posted to other districts which are understaffed. The over-staffing in this district has led to no work overload. Two, it was also found out that most of the teachers come from this District. This then means less serious issues with work due to working from the home. Koibatek therefore compares poorly to other districts in this sense.
2. The timing of the study may also have brought in biases in that at the time of study the election violence had made most teachers from other districts as internal displaced persons (IDPs) in other neighbouring home districts or home districts. The study was carried out in the aftermath of massive postelection violence in this region, which resulted in displacement of teachers and may have contributed to an increase in the level of psychiatric morbidity in the community as a whole. Some of the teachers in this study were directly affected having been displaced from other districts.
3. Another limitation to this study was that the researcher was working with the teachers' employer, the TSC, and was well known to the respondents. Because of the known fact that teachers have fear of the employer, they may have answered some of the questions to please the employer rather than on what was happening to them. Nyavanga (2004) found out that teachers have a negative attitude towards the Commission Secretaria! staff. They perceive
them as people who only look for mistakes from them, so as to punish the teacher but not help unless bribed.
4. Possible bias may have been introduced by non-responders who were absent from their stations (schools), or may have completed the questionnaires incorrectly and intentionally. While the reasons are not clear, this may be due to factors related to psychiatric morbidity. Some of the teachers who were on temporary leave and did not participate may also have been on sick leave because of poor mental health. This bias may result in the underestimation of the prevalence of psychiatric morbidity in the selected population of schoolteachers.
5. Health problems in this study was in part self reported . Self reporting on minor or past events is likely to be prone to anamnestic error since some of the information was collected for a life time period. This could then result in an under estimation or overestimation of the prevalence.
6. The tools of MINI PLUS and the Personality Screening Inventory (P) tools have not been used here in Kenya therefore, cultural appropriateness is not assured. There is a need to repeat the use of these tools in other Kenyan population.

In spite these limitations this is the first study of this type in Kenya and provides data for future similar studies.

### 6.2 Conclusion

This study found primary teachers to have high prevalence of psychiatric morbidity which is related in part to socio-demographic factors and work related
maracteristics. The study also found high prevalence of personality disorders wich are related to psychiatric disorders (Axis I).

### 6.3 Recommendations

1. The employer in this case the TSC, should put in place a system to identify the mentally sick teachers and an intervention for the same instead of only using punitive measures
2. A longitudinal research studies regarding causal relationships between sociodemographic factors, work related characteristics should be done among school teachers in Kenya so to ascertain the psychiatric morbidity causal factors.
3. The ministry of Education should put in place better medical check up for primary teachers so that they are aware of the mental status of the teachers before they are even taken in Teacher Training Colleges. This may eventually reduce the prevalence of psychiatric morbidity in the primary teachers.
4. Depression and other psychiatric illnesses among the teachers who are interdicted should be studied so as to come up with a way of managing the illness rather than punishing the teachers because this in the end increases stress on the punished and depressive episodes or other psychiatric illness among these teacher.
5. Some form of assessment, rehabilitation and possibly retraining is necessary for teachers suffering from psychiatric disorders in a form of occupational health service. The Ministry of Education and the Commission should employ psychologists deployed to the Districts, or Educational Zones who can easily identify, treat, and refer such teachers for appropriate mental health treatment.

Budget
a) Proposal Preparation

1. Proposal Typing and Printing
Kshs. 1,200
2. Photocopies
Kshs. 3,000
3. KNH Ethical Committee Fees
Kshs. 500
4. 1 Flash Memory [1GB]
Kshs. 4,000
b) Materials and Equipment
5. 5 Pens Kshs. 100
6. 3 Box Files Kshs. 900
7. Packet Staples Kshs. 300
8. 1 Stapler Kshs. 500
c) Preparation of Questionnaires
9. Typing Kshs. 200
10. Printing

Kshs. 400
3. Photo copying

Kshs. 16,000
d) Support Staff

1. Researcher ( 30 days $x$ Kshs. 4,000 / day) Kshs. 120,000
2. Collecting Data (4x10daysxKshs.1000/day) Kshs 40,000
3. Biostatician Kshs 30,000
e) Transport

| 1. Of researcher within Nairobi | Kshs. | 8,000 |
| :--- | :---: | ---: |
| 2. Of researcher to study area | Kshs. | 10,000 |
| 3. of researcher around the study area | Kshs. | 20,000 |
| 4. Of Data Collection (4x10daysx500/day) | Kshs. | 20,000 |

f) Communication

1. Concept and Proposal Preparation Kshs ..... 2,500
2. E-mail Kshs ..... 2,000
g) Preparation of Final Report
3. Typing Preliminary ResultsKshs. 1,000
4. Photo copies for Supervisors Kshs ..... 3,000
5. Final draft typing ..... Kshs. 3,000
6. Printing of Final Report Kshs. ..... 5,000
7. Binding of 10 copies of the Research Books Kshs. ..... 5,000
h) Total costs
8. Sub totalKshs. 170,000
9. Contingency ( $10 \%$ ) Kshs. 17,000
10. Grand total Kshs. 187,000

Research Study Time Schedule

| Number | Activity | Period |
| :---: | :---: | :---: |
| 1. | Preparation of Research Topic | July to September $2007$ |
| 2. | Research Concept Preparation | $\begin{aligned} & \text { October to December } \\ & 2007 \end{aligned}$ |
| 3. | Research Proposal Development and Presentation to Department | $\begin{aligned} & \text { Jan } 2^{\text {nd }} \text { to March } 14^{\text {th }} \\ & 2008 \end{aligned}$ |
| 4. | Presenting Proposal to KNH Ethical Committee | $\begin{aligned} & \text { March } 28^{\text {th }} \text { to } 2^{\text {nd }} \text { May } \\ & 2008 \end{aligned}$ |
| 5. | Data Collection | $\begin{aligned} & \text { May } 12^{\text {th }} \text { to May } 23^{\text {rd }} \\ & 2008 \end{aligned}$ |
| 6. | Data Analysis and Presentation of Results to the Department | $\begin{aligned} & \text { May } 26^{\text {th }} \text { to June } 13^{\text {th }} \\ & 2008 \end{aligned}$ |
| 7. | Writing of the Discussion and Presentation to the Department | June $16^{\text {th }}$ to July $4^{\text {th }}$ 2008 |
| 8. | Final Preparation of the Study, Binding and Presentation to the Department | $\begin{aligned} & \text { July } 4^{\text {th }} \text { t0 } \\ & \text { July } 11^{\text {th }} \\ & 2008 \end{aligned}$ |

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## Dear Teachers,

My name is Eunice J. Nyavanga, a Master of Science Clinical Psychology student at the Department of Psychiatry, University of Nairobi. I am carrying out a study to determine the psychiatric morbidity and its relationship with work characteristics among public primary school teachers in Koibatek District, Mogotio Division. This is part fulfillment for the degree award. I am being supervised by

\author{

1. Prof. D. Ndetei (Tel. No. 0722518365) <br> Professor of Psychiatry, University of Nairobi
}
2. Dr. W. Kuria (Tel. No. 0722755681)

Lecturer of Psychiatry, University of Nairobi.
3. Dr. W. Mathai (Tel. No. 0727329904)

Lecturer of Psychiatry, University of Nairobi.

