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

Ву

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This is to certify that this dissertation work has been carried out independently by Eunice Jemalel Nyavanga MSc. Clinical Psychology and has been submitted and approved by the Kenyatta National Hospital Ethics. and Review Committee for review and evaluation with our approval as University 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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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 personality-related 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.
- 12. **TSC** Teachers Service Commission
- 13. **UK** United Kingdom
- 14. **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 1/3rd 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.

- 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

- 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.
- To compare the psychiatric morbidity in the male and female teacher populations.
- 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 co-workers 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 colleagues 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 non-teachers 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

- 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.

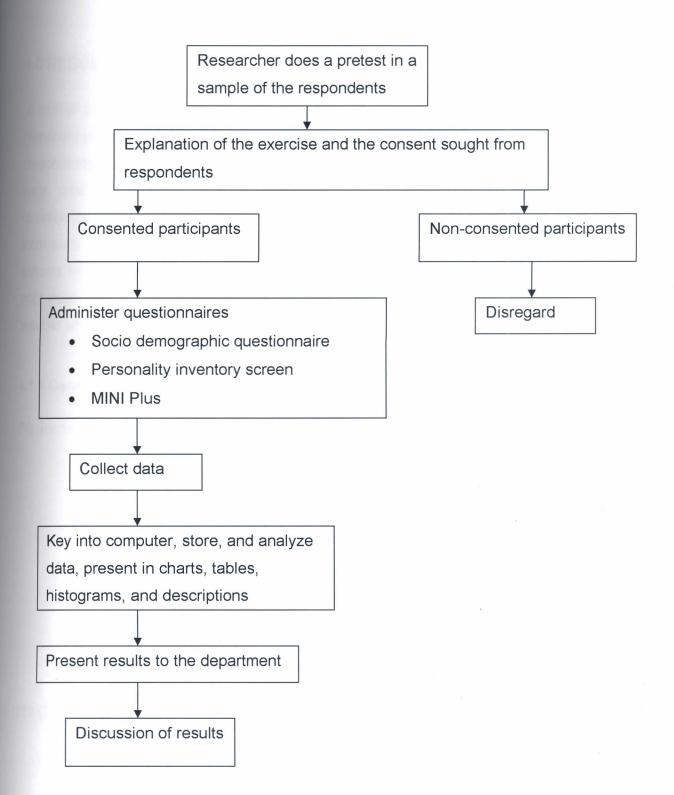
The purpose of the study was explained to the study subjects and a written informed consent was obtained before participants were included in the study. It was explained that participation was voluntary and failure to volunteer would not affect the teacher in anyway.

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



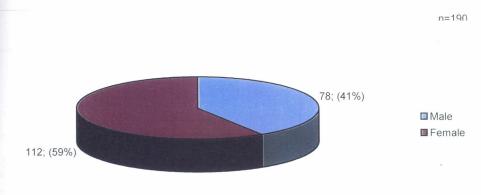
CHAPTER IV

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

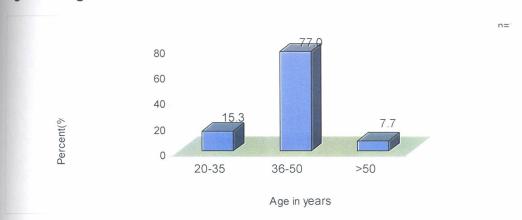
Demographic factor	Groups	Major Depressive Episode	Dysthamia	Suicidality	(Hypo) Manic episode	Panic disorder	Agora phobia	Social phobia	Specific phobia	OCD	PTSD	Alcohol abuse and dependence
	20 to 35	0	14.3	0	0	3.6	14.3	0	10.7	10.7	0	0
Age group	36 to 50	14.2	12.8	1.4	8.5	2.8	8.5	5	9.2	6.4	1.4	0.7
(years)	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	0 to 4	10.8	12.1	1.3	7	3.2	9.6	3.2	10.2	8.3	0.6	0.6
schools taught	5 or more	14.7	11.8	2.9	5.9	2.9	8.8	5.9	8.8	0	2.9	2.9
schools taught	Overall	11.5	12	1.6	6.8	3.1	9.4	3.7	9.9	6.8	1	1
	Female	13.4	11.6	0	5.4	1.8	8.9	4.5	13.4	8.9	0.9	0
Sex	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
	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
Marital status	Separated	0	0	0	0	0	0	0	0	0	0	0
Maritar Status	Widowed	28.6	0	0	14.3	0	14.3		28.6	14.3	0	0
	Not stated	0 -	100	<i>y</i> 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
	Koibatek	12.2	12.7	1.7	6.6	2.8	9.4	3.9	10.5	6.6	1.1	0.6
Home district	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	(Hypo) Manic episode	Panic disorder	Agora phobia		Specific phobia	OCD	PTSD	Alcohol abuse and dependence
	Primary teachers training	12.7	11.4	1.9	7	3.2	10.8	3.8	11.4	5.7	1.3	1.3
Level of education	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
	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	
Present grade	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
	Less than 5	9.2	9.2	0	3.9	1.3	11.8	2.6	11.8	6.6	1.3	0
Number of	6 to 10	12.6	14.6	2.9	7.8	3.9	7.8	4.9	9.7	7.8	1	1.9
children/dependants	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

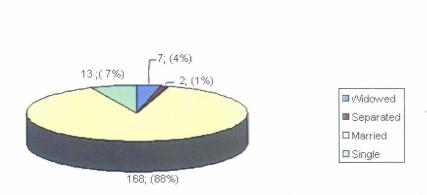


Most teachers 141 (77%) were between the ages of 36-50 years, 28 (15.3%) were between the ages of 20-35 and 7.7 (4%) were over the age of 50. the mean age was 41.28, minimum age was 30, maximum age 55 and range was 25.