I am requesting you to participate in the study voluntarily by completing a set of questionnaires that ask you about your socio-demographic data, general heath and personality characteristics. The socio-demographic questionnaire has been developed by me while the other two instruments have been developed and used in many studies in various parts of the world.

This study has been approved by Kenyatta National Research and Ethical committee, and permitted by Ministry of Education Science and Technology.

Your participation is completely voluntary and you may withdraw your participation anytime in the course of completing the questionnaire. I also request you that if you accept to complete the questionnaire, please do so as truthfully as possible. It takes about 40 minutes to complete. Do not write any personal identity. Anonymous serial numbers will be used to ensure confidentiality. Once you have filled the questionnaires, please fold and insert into the envelopes provided and seal them before inserting in the ballot boxes provided. This data will only be accessible to the researcher and will be used for purposes of research only.

There are no risks to you except that it may be painful emotionally. You will not directly benefit for participating in the study, but you may want to talk to somebody if you identify with the symptoms being inquired. You may also get in touch with me or my supervisors on the contacts provided below. The TSC who is your employer and the Ministry of Education, Science and Technology will get copies of the findings and the recommendation which they may use to improve your work environment.

If you choose to complete the questionnaires, it will be an indication that you have voluntarily consented to participate in the study. If you need clarification you can get in touch with me or my supervisors whose telephone numbers are indicated above against their names.

Thank You in Advance,
Eunice J. Nyavanga
Tel. No. 0722626240 Or 2892030 (office) Or 0202374290 (House)

Department of Psychiatry
University of Nairobi

## Appendix 2: Consent by Study Participants:

$\qquad$
been explained the nature of the study
by.
of P.O.
Box........................................................................... I therefore do hereby give
consent to participate in the study. I understand I can withdraw from participation in the study. I also understand that I can withdraw anytime before the data collection is over without any penalties or being victimized.

Name

Signature
Date

Witnessed by
Signature
Date

## Page 2

## Page 3

Research Permit No....... 13/001/38C 262
Date of issue. $22 \cdot \mathrm{~F} .2 .2008$
Fee received. SHS. 500


## MINISTRY OF HIGHER EDUCATION SCIENCE \& TECHNOLOGY

Telegrans: "SCIENCE TEC", Nairohi<br>Telephone: 02-318581<br>E-Mailpsoscienceandtechnology.goke<br>When Replying please quote<br>Ref. MOHEST 13/001/38C $26 / 2$<br>Eunice Jemelel Nyavanga<br>University of Nairobi<br>P.O. Box 30197<br>NAIROEI

30GOO MOUSE "B"<br>HARAMBEE A VENUE,<br>P.O. Box $9583-00200$<br>NAIROBI

$22^{\text {sd }}$ May 2008

## RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on, Psychiatric Morbidity among Public Primary School Teachers at Mogotio Division in Koibatek District'

I am pleased to inform you that you have been authorized to carry out research in Koibatek District for a period ending $29^{\text {th }}$ February 2008.

You are advised to report to the District Commissioner and the District Education Officer Koibatek before embarking on your research project.

On completion of your research, you are expected to submit two copies of your research report to this office.

M. O. ONDIEKI<br>FOR: PERMANENT SECRETARY

KENYATTA NATIONAL HOSPTMA
Hospita: Rd along, Ngong Rd P.O. 30: $207 \% 3-20202$ Nairo3i

Tal $2726300-8$
Fax: 725272
Telegrams: MGDStip", Naisobi Email: khadmingent:or ke

REf: KNH-ERO O1S405
20\% May 2008
Eundia demele: Nyavang
Dept of Psyentiady
FO. Box $199^{7} 6$
HAROR
Dear Eurage
 KOIBATEK DISTRICT MOGOTHO DISTRICT:
\{P72142008\}

This is to inform you that the kenyata Netiona Hospitak Ebtur and Research Conmitoe has reviewed and approved your above revised reseath monosel for the period 20w way, 2008 19\% 緮苟, 2009

 Kati-ERC lor gach natch.
 the research tindings upon complation of the study.
 research stucy su as to mhmize mances of sudy dumivation.

Yous sincerey


PROF A A GUANTA
SECRETAPY KNH-ERC
c.c. Pof M M Bnatt Charperson WWHERO

The Tepay Dreator OS, ©NH
The Chamen, Dept of Pavenaty, Won
Supervisore: Prof Devid Naciel, Dent of Pscinary, bod
Dr. Muman manni, Bept. of Ps, iniatry, WoN
Or. Wergenkana Dept of Peycriatry, UoN

Appendix 6: Study Instruments:
This questionnaire has three parts, $a, b$, and $c$. each part has instructions. Please the instructions carefully and complete ALL parts as carefully as possible as it applies to you. It will only take you about 30 to 40 minutes to complete.

## Section A: Socio-demographic characteristics:

We want to know some of your social demographic factors and work characteristics. Please read this questionnaire as carefully as possible and complete ALL the parts as they apply to you.

## Social Demographic Questionnaire:

1. Employment
a) When were you employed by the TSC ?
b) How long have you been teaching?
c) Have you broken service with the TSC? $\square$ Yes
d) If yes explain
e) How many other schools you have been taught
2. School factors
a) Number of students in the school.
b) Number of teachers in the school.
c) How long have you been teaching in this school? years.
d) How many hours do you teach every day.
e) What subjects do you teach?
f) Which class do you teach?
g) How many students are in your class?
3. Type of school
a) Urban $\square \quad$ rural $\square$
b) Boarding $\qquad$ day
c) Mixed
boys
girls
4. Age.
5. Sex male $\square \quad$ female
6. Religion
a) Catholic
b) Protestant
c) Muslim
d) Traditional
e) Other
(Specify)
7. Residence
a) town
b) rural home
c) own house

## 8. Ancestral home

a) District
b) Province

## 9. Level of education

a) Primary
b) secondary education
c) primary teacher training
d) diploma in education
e) technical education
f) university education
g) other
h) (specify)

## 10. Present grade

a) P 2
b) P3
c) P 1
d) AT IV
e) Diploma in Education
f) University Degree in Education
g) Other (Specify)

## 11. Household income

a) monthly
i) Salary
ii) Other income

## 12. Marital status

a) Single
b) Married
c) Separated
d) Widowed
e) Divorced
13. Form of marriage
a) Polygamous
b) Monogamous
c) Other
d) (Specify)

## 14. Number of children/ dependants

15. Region:
a) Protestant
b) Catholic
c) Muslim
d) Non-Committed
e) Any other
f) Specify

## 16. Work related characteristics

a) Are you
i) A Head teacher
ii) Deputy Head teacher
iii) Senior Teacher
iv) Class Teacher
v) Any other
vi) Specify
b) Have you ever been interdicted? Yes $\square \quad$ No $\square$

If Yes
i) What was the accusation?

- Absenteeism
- Carnal Knowledge
- Desertion
- Alcoholism
- Any other

Specify
ii) Did the commission punish you $\quad$ Yes $\square \quad$ No $\square$
iii) How were you punished by the Commission?

- Suspension
- Dismissal
- Salary recovery
- Demotion
- Warning
- Any other
- Specify


## c) Quantitative demands

i) Is your amount of work so extensive that you do not have time to think and talk about anything else than work?
$\square$ Almost all working hours $\square 3 / 4$ of working hours $\square 1 / 2$ of working hours
$\square 1 / 4$ of working hours $\square$ Seldom
Never
ii) Do you have time for leisure?
$\square \quad$ Yes
$\square \quad$ Yes
$\square \quad$ No
iii) Do you do other jobs other than teaching?
$\square \quad$ Yes
$\square \quad$ No

## d) Influence at work

i) In your work, is it possible for you to decide your work pace?
$\square$ Almost all working hours
$\square 3 / 4$ of working hours
$\square 1 / 2$ of working hours

- $1 / 4$ of working hours
$\square$ seldom
Never
ii) Are you involved in planning your work?
$\square$ Always
$\square$ usually
$\square$ usually not
$\square$ Never
iii) Do you receive information on those decisions that affect your work place?
i) Does your work require that you repeat the same work tasks many times per hour?
- Almost all working hours
$\square 3 / 4$ of working hours
$\square 1 / 2$ of working hours
[ $1 / 4$ of working hours
$\square$ seldom
$\square$ Never
ii) Do you have the possibility to learn new things and to qualify yourself at work?
$\square$ Always
$\square$ usually
$\square$ usually not
$\square$ Never
iii) Is your work varied?
$\square$ To a large extent $\quad \square$ To some extent $\quad \square$ only to a less extent $\square$ not at all


## f) Social Support from supervisors

i) Do you receive support from supervisors?
$\square$ Always $\quad \square$ usually $\quad \square$ usually not $\quad \square$ Never
$\square$ Do not have a supervisor
g) Social Support from coworkers
i) Do you receive support from your coworkers?
$\square$ Always $\quad \square$ usually $\quad \square$ usually not $\square$ Never $\square$ do not have coworkers

## h) Job insecurity

i) Are you worried about any of the following?

- Becoming unemployed
$\square$ Yes $\square$ Yes

NoNo

- Having difficulty in securing another job if you became unemployed
i) How would you describe your workload?
i) Overworked Yes
No
ii) Under worked Yes
iii) Normal Yes No
j) Are you currently undertaking any studies as you work fully? Yes
k) Are you satisfied with your job? Yes No

1) If you had the opportunity to get another job outside teaching, which pays exactly the same salary, would you take it up? Yes No
m) In the last 12 months, how many days
i) Did you stay away from work on sick leave.
ii) Did you sometimes take an off to see a doctor or visit a hospital
iii) Did you stay away from work for other reason.
iv) Specify the reasons
n) Do you feel there is ample social support for you at your place of work
10. I've never been arrested.

TRUE FALSE DK RF
11. At times I've done things that could get a person arrested.

TRUE FALSE DK RF
12. I usually feel bad when I hurt or upset someone.

TRUE FALSE DK RF
13. At times l've refused to hold a job, even when I was expected to.

TRUE FALSE DK RF
14. I will lie or con someone if it serves my purpose.

TRUE FALSE DK RF
15. I lose my temper and get into physical fights.

TRUE FALSE DK RF
16. I take chances and do reckless things.

TRUE FALSE DK RF
17. it's hard for me to stay out of trouble.

TRUE FALSE DK RF
18. At times I fail to meet my financial obligations.

TRUE FALSE DK RF
19. At times l've intentionally damaged things that weren't mine.

TRUE FALSE DK RF
20. I will give false information about myself if it will help me get a job or impress someone.

TRUE FALSE DK RF
21. I argue or fight when people try to stop me from doing what I want.

TRUE FALSE DK RF
22. My feelings are like the weather, they're always changing.

TRUE FALSE DK RF
23. Sometimes I get so angry I break or smash things.

TRUE FALSE DK RF
24. I let others make my big decisions for me.

TRUE FALSE DK RF
25. I usually feel uncomfortable or helpless when l'm alone.

TRUE FALSE DK RF
26. I often seek advice or reassurance about everyday decisions.

TRUE FALSE DK RF
27. I keep to myself even when there are other people around.

TRUE FALSE DK RF
28. People think I'm too strict about rules and regulations.

TRUE FALSE DK RF
29. People think l'm too stiff or formal.

TRUE FALSE DK RF
30. I feel awkward or out of place in social situations.

TRUE FALSE DK RF
31. People often make fun of me behind my back.

TRUE FALSE DK RF
32. I prefer activities that I can do by myself.

TRUE FALSE DK RF
33. l've held grudges against people for years.

TRUE FALSE DK RF
34. I'm convinced there's a conspiracy behind many things in the world. TRUE FALSE DK RF

## Section C: PART ONE: MINI SCREEN:

In this section we are asking you a few questions about your health. In part one choose YES or NO as it applies to you. If you choose YES for any of the questions, then go to part two to answer the questions in that module as shown by the module arrow. IF you choose NO then you do not answer any of the modules in the corresponding Module.

## MINI SCREEN

Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks ?

In the past two weeks, have you been much less interested in most things or much less able to enjoy the things you used to enjoy most of the time ?

Have you felt sad, low or depressed most of the time for the last two years ?
In the past month did you think that you would be better off dead or wish you were dead?
> Have you ever had a period of time when you were feeling 'up' or 'high' or 'hyper' or so full of energy or full of yourself that you got into trouble, or that other people thought you were not your usual self? (Do not consider times when you were intoxicated on drugs or alcohol.)
Have you ever been persistently irritable, for several days, so that you had arguments or verbal or physical fights, or shouted at people outside your family? Have you or others noticed that you have been more irritable or over reacted, compared to other people, even in situations that you felt were justified?
> Have you, on more than one occasion, had spells or attacks when you suddenly felt anxious, frightened, uncomfortable or uneasy, even in situations where most people would not feel that way? Did the spells surge to a peak, within 10 minutes of starting ?
Code YeS only if the spells peak within 10 minutes.
Do you feel anxious or uneasy in places or situations where you might have a panic attack or panic-like symptoms, or where help might not be available or escape might be difficult : like being in a crowd, standing in a line (queue), when you are away from home or alone at home, or when crossing a bridge, traveling in a bus, train or car?
> In the past month were you fearful or embarrassed being watched, being the focus of attention, or fearful of being humiliated? This includes things like speaking in public, eating in public or with others, writing while someone watches, or being in social situations.
> In the past month have you been bothered by recurrent thoughts, impulses, or images that were unwanted, distasteful, inappropriate, intrusive, or distressing? (e.g., the idea that you were dirty, contaminated or had germs, or fear of contaminating others, or fear of harming someone even though you didn't want to, or fearing you would act on some impulse, or fear or superstitions that you would be responsible for things going wrong, or obsessions with sexual thoughts, images or impulses, or hoarding, collecting, or religious obsessions.)