n=190

4.1.3 Marital status

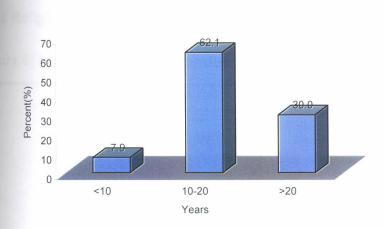
Figure 3: Marital Status



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

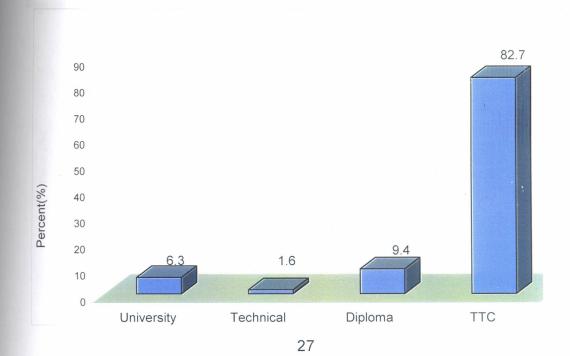
Figure 4: Teaching experience



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

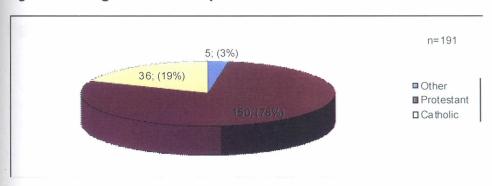
Figure 5: Level of education



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

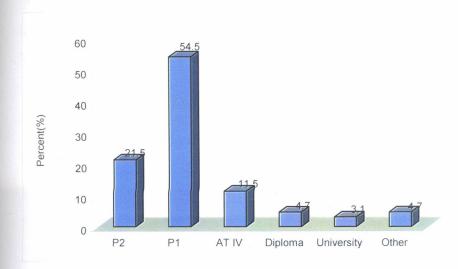
Figure 6: Religion of the respondents



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

4.1.7 Respondents Present Grade

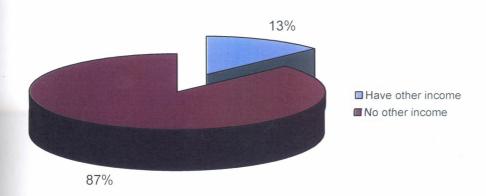
Figure 7: Respondents present grade



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

4.2 Work Characteristics

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

	Position held a	at school	Teac	hing expe	rience	Numl	per of	Inter	dictio
				(years)		schools	taught	n	
	Administrative	Other	< 10	10 - 20	> 20	0 - 4	<u>></u> 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

	×				Wor	k related fac	tors					
Psychiatric Disorder	Do you have time for leisure?		Do you do other jobs other than teaching?		study	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	13.2	9.4	10.9	6.8	10.4	14.3	8.5	18.0	0.0	0.0		
Episode												
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 r	eceive su	oport from sup	ervisors?	Do you receive support from your coworkers?			
	Always	Usually	Usually not	Never	Always	Usually	Usually 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 t		at the same wo	ork tasks mar	y times per
	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)

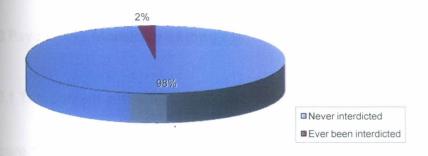
Psychiatric disorder	about	Are you worried about becoming unemployed?		u worried It being red against r will?	about l redunda	Are you worried about becoming redundant because of new technology?		worried about difficulty in another job if become mployed?
M	No	Yes	No	Yes	No	Yes	No	Yes
Major Depressive 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 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 yo	ou describe your	workload?	,	satisfied our job?	Possibility of taking another same paying job outside teaching		
	Overworked	Under worked	Normal	No	Yes	Will not	Will take	
Major Depressive Episode	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 disorder	6.4%	0.0%	8.2%	8.2%	5.4%	5.1%	6.9%	
Posttraumatic Stress Disorder	1.1%	0.0%	1.2%	0.0%	0.9%	1.0%	1.4%	
Alcohol abuse and dependence	1.1%	0.0%	1.2%	1.6%	0.0%	1.0%	1.4%	

4.2.1 Interdiction of the respondents

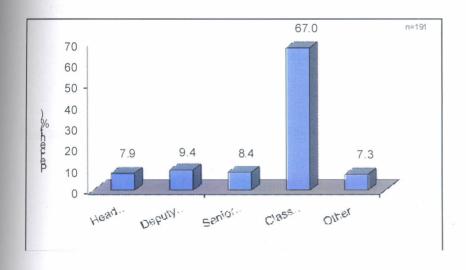
Figure 9: Interdiction of the respondents



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

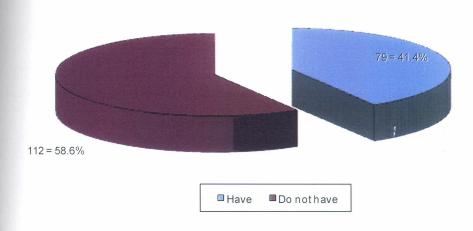


49 (25.7%) held administrative positions in the school while 142 (74.3%) did not hold any administrative positions (head-teachers, Deputy head teachers and senior teachers) in the school. 7.9% were head teachers, 9.4% deputy head teachers, 67.0% class teachers while 7.3% held other positions in the school.