If YES, go to the corresponding M.I.N.I. module目

In the past month, did you do something repeatedly without being able to resist doing it, like washing or cleaning excessively, counting or checking things over and over, or repeating, collecting, or arranging things, or other superstitious rituals ?
, Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else? EXAMPLES OF TRAUMATIC EVENTS INCLUDE SERIOUS ACCIDENTS, SEXUAL OR PHYSICAL ASSAULT, A TERRORIST ATTACK, BEING HELD HOSTAGE, KIDNAPPING, FIRE, DISCOVERING A BODY, SUDDEN DEATH OF SOMEONE CLOSE TO YOU, WAR, OR NATURAL DISASTER.
, Did you respond to the trauma with intense fear, helplessness, or horror ?
, During the past month, have you re-experienced the event in a distressing way (such as, dreams, intense recollections, flashbacks or physical reactions)?
> In the past $\mathbf{1 2}$ months, have you had 3 or more alcoholic drinks within a 3 hour period on 3 or more occasions?
> Now I am going to show you / READ THE LIST BELOW of street drugs or medicines. In the past $\mathbf{1 2}$ months, did you take any of these drugs more than once, to get high, to feel better, or to change your mood?

| amphetamines | speed | crystal meth | Dexedrine | Ritalin, diet pills, rush |
| :--- | :--- | :--- | :--- | :--- |
| cocaine | crack | freebase | speedball |  |
| heroin | morphine, methadone | opium | Demerol | codeine, Percodan, OxyContin |
| LSD | mescaline | PCP, angel dust | MDA, MDMA | ecstasy, ketamine |
| inhalants | glue | ether | GHB | steroids |
| THC, marijuana | cannabis, hashish | grass | weed, reefer | barbiturates, Valium, Xanax, Ativan |

$>$ How tall are you?
____| inches | _ | _ | _ | lbs

What was your lowest weight in the past 3 months?
IS PATIENT'S WEIGHT LOWER THAN THE THRESHOLD CORRESPONDING TO HIS / HER HEIGHT ? SEE TABLE BELOW

| Height (ft in) | $4^{\prime} 9$ | $4^{\prime} 10$ | $4^{\prime} 11$ | $5^{\prime} 0$ | $5^{\prime} 1$ | $5^{\prime} 2$ | $5^{\prime} 3$ | $5^{\prime} 4$ | $5^{\prime} 5$ | $5^{\prime} 6$ | $5^{\prime} 7$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weight (lbs) | 81 | 84 | 87 | 89 | 92 | 96 | 99 | 102 | 105 | 108 | 112 |
| Height (ft in) | $5^{\prime} 8$ | $5^{\prime} 9$ | $5^{\prime} 10$ | $5^{\prime} 11$ | $6^{\prime} 0$ | $6^{\prime} 1$ | $6^{\prime} 2$ | $6^{\prime} 3$ |  |  |  |
| Weight (lbs) | 115 | 118 | 122 | 125 | 129 | 132 | 136 | 140 |  |  |  |

> In the past three months, did you have eating binges or times when you ate a very large amount of food within a 2 -hour period ?
> In the last $\mathbf{3}$ months, did you have eating binges as often as twice a week ?
> Have you worried excessively or been anxious about several things over the past 6 months?

| NO | YES | $\rightarrow$ M |
| :---: | :---: | :---: |
| NO | YES | $\rightarrow \mathrm{N}$ |
| NO | YES | $\rightarrow \mathrm{N}$ |
| NO | YES | $\rightarrow 0$ |

## PART TWO: MINI PLUS:

In this part answer only the modules which you have answered YES in part one above. Leave the others blank.

## A. MAJOR DEPRESSIVE EPISODE

Have you ever been consistently depressed or down, most of the day, nearly every day, for at least two weeks?

Have you been consistently depressed or down, most of the day, nearly every day, for the past 2 weeks?
Have you ever been much less interested in most things or much less able to enjoy the things you used to enjoy most of tetime over at least 2 weeks?

In the past 2 weeks, have you been much less interested in most things or much ble to enjoy the things you used to enjoy most of the time.

IS A1a OR A2a CODED YES?
NO YES

IF CURRENTLY DEPRESSED ( $\mathbf{A} \mathbf{1 b}$ OR A2b = YES): EXPLORE ONLY CURRENT EPISODE.
IF NO: EXPLORE THE MOST SYMPTOMATIC PAST EPISODE.
A3 Over the two week period when you felt depressed or uninterested,

## Current Episode

a Was your appetite decreased or increased nearly every day? Did your weight decrease or increase without trying intentionally NO YES
(I.E., BY $\pm 5 \%$ OF BODY WEIGHT OR $\pm 8$ LBS. OR $\pm 3.5 \mathrm{KGS}$.

FOR A 160 LB. $/ 70$ KGS. PERSON IN A MONTH)?
If YES TO EITHER, CODE YES.
b Did you have trouble sleeping nearly every night (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)?
c Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day?

| d Did you feel tired or without energy almost every day? | NO | YES |
| :--- | :--- | :--- | NO YES

e Did you feel worthless or guilty almost every day? NO YES NO YES IF $\mathbf{A 3 e}=\mathbf{Y E S}:$ ASK FOR AN EXAMPLE.
The example is consistent with a delusional idea. o No o yes

```
Did you have difficulty concentrating or making decisions almost every day? NO
Did you repeatedly consider hurting yourself, feel suicidal. or wish that you
were dead?
ARI 3GPMORE. A3 ARSWTRS(0)HFT) YES(OR 4 A 3 ANSWTRS.
```






```
SYMPYODAATICPASI FPISND..
Did the symptoms of depression cause you significant distress or impair your ability to function at work, socially, or in some other important way?
Are the symptoms due entirely to the loss of a loved one (bereavement) and are they similar in severity, level of impairment, and duration to what most others would suffer under similar circumstances?
If so, this is uncomplicated bereavement.
```


## HAS UNCOMPLICATED BEREAVEMENT BEEN RULED OUT?

```
\begin{tabular}{cc|cc} 
NO & YES & NO & YES \\
NO & YES & NO & YES \\
& & & \\
NO & YES & NO & YES
\end{tabular}
```






```
SYMPYOMATIC PASI FPISADA. NO YES
```

Were you taking any drugs or medicines just before these symptoms began? $\pi$ No $\pi$ Yes
b Did you have any medical illness just before these symptoms began?

$$
\pi \text { No } \pi \text { Yes }
$$

IN THE CLINICIAN'S JUDGMENT: ARE EITHER OF THESE LIKELY TO BE DIRECT
CAUSES OF THE PATIENT'S DEPRESSION? IF NECESSARY ASK ADDITIONAL
OPEN-ENDED QUESTIONS.

A7 (SUMMARY): HAS AN ORGANIC CAUSE BEEN RULED OUT?

NO YES UNCERTAIN

NO
YES

Major Depressive Episode

| Current | 0 |
| :--- | :--- |
| Past | 0 |

NO
YES

Mood Disorder Due to a General Medical Condition

| Current | 0 |
| :--- | :--- |
| Past | 0 |

NO
YES

Substance Induced Mood Disorder
Cuncit
Past

During your lifetime, how many distinct times did you have these symptoms $\square$

MAJOR DEPRESSIVE EPISODE WITH MELANCHOLIC FEATURES (optional)
( MFACS: GOTOTHE DHAGNOSIIC BOX, (IRCIE NO, AND MONE TO THE NEXT MODH LE.)


During the most severe period of the current depressive episode, did you lose almost
NO YES
completely your ability to enjoy nearly everything?
b During the most severe period of the current depressive episode, did you lose your ability
NO YES
to respond to things that previously gave you pleasure, or cheered you up?
IF NO, DOUBLE CHECK ANSWER BY ASKING:
When something good happens, does it fail to make you feel better, even temporarily?

IS EITHER A13a OR A13b CODED YES?
NO YES

Over the past two week period, when you felt depressed and uninterested:
a Did you feel depressed in a way that is different from the kind of feeling
NO YES
you experience when someone close to you dies?
b Did you feel regularly worse in the morning, almost every day?
NO YES
c Did you wake up at least 2 hours before the usual time of awakening and
NO YES
have difficulty getting back to sleep, almost every day?
d IS A3c CODED YES (PSYCHOMOTOR RETARDATION OR AGITATION)?

| NO | YES |
| :---: | :---: |
| NO | YES |
| NO | YES |

ARE 3 OR MORE A14 ANSWERS CODED YES?
$\mathrm{NO} \quad$ YES

Major Depressive Episode with
Melancholic Features, Current

STPES OF MA.JOR DEPRESSIVE EPISODE
Mild
Moderate
Severe without psychotic features
Severe with psychotic features
In partial remission
In full remission
Chronic
With catatonic features
With melancholic features
With atypical features
With postpartum onset
With seasonal pattern
With full interepisode recovery
Without full interepisode recovery

Mark all that apply.
296.21/296.31
296.22/296.32
296.23
296.24
296.25
296.26

A8OR A 9 OR A $10=$ YES, SKIP TO SUICIDALITY

## B. DYSTHYMIA

( Means : Go to the diagnostic box, Circle no, and move to the next module)
Ipatient's symptoms currently meet criteria for major depressive episode, do NOT explore current dystlymia, but do explore PAST dysthymia. Make sure that the past dystlymia explored is not one of the past major depressive episodes, and that it was eparated from any prior major depressive episode by at least 2 months of full remission. [APPLY THIS RULE ONLY IF YOU IRE INTERESTED IN EXPLORING DOUBLE DEPRESSION.]

SPECIFY WHICH TIME FRAME IS EXPLORED BELOW:<br>o Current<br>o Past

B1 Have you felt sad, low or depressed most of the time for the last two years?
NO YES
(OR IF EXPLORING PAST DYSTHYMIA: "In the past, did you ever feel sad, low or depressed for 2 years continuously?")

B2 Was this period interrupted by your feeling OK for two months or more? NO YES

B3 During this period of feeling depressed most of the time:
a Did your appetite change significantly? NO YES
b Did you have trouble sleeping or sleep excessively? NO YES
c Did you feel tired or without energ?? NO YES
d Did you lose your self-confidence? NO YES
e Did you have trouble concentrating or making decisions? NO YES
f Did you feel hopeless"? NO YES

ARE 2 OR MORE B3 M MSHIRS CODED IES'?

Did the symptoms of depression cause you signiticant distress or impair your NO

## D. (HYPO) MANIC EPISODE





Parl 1 (ai Moinllf M (Psychotic Disordeks Ml-M18)



 FACH PMSHIVE RHSPO:SE TO THI FOLLOWING QUESTIONS If THE (HYPO)MANIC SYMPTOMS ARE NOT BETTER EXPLAINED BY THE PRESFNCI. OA A PSYCHOTIC DISORDER AND CODF ACCORDIN(A.Y.
a Have you ever had a period of time when you were feeling 'up' or 'high' or 'hyper' or so full of energy or full of yourself that you got into trouble, or that other people thought you were not your usual self? (Do not consider times when you were intoxicated on drugs or alcohol.)

IF NO, CODE NO TO D1b: IF YES ASK:
b Are you currently feeling 'up' or 'high' or 'hyper' or full of energy?
NO YES

If PATIENT IS PUZZLED OR UNCLEAR ABOUT WHAT YOU MEAN BY 'UP' OR 'HIGH', CLARIFY AS FOLLOWS: BY 'UP' OR 'HIGH' OR 'HYPER' I MEAN: HAVING ELATED MOOD; INCREASED ENERGY; NEEDING LESS SLEEP; HAVING RAPID THOUGHTS; BEING FULL OF IDEAS; HAVING AN INCREASE
IN PRODUCTIVITY, MOTIVATION, CREATIVITY, OR IMPULSIVE BEHAVIOR.
D2 a Have you ever been persistently irritable, for several days, so that you NO YES had arguments or verbal or physical fights, or shouted at people outside your family? Have you or others noticed that you have been more irritable or over reacted, compared to other people, even in situations that you felt were justified?

IF NO, CODE NO TO D2b: IF YES ASK:
b Are you currently feeling persistently irritable?
NO YES

IS D1a OR D2a CODED YES?
NO YES

D3 IF D1b OR D2b = YES: EXPLORE ONLY CURRENT EPISODE, OTHERWISE IF D1b AND D2b = NO: EXPLORE THE MOST SYMPTOMATIC PAST EPISODE

During the times when you felt high, full of energy, or irritable did you:
a Feel that sou could do things others couldn't do. or that you were an especially important person?
IF TES. ASK FOR EXAMPIFS.
The examples are consishent hithadelusional idea. $\pi$ No $\pi$ Yes
b Need less sleep (for example, feel rested after only a few hours sleep)?
c Talk too much whout stopping, or so fast that people had difficulty understanding"?
d Have racing thoughts:

| Current Episode |  | Past Episode |  |
| :---: | :---: | :---: | :---: |
| NO | YES | NO | Y'ES |
| NO | YES | NO | YES |
| NO | YES | NO | YES |
| NO) | YES | NO | Y'ES |



Were you taking an: drugs or medicines just before these symptoms began?

$$
\pi \text { No } \pi \text { Yes }
$$

Did you have any medical illness just before these s:mptoms began?

$$
\pi \text { No } \quad \pi \mathrm{Yes}
$$

IN THE CLINICIAN'S JUDGMENT: ARE EITHER OF THESE LIKELY TO BE DIRECT CAUSES OF THE PATIENT'S (HYPO)MANIA? IF NECESSARY, ASK ADDITIONAL OPEN ENDED QUESTIONS.

D4 (SUMMARY): HAS AN ORGANIC CAUSE BEEN RULED OUT?

| NO | YES | UNCERTAIN |  |
| :--- | :--- | :--- | ---: |
| NO | YES | NO | YES |

Did these symptoms last at least a week and cause problems beyond your
control at home, work, school, or were you hospitalized for these problems?
IF D5 IS CODED NO FOR CURRENT EPISODE, THEN EXPLORE D3, D4 ANU D5 FOR THE MOST SYMPTOMATIC PAST EPISODE.