4.3 Psychiatric Morbidity among respondents

4.3.1 The current prevalence of psychiatric morbidity

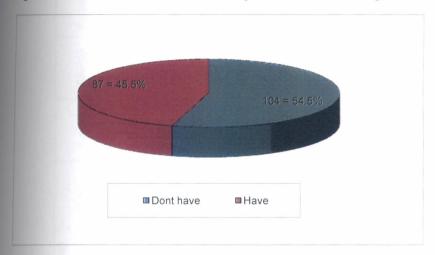
Figure 11: Current prevalence of psychiatric morbidity



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



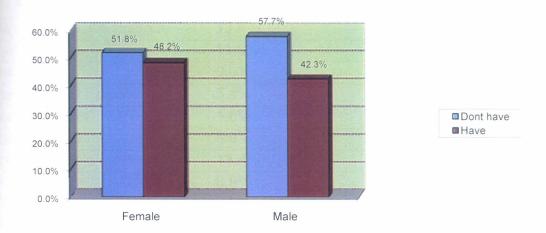
It was found out that the life time prevalence of Axis I Psychiatric Morbidity among teachers was 45.5 %, while 54% have had no Axis I Psychiatric Morbidity

Table 3: Psychiatric Morbidity Cormobidity

N.	Major			(Hypo)							
	Depressive			Manic	Panic	Agora	Social	Specific			Alcohol
	Episode	Dysthamia	Suicidality	episode	disorder	phobia	phobia	phobia	OCD	PTSD	use
Major depressive	100.0%	36.4%	4.5%	13.6%	0.0%	13.6%	13.6%	9.1%	4.5%	4.5%	4.5%
episode		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

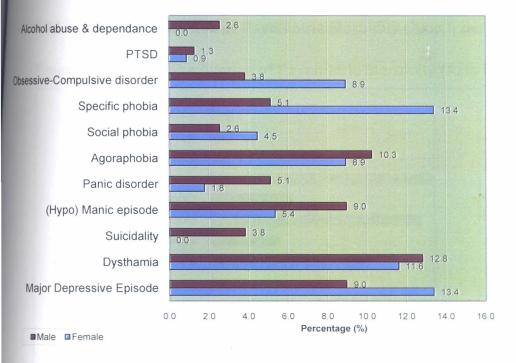


Table 4: Prevalence of different psychiatric morbidity by gender was found to be as follows

	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%	20
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)

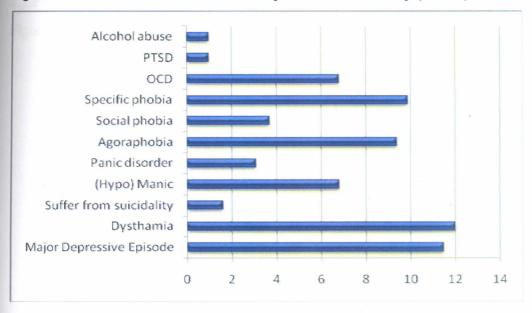


Table 5: Psychiatric Morbidity Prevalence Types

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

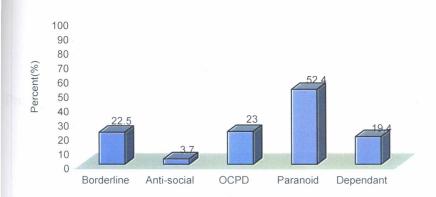
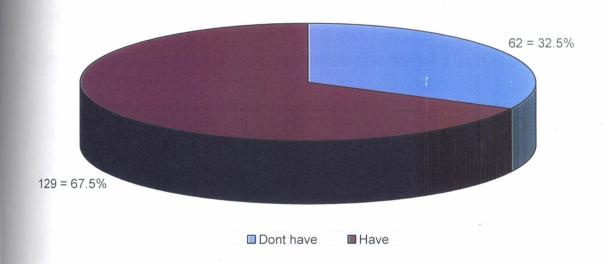


 Table 6: Personality Disorders (percentages and frequencies)

	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

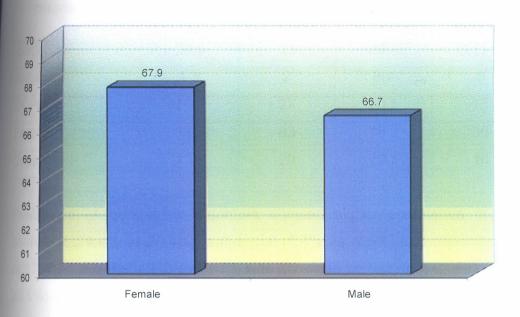
Prevalence of Personality Disorders (Axis II Psychiatric Disorders were found to be as follows Borderline 22.5%, Anti-social 3.7%, OCPD 23%, Paranoid 52.4% and Dependant Personality 19.4%.

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

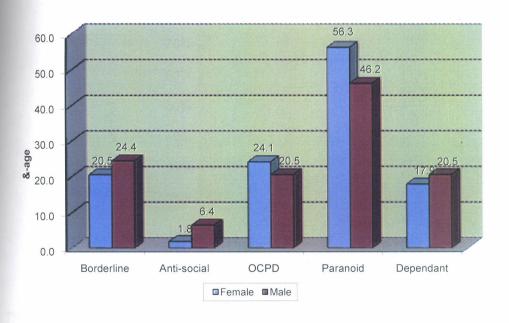


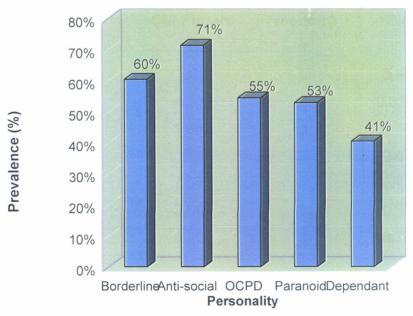
 Table 7: Personality per gender (percentages and frequencies)

personality	Female %	Female number	Male %	Male 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

The same of		В	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	Primary teachers college	637	0.656	1	0.331
education	Diploma in education	365	0.825	1	0.658
	Technical education	026	1.639	1	0.987
	University education	0(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	0(b)		0	

^{**} implies that the factor has a significant effect on the psychiatric morbidity

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

a The reference category is: Have.

b This parameter is set to zero because it is redundant.

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)		В	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	No	939	.644	1	.145
leisure	Yes	0(b)		0	
Decision making	Almost all working hours	-1.597	.768	1	.038**
participation	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	Always	2.875	1.085	1	.008**
supervisor	Usually	2.284	1.054	1	.030**
	Usually not	2.277	1.187	1	.055
	Never	0(b)		0	
Worried about	No	1.289	.765	1	.092
transfer	Yes	0(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/dependents, 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 well-being 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 explanation 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

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 post-election 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 Secretariat 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

characteristics. The study also found high prevalence of personality disorders which 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) Pr	pposal 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) Ma	terials and Equipment		
1.	5 Pens	Kshs.	100
2.	3 Box Files	Kshs.	900
3.	Packet Staples	Kshs.	300
4.	1 Stapler	Kshs.	500
c) Pre	paration of Questionnaires		
1.	Typing	Kshs.	200
2.	Printing	Kshs.	400
3.	Photo copying	Kshs.	16,000
d) Su	pport 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
		×	
) Tra	nsport		
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) Communic	ation
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1.	Concept and Proposal Preparation	Kshs.	2,500
2.	E-mail	Kshs.	2,000
g) Pre	eparation of Final Report		
1.	Typing Preliminary Results	Kshs.	1,000
2.	Photo copies for Supervisors	Kshs.	3,000
3.	Final draft typing	Kshs.	3,000
4.	Printing of Final Report	Kshs.	5,000
5.	Binding of 10 copies of the Research Books	Kshs.	5,000
) To	tal costs		
1.	Sub total	Kshs.	170,000
2.	Contingency (10%)	Kshs.	17,000
3.	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	October to December 2007
3.	Research Proposal Development and Presentation to Department	Jan 2 nd to March 14 th 2008
4.	Presenting Proposal to KNH Ethical Committee	March 28 th to 2 nd May 2008
5.	Data Collection	May 12 th to May 23 rd 2008
6.	Data Analysis and Presentation of Results to the Department	May 26 th to June 13 th 2008
7.	Writing of the Discussion and Presentation to the Department	June 16 th to July 4 th 2008
8.	Final Preparation of the Study, Binding and Presentation to the Department	July 4 th t0 July 11 th 2008

REFERENCES

- Adams E. Vocational Teacher Stress and Internal Characteristics. Journal of Vocational and Technical Education; 1999, 1(16): 7-22.
- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders. Washington DC: American Psychiatric Press; 1994.
- 3. Bauer J., Unterbrink T., Hack A. et al. Working conditions, adverse events and mental health problems in a sample of 949 German teachers. Int Arch Occup Environ Health. 2007 Apr; 80(5): 442-9.
- Beer J, Beer J. Bumout and stress, depression and self esteem of teachers. Psychol rep; 1992: 71:1331-6.
- Bell M. Psychiatric Rating Scales and Diagnostic Aids. The University of Adelaide 2007, Australia.
- Borg M.C. Occupational stress in British educational settings: a review.
 Educational Psychology 1990; 10: 103-126.
- 7. Boyle GJ, Borg MG, Falzon JM, Baglioni AJ Jr: *A structural model of the dimensions of teacher stress. Br J Educ Psychol* 1995, **65**(Pt 1):49-67.
- 8. Burke R.J, Greenglass E.R. *Towards an understanding of work satisfactions and emotional well-being of school-based educators*.

 Stress Med 1994; **10**:177-184.
- Byrne B.M. The Normological network of teacher burnout: a literature review and empirically validated model. In Understanding and Preventing Teacher Burnout: A Sourcebook of International Research and Practice. Cambridge University Press 1999: Cambridge, UK: 15-37.

- 10.Cass H. M., Oi Ling Siu, Faragher E. B. and Cooper C.L. A meta-analysis of the relationship between job satisfaction and employee health in Hong Kong. Stress and Health 2003; 19: 79-95.
- 11.Claro S. & Bedregal P. *Mental health status of teachers in 12 schools of Puente Alto. Santiago, Chile.* Rev Med Chil 2003 Feb; 131(2): 159-67.
- 12.Cockburn A D: *Primary teachers' knowledge and acquisition of stress relieving strategies*. Br J Educ Psychol 1996; **66**: 399-410.
- 13. Coid J. *Epidemiology, public health and the problems of personality disorder.* The British Journal of Psychiatry 2005, 182:3-9.
- 14. Colligan MJ, Smith MJ, Hurrell JJ Jr: *Occupational incidence rates of mental health disorders*. *J Human Stress* 1977, **3:**34-9.
- 15. Crompton W.M., Helzer J. E., Hwu H. Yeh E., McEvoy L., Tipp J.E., Spitznagel E.L: New methods in cross-cultural Psychiatry: Psychiatric illness in Taiwan and the United States. American Journal of Psychiatry; 1991: 148: 1697-1704.
- 16. Cropley M, Steptoe A. Joekes K. *Job strain and psychiatric morbidity*. Psychol Med 1999; **29:** 1411-1416.
- 17. Davison C.G. and Neale J.M., *Abnormal Psychology*, John Wiley and sons, Inc. 2000. New York, USA.
- 18. De Frank R.S. and Stroup C.A. *Teacher Stress and health; examination of a model.* J Psychosom Res 1989; **33**: 99-109