IF D3 (SUMMARY) = YES AND D4 (SUMMARY) = YES OR UNCERTAIN AND D5 = NO, AND NO DELUSIONAL IDEA WAS DESCRIBED IN D3a. CODE YES FOR HYPOMANIAC EPISODE.

SPECIFY IF THE EPISODE IDENTIFIED IS CLRRENT OR PAST.

| NO | YES |
| :--- | :---: |
| HYPOMANIC EPISODE |  |
| Current | 0 |
| Past |  |


| NO | YES |
| :--- | :---: |
| MANIC EPISODE |  |
|  |  |
| Current | 0 |
| Past | 0 |

```
IF D3 (SUMMARI) AND DHb AND D5 IES AND D& (SUMMARY) = NO. ( C ()E YES'?
```

SPECIFY IF THEEPISODE HDENTHIID) ISCLRRINOR OASI.

If D 3 (SUMMARY) AND D4a AND D5 = YES AND D4 $($ SUMMARY $)=\mathrm{NO}$,

If D8 OK D9 = YES, (GOTONEXTMODUIE

## UBTYPES

Rapid Cycling

```
NO YES
```


## Rapid Cycling

Have you had four or more episodes of mood disturbance in 12 months?

Mixed Episode
PATIENT MEETS CRITERIA FOR BOTH MANIC EPISODE AND MAJOR DEPRESSIVE EPISODE NEARLY EVERY DAY DURING AT LEAST A ONE WEEK PERIOD.

## NO <br> YES

Mixed Episode

NO
YES

## Seasonal Pattern

THE ONSET AND REMISSIONS OR SWITCHES FROM DEPRESSION TO MANIA OR HYPOMANIA CONSISTENTLY OCCUR AT A PARTICULAR TIME OF YEAR.

With Full Inter-episode Recovery
Between the two most recent mood episodes did you fully recover?

CIRCLE ONE

MOST RECENT EPISODE WAS A MANIC / HYPOMANIC / MIXED / DEPRESSED EPISODE

## SEVERITY

| X1 | Mild | 0 |
| :--- | :--- | :--- |
| X2 | Moderate | 0 |
| X3 | Severe without psychotic features | 0 |
| X4 | Severe with psychotic features | 0 |
| X5 | In partial remission | 0 |
| X6 | In full remission | 0 |

CHRONOLOGY
D10 How old were you when you first began having symptoms of manic hypomanic episodes?age

D11 Since the first onset how many distinct times did you have significant symptoms of mania hypomania?

## E. PANIC DISORDER


a Have you, on more than one occasion, had spells or attacks when you suddenly felt an*ious,
frightened, uncomfortable or uneasy, even in situations where most people would not feel
that way?
b Did the spells surge to a peak within 10 minutes of starting?

At any time in the past. did any of those spells or attacks come on unexpectedly or

NO

Have you ever had one such attack followed by a month or more of persistent concern
about having another attack, or worries about the consequences of the attack?

During the worst spell that you can remember:
frightened, uncomfortable or uneasy, even in situations where most people would not feel that way?
b Did the spells surge to a peak within 10 minutes of starting?
a Did you have skipping, racing or pounding of your heart? NO
YES
b Did you have sweating or clammy hands? NO
YES
c Were you trembling or shaking? NO YES
d Did you have shortness of breath or difficulty breathing? NO
e Did you have a choking sensation or a lump in your throat? NO
$f$ Did you have chest pain, pressure or discomfort? NO YES
g Did you have nausea, stomach problems or sudden diarrhea? NO
h Did you feel dizzy, unsteady, lightheaded or faint? NO
i Did things around you feel strange, unreal. detached or unfamiliar. or did you feel outside of or detached from part or all of your body?
j Did you fear that you were losing control or going crazy? NO
$k$ Did you fear that you were dying? NO
1 Did you have tingling or numbness in parts of your body? NO
$m$ Did you have hot flushes or chills? NO
E4 (SLMMARY): ARE 4 OR MORE E4 ANSWERS CODED IES? NO
Were you taking any drugs or medicines just before these symptoms began?
$\pi$ No $\pi$ Yes
b Did you have any medical illness just before these symptoms began.?
$\pi$ No $\pi$ les

CAUSES OF THE PATHETSPANICDISORDHR?
E5 (SUMMARI): HIS ANORGANIC゚ CAISH BHINRUIEDOU1゙. NO

If E6 YES, SKIPTOE8.

II EG NO, ARE ANY E4 ANSWIR'SCODED YES?

THANSKFTOF1
NO YES
LIMITEDSMMPIO:
ATTACAS
1.1HTMI

In the past month, did you have such attacks repeatedly (2 or more), followed by persistent concern about having another attack?
(H HHIS IS DHNIED) BY THEPATHENI-CHAILENGEBY REVIEWING THE SYMPTOMS ENDORSED IN E4).

ARE E3 AND E4 (SUMMARY) AND E5b ALL CODED YES
AND E5 (SUMMARY) CODED NO?
NO YES
PANIC DISORDER (I RRESI

NO
YES

Anxiety Disorder with Panic Attacks Due to a
General Medical Condition CURRENT

NO
YES

Substance Induced Anxiety Disorder with Panic Attacks CURRENT

## CHRONOLOGY

How old were you when you first began having symptoms of panic attacks?


During the past year, for how many months did you have significant symptoms of panic attacks or worries about having an attack?

## F. AGORAPHOBIA

Have you ever felt anxious or uneasy in places or situations where you might have a panic NO YES attack or the panic-like symptoms we just spoke about, or where help might not be available or escape might be difficult: like being in a crowd, standing in a line (queue), when you are alone away from home or alone at home, or when crossing a bridge, traveling in a bus, train or car?

If $\mathrm{FI}=\mathrm{NO}$. (IRClE NO IN F2AND AF F3.

Have you ever feared these situations so much that you avoided them. or suffered through them, or needed a companion to face them?

Do you NOW fear or avoid these places or situations?

F4 a IS PANIC DISORDER, CURRENT (E8), CODED YES, AND IS AGORAPHOBIA, CURRENT (F3), CODED NO?

CHECK ONLY IF YES
IS AGORAPHOBIA CODED YES?
IS PANIC DISORDER CODED YES?
F2 o lifetime F3 o current
E6 o lifetime E8 o current

## NO

YES
AGORAPHOBLA
LIFETIME
b IS PANIC DISORDER, CURRENT (E8), CODED YES, AND IS AGORAPHOBIA, CURRENT (F3), CODED YES?
c IS PANIC DISORDER, LIFETIME (E6). CODED NO, AND IS AGOR APHOBIA. CURRENT (F3), CODED YES?

NO
YES

## AGORAPHOBIA

 CURRENTPanic Disorder, Current without AGORAPHOBIA

## NO <br> YES

Panic Disorder, Current
with
AGORAPHOBI.A

NO YES
AGORAPHOBIA, CURRENT
without history of
Panic Disorder

NO
YES
AGOR:1PHOBIA, CURRENT
without current Panic
Disorder but with a past
history of Panic Disorder

How old were you when you first began to fear or avoid these situations (agoraphobia)?