- 19.Delcor N.S., Araujo T.M., Reis E.J. et al. Labor and health conditions of private school teachers in Vitoria da Conquista, Bahia, Brazil. Cad Saude Publica, 2004 Jan-Feb; 20(1): 187-96
- 20. Dussault M, Deaudelin C, Royer N and Loiselle J, *Professional isolation* and occupationa stress in teachers. Psychol Rep 1999; **84**, 943-946.
- 21.Eaton WW, Anthony JC, Mandel W, Garrison R: *Occupations and the prevalence of major depressive disorder. J Occup Med* 1990, **32:**1079-87
- 22. Eshelinen L., Toikkanen J., Toumi K. et al. *Work related stress symptoms* of aging employees in municipal occupations. Scand J Work Environ Health 1991; 17: 87-93
- 23. Faber B.A.). *Crisis in Education: Stress and Burnout in American Teachers.* Jossey-Bass 1991: San Francisco
- 24. Ferrie et al, *Injustice at work and incidence of psychiatric morbidity*: the Whitehall 2 study. Occu. Med; 2006: **63**: 443-450
- 25. Ferrie J.E., Shipley M.J., Stansfeld S.A., et al. *Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures and health related behaviours in British civil servants;* the Whitehall II study. J. Epidemiol Community Health 2002; 56: 450-454.
- 26. Finlay-Jones R. Factors in the teaching environment associated with severe psychological distress among school teachers. Aus N Z Psychiatry 1986; 20: 304-13

- 7.Fletcher B.C. & Jones F. A refutation of Karaseks' demand-discretion model of occupational stress with a range of dependent measures. Scan JWork Environ Health 1991; 17: 87-93.
- 28. Freidman I. Student behaviour patterns contributing to teacher burnout.

 The Journal of Educational Research 1995; 88: 281-289.
- 29. Gagliemi R.S. & Tahrow K. *Occupational stress, burnout, and health of teachers:* a methodological and theoretical analysis. Review of educational Research 1998; **68**: 61-99.
- 30. Ganster D.C. & Schaubroeck J. Work stress and employee health. J Manag. 1991; 17: 235-27
- 31. Gasparini S.M., Barreto S.M. and Assuncao A.A. *Prevalence of common mental disorders among school teachers in Belo Horizonte, Minas Gerais, Brazil.* Cad Saude Publica. 2006 Dec; **22(12)**: 2679-91
- 32. Gater R, Transella M, Korten A et al Sex differences in prevalence and detection of depressive and anxiety disorders in general health care settings Arch general psychiatry: 1998: 55: 405-413.
- 33. Goldberg D: The detection of psychiatric illness by questionnaire.: Oxford University Press; 1972. London
- 34. Grosch J.W. & Murphy L.R. *Occupational differences in depression and global health:* results from a national sample of US workers. J Occup Environ Med 1998, **40:** 153-64.
- 35. Hammen C, deMayo R. *Cognitive correlates of teacher stress of depression*, J Abnormal Psychol; 1982, 91: 96-101

- 36. Hammen C.: *Interpersonal stress and depression in women*, J Affect Disord; 2003: **74**:49-57.
- 37. Hart P M, Teacher quality of work life: Integrating work experiences, psychological distress and morale. J. Occup. Org, Psychol. 1994; 67: 109-132
- 38. Hart P M., Wearing A J, and Conn M. Conventional wisdom is poor predictor of the relationship between discipline policy, student misbehavior and teacher stress. Brit. J. Ed. Psychol. 1995; 65: 27-48.
- 39. Hata M. *Mental health of teachers*; Education and Medicine, 2000; **48**: 644-650.
- 40. Hui E. & Chan D: Teacher stress and guidance work in Hong Kong secondary school teachers. British Journal of Guidance and Counseling: 1996; 24:199-121.
- 41. Ilfeld FW Jr: Characteristics of current social stressors. Psychol Rep 1976, 39:1231-47.
- 42. Ilfeld FW Jr: *Current social stressors and symptoms of depression.* Am J Psychiatry 1977, **134:**161-6.
- 43. Ilfeld FW Jr: *Methodological issues in relating, psychiatric symptoms to social stressors. Psychol Rep* 1976, **39:**1251-8
- 44. Jackson L.T.B., Rothmann S. & van de Vijver F.J.R. *A model of work-related well-being for educators in South Africa.* Stress and Health 2006; 22: 263-274.

- 45. Jackson S.E.: *Participation in decision making as a strategy for reducing job-related strain.* Journal of Applied Psychology 1983: **68**: 3-19
- 46. Jacobsson, C, A Pousette and I Thylefors 2001: *Managing stress and feelings among Swedish comprehensive school teachers*. Scandinavian journal of Educational research march; **45(1)**: 37-53.
- 47. Journal of Clinical Psychiatry 1998, 59 Suppl **20**: 22-23; **the complete version 5.0.0 34-57.**
- 48. Jurado D., Gurpeui M, Moreno O, and de Dios Luna. School setting and teaching experience as risk factors for depressive symptoms in teachers,; Eur Psychiatry 1997; 13: 78-82
- 49. Kanai Y. et al: A study on mental health among junior high school teachers in relation to "Ibasyo". Jpn Bull Soc Psychiat. 2005: 87-95 (in Japanese).
- 50. Karasek R.A.: Job demands, job decision latitude and mental strain, Administrative Quarterly 1979: **24**; 285-308.
- 51. Karasek, R: job demands, job decisions latitude and mental strain: implication for job redesign administrative science quarterly; 1979: 24: 285-306.
- 52. Karasek, R., & Cooper, C.L. Healthy work. New York: 1990. Basic Books.
- 53. Kendler K.S., Thormton L.M. and Presco C.A: Gender differences in the rates of exposure to stressful live events an sensitivity to their depressogenic effects. Am J Psychiatry: 158:587-593.