During the past year. for how many months did you have significant fear or avoidance
 of these situations (agoraphobia)?

## G. SOCIAL PHOBIA (Social Anxiety Disorder)

( means: go to the diagnostic box, circle no, and move to the next modlie)

Gl In the past month, were you fearful or embarrassed being watched, being the focus of
 attention, or fearful of being humiliated? This includes situations like speaking in public, eating in public or with others, writing while someone watches, or being in social situations.


## SUBTYPES

Do you fear and avoid 4 or more social situations?
NO

If YES $\Pi$ generalized social phobia (social anxiety disorder)
If NO $\Pi$ social phobia (social anxiety disorder), not generalized

## CHRONOLOGY

G5 How old were you when you first began to fear social situations?
G6 During the past year, for how many months did have you have significant fear of socialsituations?

## H. SPECIFIC PHOBIA



In the past month, have you been excessively afraid of things like: flying.
driving, heights, storms, animals, insects, or seeing blood or needles?


## CHRONOLOGY

How old were you when you first began to fear or avoid this situation?


During the past year, how many times have you had significant fear of this situation? $\square$

## I. OBSESSIVE-COMPULSIVE DISORDER

above a NO means : GO to the diagnostic boxes, circle NO in all diagnostic boxes, and move to the next module)

In the past month, have you been bothered by recurrent thoughts, impulses, or images that were NO YES
unwanted, distasteful, inappropriate, intrusive, or distressing? (For example, the idea that you were dirty, contaminated or had germs, or fear of contaminating others, or fear of harming someone even though you didn't want to, or fearing you would act on some impulse, or fear or superstitions that you would be responsible for things going wrong, or obsessions with sexual thoughts, images or impulses, or hoarding, collecting, or religious obsessions.)
(DO NOT INCLUDE SIMPLY EXCESSIVE WORRIES ABOUT REAL LIFE PROBLEMS. DO NOT INCLUDE OBSESSIONS directly related to eating disorders, sexual deviations, pathological gambling, or alcohol or drug abuse because the patient may derive pleasure from the activity and may want to resist it ONLY BECAUSE OF ITS NEGATIVE CONSEQUENCES.)

Did they keep coming back into your mind even when you tried to ignore or get rid of them?

Do you think that these obsessions are the product of your own mind and that they are not imposed from the outside?
$\underset{\substack{\text { No } 14 \\ \text { NO }}}{\substack{\text { YES }}}$

NO YES
obsessions

In the past month, did you do something repeatedly without being able to resist doing it, like
washing or cleaning excessively, counting or checking things over and over, or repeating, collecting, arranging things, or other superstitious rituals?

## IS 13 OR 14 (ODID IES?

Did you recognize that either these obsessional thoughts or compulsive behaviors were excessive or unteasonable?

Did these obsessions or compulsions significantly interfere with your normal routine, NO

YES occupational functioning. usual social activities, or relationships, or did they take more than one hour a day?

17 a Were you taking any drugs or medicines just before these symptoms began?

$$
\pi \text { No } \pi \text { Yes }
$$

b Did you have any medical illness just before these symptoms began?

$$
\pi \text { No } \quad \pi \text { Yes }
$$

IN THE CLINICIAN'S JUDGMENT: ARE EITHER OF THESE LIKELY TO BE DIRECT
CAUSES OF THE PATIENT'S OBSESSIVE COMPULSIVE DISORDER?
I7 (SUMMARY): HAS AN ORGANIC CAUSE BEEN RULED OUT?
NO YES

ARE I6 AND I7 (SUMMARY) CODED YES?


## CHRONOLOGY

110 How old were you when you first began having symptoms of OCD?


111 During the past year, for how many months did you have significant symptoms of OCD?

## J. POSTTRAUMATIC DIKEDS עISUNDEN (Up:evere;

( MIANS : (GOTOTHF DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TOTHE NEXT MOHULE.
Have yon ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else?
EXAMPLES OF TRAUMATIC EVENTS INCLUDE: SERIOUS ACCIDENTS, SEXUAL OR PHYSICAL ASSAUIT,
A TERROIST ATTACK., BEING HELD HOSTAGE, KIDNAPPING, FIRE, DISCOVERING A BODY, SUDDEN
DEATH OF SOMEONE CLOSE TO YOU, WAR, OR NATURAL DISASTER.
Did you respond with intense fear, helplessness or horror?
During the past month, have you re-experienced the event in a distressing way
(such as, dreams, intense recollections, flashbacks or physical reactions)?
In the past month:
a Have you avoided thinking about or talking about the event?
b Have you avoided activities, places or people that remind you of the event?
NO
c Have you had trouble recalling some important part of what happened?
NO
d Have you become much less interested in hobbies or social activities?
e Have you felt detached or estranged from others? NO
YES
$f$ Have you noticed that your feelings are numbed? NO
$g$ Have you felt that your life will be shortened or that you will die sooner than other people?
J4 (SUMMARY): ARE $\mathbf{3}$ OR MORE J4 ANSWERS CODED YES?
In the past month:
a Have you had difficulty sleeping?
b Were you especially irritable or did you have outbursts of anger?
NO
c Have you had difficulty concentrating? NO
d Were you nervous or constantly on your guard?
e Were you easily startled?
J5 (SLMMARY): ARE 2 OR MORE $\mathbf{J 5}$ ANSWERS CODED YES?
During the past month, have these problems significantly interfered with !our work or

## (HRONOLOCY

How old were you when you first began having symptoms of PTSD? $\square$
Since the first onset how many illness periods of PTSD did you have?
During the past year, for how many months did you have significant symptoms of PTSD? $\square$

## K. ALCOHOL ABUSE AND DEPENDENCE

( MEANS: GOTOTHE DIAGNOSTIC BOXFS, (IRCLE NO IN BOTH AND MONE TOTHF NEXT OPTIONAL K. MODULE)

In the past 12 months, have you had 3 or more alcoholic drinks within a 3 hour
NO YES period on 3 or more occasions?

In the past 12 months:
a Did you need to drink more in order to get the same effect that you got when you first
NO YES started drinking?
b When you cut down on drinking, did your hands shake, did you sweat or feel agitated?
NO YES Did you drink to avoid these symptoms or to avoid being hungover. for example, "the shakes", sweating or agitation? If YES to either question, code YES.
c During the times when you drank alcohol, did you end up drinking more than you
NO YES planned when you started?
d Have you tried to reduce or stop drinking alcohol but failed?
NO YES
e On the days that you drank, did you spend substantial time in obtaining NO

YES alcohol, drinking, or in recovering from the effects of alcohol?
f Did you spend less time working, enjoying hobbies, or being with others because of NO YES your drinking?
g Have you continued to drink even though you knew that the drinking caused you health NO YES or mental problems?

ARE 3 OR MORE K2 ANSWERS CODED YES?
$\therefore$ IF YES, SKIP K3 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

K3 In the past 12 months:
a Have you been intoxicated, high, or hungover more than once when you had other
NO YES responsibilities at school, at work, or at home? Did this cause any problems? (CODE YES ONLY IF THIS CAUSED PROBLEMS.)
b Were you intoxicated more than once in any situation where you were physically at risk, NOS for example. driving a car, riding a motorbike, using machinery, boating, etc.?
c Did you have legal problems more than once because of your drinking, for example. NO YES an arrest or disorderly conduct?
d Did you continue to drink even though your drinking caused problems with your
NO YES family or other people?

(Optional) K. LIFETIME ALCOHOL ABUSE AND DEPENDENCE



K4 Did you ever have 3 or more alcoholic drinks within a 3 hour NO YES period on 3 or more occasions?

K5 In your lifetime:
a Did you need to drink more in order to get the same effect that you did when you first NO YES started drinking?
b When you cut down on drinking did your hands shake, did you sweat or feel agitated? NO YES Did you drink to avoid these symptoms or to avoid being hungover, for example, "the shakes", sweating or agitation? IF YES TO EITHER QUESTION, CODE YES.
c During the times when you drank alcohol, did you end up drinking more than you NO YES planned when you started?
d Have you tried to reduce or stop drinking alcohol but failed? NO YES
e On the days that you drank, did you spend substantial time in obtaining NO YES alcohol, drinking, or in recovering from the effects of alcohol?
f Did you spend less time working, enjoying hobbies, or being with others because of NO YES your drinking?
g Have you continued to drink even though you knew that the drinking caused you health NO YES or mental problems?

ARE 3 OR MORE K5 ANSHERS CODED YES?

* IF YES, SKIP K6 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

```
ALCOHOL DEPENDENCE LIFETIME
```

In your lifetime:
K6 a Have you been intoxicated, high. or hungover more than once when you had other responsibilities at school, at work, or at home? Did this cause any problems? (Code yes only if this calised problems.)
b Were you intoxicated in any situation where you were physically at risk. NO YES
for example, driving a car, riding a motorbike, using machinery, boating, etc.?
c Have you had any legal problems because of your drinking. NO YES for example, an arrest or disorderly conduct?
d Have you comtimued to drink even though your drinking caused problems with NO YES your family or other people?

## L. NON-ALCOHOL PSYCHOACTIVE SUBSTANCE USE DISORDERS


Now I am going to show you/read to you a list of street drugs or medicines.
a Have you ever taken any of these drugs more than once to get high, to feel better, NO YES or to change your mood?

## CIRCLE EACH DRUG TAKEN:

Stimulants: amphetamines, "speed", crystal meth, "crank","rush", Dexedrine, Ritalin, diet pills.
Cocaine: snorting, IV, freebase, crack, "speedball".
Narcotics: heroin, morphine, Dilaudid, opium, Demerol, methadone, codeine, Percodan, Darvon, OxyContin.
Hallucinogens: LSD ("acid"), mescaline, peyote, PCP ("Angel Dust", "peace pill"), psilocybin, STP, "mushrooms", ecstasy, MDA, MDMA or ketamine ("special K").

Inhalants: "glue", ethyl chloride, "rush", nitrous oxide ("laughing gas"), amyl or butyl nitrate ("poppers").
Marijuana: hashish ("hash"), THC, "pot", "grass", "weed", "reefer".
Tranquilizers: Quaalude, Seconal ("reds"), Valium, Xanax, Librium, Ativan, Dalmane, Halcion, barbiturates,
Miltown, GHB, Roofinol, "Roofies".
Miscellaneous: steroids, nonprescription sleep or diet pills. Any others?
Specify MOST USED Drug(s): $\qquad$

ONLY ONE DRUG / DRUG CLASS HAS BEEN USED

ONLY THE MOST USED DRUG CLASS IS INVESTIGATED.

EACH DRUG CLASS USED IS EXAMINED SEPARATELY (PHOTOCOPY L2 AND L3 AS NEEDED)
b SPECIFY WHICH DRUG/DRUG CLASS WILL BE EXPLORED IN THE INTERVIEW BELOW IF THERE IS CONCURRENT OR SEQUENTIAL POLYSUBSTANCE USE:

L2 Considering the (name of drug / drug class selected), in your lifetime:
a Have you found that you needed to use more (name of drug / drue class selected) NO YES to get the same effect that you did when you first started taking it?
b When you reduced or stopped using (name of drug / drug class selected), did you NO YES have withdrawal symptoms (aches, shaking, fever, weakness, diarrhea, nausea, sweating, heart pounding, difficulty sleeping, or feeling agitated, anxious, irritable. or depressed)? Did you use any drug(s) to keep yourself from getting sick (withdrawal symptoms) or so that you would feel better.? IF TES TOHTHER QUESTION CODE VES
c Have you often found that when you used (name of drug / drug class selected). NO YES
you ended up taking more than you thought you would?
d Have you tried to reduce or stop taking (name of drug / drug class selected), but failed?
e On the days that you used (name of drug / drug class selected), did you spend substantial NO YES
time ( -2 hours) in obtaining, using or in recovering from drug(s), or thinking about drug(s)?
f Did you aend less time working, enjoying hobbies, or being with famiiy or friends NO YES because of your drug use?
\& Have you continued to use (name of drug / drug class selected) even though it caused NO YES you health or mental problems?

ARE 3 (OR MORE L2 ANSWERS CODED YES?

SPECIFY DRUG(S): $\qquad$

L3 a Have you used (most used drug, any drug) in the past 12 months?
b ARE 3 OR MORE L2 ANSWERS CODED YES WITHIN THE PAST 12 MONTHS?
NO YES

ARE L3a AND b CODED YES?
SPECIFY DRUG(S): $\qquad$ NO YES* ${ }^{*}$

## * IF YES, SKIP L4 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX FOR THIS SUBSTANCE AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

| NO | YES |
| :---: | :---: |
| SUBSTANCE DEPENDENCE |  |
| LIFETIME |  |
| 1 |  |
|  | YES |
| NO | YES |
| NO | YES** |
| SUBSTANCE DEPENDENCE CURRENT |  |

Considering your use of (name the drug / drug class selected), in the past 12 months:
L4 a Have you been intoxicated, high, or hungover from (name of drug / drug class selected)
NO YES
more than once, when you had other responsibilities at school, at work. or at home?
Did this cause any problem? (Code yes only if this Caused problems.)
b Have you been high or intoxicated from (name of drug / drug class selected)
NO YES
more than once, in any situation where you were physically at risk, (for example, driving a car, riding a motorbike, using machinery, boating, etc.)?
c Did you have legal problems more than once, because of your drug use.
NO YES for example.an arrest or disorderly conduct?
d Did you continue to use (name of drug / drug class selected) even though it caused
NO YES
problems with your family or other people?

ARE 1 OR MORE LA ANSWERS CODED YES?
SPECIFY DRUG(S): $\qquad$
NO N/A YES

SUBSTANCE ABUSE CURRENT

CHRONOLOGY
1.5 How old were you when you first began having problems with drug abuse?