- 64.Landsmann L. Special report; Instructor 1979: 88 (1); 55-70.
- 65.La Rocco J.M., House J.S. & French J.R.P. Social support, occupational stress and health. J Health Soc Behav 1980; 21: 202-16.
- 66.Lloyd C. Work-related stress and occupational therapy. Occupational Therapy International 2001; 8 (4), 227-243.
- 67.Loscocco K.A. and Spitze G. Working conditions, social support and the well-being of female and male factory workers. Journal of Health and Social Behaviour 1991: 31: 313-327.
- 68. Luijsterburg J, den Bogaard J. v and Peiter de V. Variety in mental health research data: when does more bcome too much? BMC Psychiatry 2007 September 5 doi.10 1186 /1471-244x-7-45.
- 69. MacAnespei H. *Mental illness in school teachers*. British Medical Journal, 1978; **2:** 257-258.
- 70. Malik J.L, Mueller R.O, and Meinke D.L. The effects of teaching experience and grade level taught on teachers stress: a LISREL analysis. Teaching Teacher Educ 1991: 7: 57-62.
- 71. Marmot et al: Contribution of job control and other risk factors to social variations in coronary heart disease. The lancet 1997: 350: 235-239.
- 72. Maslach C, Jackson S: *The measurement of experienced burnout. J Occup Behav* 1981, **2:**99-113.
- 73. Mental problems "hit one in four': (http:/news.bbc.co.uk/2/hi/health)

- 74.Mental Health care in Developing World: 2004, (http://www.psychiatrictimes.com)
- 75.Michiko N, Kenji J, Tsuchiya, Toulopoulou T, and Takei N. *Poor Mental Health Associated with Job dissatisfaction among School Teachers in Japan*, 2007; **49**:515-522.
- 76. Microsoft ® Encarta ® 2006. © 1993-2005 Microsoft Corporation. All rights reserved
- 77. Miller GV and Travers CJ.: Ethnicity and the experience of work job stress and satisfaction of minority ethnic teachers in the UK. Int Rev Psychiatry: 2005: 17:317-327.
- 78. Moreno-Abril O. Luna-del-Castillo Jde D. et al. Factors associated with psychiatric morbidity in Spanish schoolteachers. Occup Med (Lond). 2007 May; 57(3): 194-202.
- 79. Muriungi S.K. Prevalence of burnout syndrome and its health effects among academic staff at Kenya Medical Training College, Nairobi Campus, 2008.
- 80. Muntaner C, Eaton W W, Diala C, Kessler R C and Sorlie P D: **Social class,** asserts, organizational control and the prevalence of common groups of psychiatric disorders. Soc Sci Med; 1998: **47:** 2043-2053.
- 81. Murray C.J.L., Lopez A.D., and Mathers et al. *The Global burden of disease*2000 project: aims, methods and data sources. Geneva, Switzerland:

 World Heath Organization, 2002. (Paper 36).

- Mwamwenda T.S. Monyooe L.A. and Grencross M. J. Stress of Secondary school teachers in Transkei, South Africa. Psychol Rep 1997 April; 80(2): 379-82.
- 83. Nadaoka T. Kashiwakua M, Oij A et al. Stress and psychiatric disorders in local government officials in Japan, in relation to their employment level. Acta Psychiatr Scand 1997; 96: 176-183.
- 84. Ndetei D. M. and Muhanji J. *The Prevalence and Clinical Presentation of Psychiatric illness in a rural setting in Kenya 1974.* British Journal of Psychiatry 137: 547-550.
- 85. Niedhammer I. and Chea M. Psychological factors at work and self reported health: comparative results of cross sectional and prospective analysis of the French GAZEL cohort. Occupational Environ Med 2003; 60:509-515.
- 86. Nyavanga E.J. *The effectiveness of Customer Service Delivery and Customer Satisfaction in the Public Service*, a study at the Teachers Service Commission, 2004.
- 87. Padabissi L. Ronalland J P. and Santinello M. Stress and burnout among teachers in Italy and France. The Journal of Psychology 1991; 127: 529-535.
- 88. Parkes: social support and the demand discretion model of job stress: test of addictive and interactive effects in two samples. Journal of vocational behaviour: 1994, 44:91-113.
- 89. Parslow R.A., Jorm A.F., Christensen H., Broom D.H., Strazdins L. and Souza M.D.R. *The impact of employee level and work stress on mental*

- health of GP service use: an analysis of a sample of Australian Government employees. BMC Public Health 2004; 4: 41.
- M.Parterniti S. Neidhammer T. Lang T et al. Psychological factors at work, personality traits and depressive symptoms. Br J Psychiatry 2002; 181: 111-117.
- 91. Perez et al: *prevalence de psicopatologias en un centro de salud rural.***Aten primaria, 2003:31: 39-46 (cross ref) (Medline).
- 92. Perry M: The relationship between social class and mental disorder. J Prim Prev 1996, 17:17-30.
- 93. Pithers R.T. *Teachers stress research. Problems and Progress*. British Journal of Psychology 1995 Dec; **65 (Pt 4):** 387-92.
- 94. Pithers RT, Soden R: **Scottish and Australian teacher stress and strain: a** comparative study. Br J Educ Psychol 1998, **68**(Pt 2):269-79.
- 95. Porto L.A. Carvalho F.M., Oliveira N.F., Silvnany Neto A.M. et al. Association between mental disorders and work related psychosocial factors in teachers 2001. PMID: 17301903 [PubMed-Indexed for MEDLINE]
- 96. Quick, J.C., Quick J.D., Nelson D.L., & Hurrell J.J. (). **Preventive stress** management in organizations. Washington, DC: 1997, American Psychological Organization.
- 97. Revicki D.A. and May H.J. *Organizational characteristics, occupational stress and mental heath in nurses*; Behavioural Medicine 1989: **15**; 30-36.

- M.Rogler L.H. Increasing socioeconomic inequalities and mental health of the poor. J Nerv Ment Dis 1996, 184:719-22.
- M.Rout, U R and J. K Rout: Stress management for primary health
 professionals. New York,: Kluwer academic / plenum publishers, 2002.
- 100. Roxburgh S.: Gender differences in work and well being: effects of exposure and vulnerability Health Soc Behav: 1996; 37: 265-77 (Medline)
- 101. Ruguleis R., Bultmann U., Aust B., and Burr H. The epidemiology of Health and Illness. A social-physiological perspective. In: Sutton S, Baun A, Johnson M, eds. The Sage Hand book of health psychology. London, United Kingdom: Sage Publishers, 2004: 27-68.
- 102. Russell DW, Altmaier E, Van Velzen D: *Job-related stress, social support, and burnout among classroom teachers. J Appl Psychol* 1987, 72:269-74.
- 103. Schaubroeck J. and Frank L.S.: Facilitating and inhibiting effects of job control and social support on stress outcomes and role behaviour: a contingency model. Journal of Organizational Behaviour: 2003: 19: 167-193.
- 104. Schonfeld I.S. Psychological Distress in a sample of teachers. Journal of Psychology 1990 May; 124(3); 321-38.
- 105. Sekine M. Chandola T., Martikainen P. et al. Explaining social inequiities in health by sleep. The Japanesse civil servants study. J Public Health 2006; (Oxf) 28:,63-70.

- 106. Singh M. and Singh G.: Assessment of Mental Health Status of Teachers of Varanasi City; The Journal Internet of Health; 2006; ISSN: 1528-8315.
- 107. Smith M, Bourke S. Teacher stress: examining a model based on context, workload and satisfaction. Teaching Teacher Educ 1992; 8: 31-46.
- 108. So-Kum Tang C W-TA, Schwarzer R, Schmitz G: *Health outcomes of job stress among Chinese teachers: role of stress resource factors and burnout. J Organiz Behav* 2001, **22:**887-901.
- 109. Sutherland V. & Cooper C. (1990). *Understanding Stress;* London: Chapman and Hall.
- 110. Stanfeld S A, Fuhrer R and Shipley M J: *Types of social support as predictors of psychiatric morbidity in cohort of British Civil Servants* (Whitehall Study), 1998. Psychol Med 28, 881-892.
- 111. Stanfeld S A, Fuhrer R, Shipley M J and Marmot M G: Work characteristics predict psychiatric disorder: prospective results from the Whitehall II study: Occup Environ Med 1999: 56, 302-307.
- 112. Stanfeld S. *Work, personality traits and mental health.* Br J Psychiatry 2002; **181**: 111-117.
- 113. Stansfeld, S. A. *Work and psychiatric disorder in the Whitehall study.*Journal of psychosomatic research 1997: **43**: 73-81.
- 114. Stansfeld S.A., Fuhrer R. Head J. et al. *Work and psychiatric disorder in the Whitehall II study*. J. Psychosom Res. 1997; **43**: 73-81.

- 115. Stansfeld SA, Head J, Marmot MG: Explaining social class differences in depression and well-being. Soc Psychiatry Psychiatr Epidemiol 1998, 33:1-9.
- 116. Steptoe A. and Marmort. Burden of Psychological Adversity and Vulnerability in Middle Age: Association with Biobehavioural Risk Factors and Quality of Life. Psychosom Med 2003; 65(6): 1029-1037.
- 117. Stone et al 1990, Disease prone personality or distress prone personality? The role of neuroticism in coronary heart disease. New York Wiley.
- 118. Susser M. & Watson W., Hooper K. **Sociology in Medicine**. New York Oxford Press; 1985.
- 119. Orpines P. & Horne A. M., Multisite Violence Prevention Project. A teacher focused approach to prevent and reduce students aggressive behaviour: the GREAT Teacher Program. Am J. Prev. Med 26: Supp.1, 29-38.
- 120. Van Dick R. & Wagner U. Stress and strain in teaching: a structural equation approach. Br J Educ Psychol 2001; **71**: 243-259.
- 121. Wang Z. M., Lan Y. J., Li J., & Wang M.Z. Study of the occupational stress of the teachers in primary and secondary school. Modern Preventive Medicine 2002; 29: 129-131.
- 122. Warr P.B. *Decision latitude, job demands and employee well-being.* Work and Stress; 1990; 4: 485-294.

- 123. Wing J, Cooper JE, Sartorius N: *The Measurement and Classification of Psychiatric Symptoms*. London: Cambridge University Press; 1974.
- 124. World Health Organization. *International Classification of diseases*.
 Tenth Version, 2005 updated. Geneva, Switzerland. World Heath Organization 2005. [http://www.who.int/classifications/icd/en].
- 125. World Health Organization. *Mental Health: New understanding*, New Hope, Geneva 2001.
- 126. World Health Organization: *Occupational Health Fact Sheet No.84.* 2004, [http://www.who.int/int-fs/en/facto84.html].
- 127. Wu S., Li J., Wang M., Wang Z., & Li H. Short communication: Intervention on occupational stress among teachers in the middle schools in China. Stress and Health 2006; 22: 329-336.
- 128. Wu S., Li J., Wang M., Wang Z., and Li H. *Intervention on occupational stress among teachers in the middle schools in China;* Short communications. Stress and Health 2006, **22**: 329-336.
- 129. Yaosaka O. The circumstances of teachers. a databook of educational Statistics, Tokyo, Jikit susiusha, 2000: 111-163.
- 130. Yokopenic et al: depression problem recognition and professional consultation. J Nerv Ment Dis; 1983: **171**: 15-23.

APPENDIXES:

Appendix I: Consent Explanation:

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

1. Prof. D. Ndetei (Tel. No. 0722518365)
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)

Master of Science Clinical Psychology

Department of Psychiatry

University of Nairobi

Appendix 2: Consent by Study	Participants:
1	have
been explained the nature of the	study
by	, of P.O.
Box	I therefore do hereby give
consent to participate in the study	y. I understand I can withdraw from participation
in the study. I also understand the	at I can withdraw anytime before the data
collection is over without any pen	alties or being victimized.
Name	
Signature	
Date	
Witnessed by	
Signature	
Date	

PAGE 2

THIS IS TO CERTIFY THAT: Prof./Dr./Mr./Mrs./Miss. EUNICE JAMALEL NYAVANGA
of (Address). UNIVERSITY OF NAIROBI
P.O.BOX 30197 NAIROBI
has been permitted to conduct research in
Location,
KOIBATEK District,
RIFT VALLEY Province,
on the topic PSYCHIATRIC MORBIDITY AMONG PUBLIC PRIMARY SCHOOL
AMONG PUBLIC PRIMARY SCHOOL
TEACHERS AT MOGOTIO DIVISION
IN KOIBATEK DISTRICT
for a period ending 29TH FEBRUARY, 20.09

PAGE 3

Research Permit No. MOHEST 13/001/38C 262 Date of issue 22.5.2008

Fee received SHS.500



FOR Permanent Secretary

Applicant's Signature

Ministry of

Science and Technology



MINISTRY OF HIGHER EDUCATION SCIENCE & TECHNOLOGY

Telegrams: "SCIENCE TEC", Nairobi

Telephone: 02-318581

E-Mail:ps@scienceandtechnology.go.ke

When Replying please quote

Ref. MOHEST 13/001/38C 26/2

Eunice Jemelel Nyavanga University of Nairobi P.O. Box 30197 NAIROBI JOGOO HOUSE "B" HARAMBEE AVENUE, P.O. Box 9583-00200 NAIROBI

22nd 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 Kolbatek District for a period ending 29th 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. ONDIÉKI

FOR: PERMANENT SECRETARY

Copy to:

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The District Commissioner KOIBATEK DISTRICT



Ref: KNH-ERC/ 01/ 405

KENYATTA NATIONAL HOSPITAL

Hospital Rd. along, Ngong Rd. P.O. Box 20723-00202, Nairobi. Tel: 2726300-9

Fax: 725272

Telegrams: MEDSUP*, Nairobi. Email: knhadmin@knh.or.ke

20th May, 2008.

Eunice Jemalel Nyavanga Dept. of Psychiatry P.O. Box 19676 NAIROBI

Dear Eunice

RESEARCH PROPOSAL: "PSYCHIATRY MORBIDITY IN THE PRIMARY SCHOOL TEACHERS IN KOIBATEK DISTRICT, MOGOTIO DISTRICT" (P72/4/2008)

This is to inform you that the Kenyafta National Hospital Ethics and Research Committee has reviewed and approved your above revised research proposal for the period 20th May, 2008 – 19th May, 2009.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given. Clearance for export of biological specimen must also be obtained from KNH-ERC for each batch.

On behalf of the Committee, I wish you fruitful research and look forward to receiving a summary of the research findings upon completion of the study.

This information will form part of database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

Yours sincerely

PROF A N GUANTAI SECRETARY, KNH-ERC

autai

c.c. Prof. K.M. Bhatt, Chairperson, KNH-ERC

The Deputy Director CS, KNH

The Chairman, Dept. of Psychiatry, UoN

Supervisors: Prof. David M. Ndetei, Dept. of Psychiatry, UoN

Dr. Mutheni Mathai, Dept. of Psychiatry, UoN Dr. Wangari Kuria, Dept. of Psychiatry, UoN Appendix 6: Study Instruments:

Social Demographic Questionnaire:

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.

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 \square No
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 1	many studen	ts are in you	r class?	•••••
3. Type	of school			
a)	Urban □	rural 🗆		
b) Boarding \square		day □	
c) Mixed	b	ooys 🗆	girls \square
4. Age	••••••			
5. Sex		male \square	female	
6. Religi	on			
	a) Catho	olic 🗆		
	b) Prote	stant \square		
	c) Musli	im 🗆		
	d) Tradi	tional		
	e) Other	r 🗆		
	(Specify))		
7. Reside	ence			
a) t	cown			
b) r	rural home			
c) (own house			
8. Ances	stral home			
a)	District			
b)	Province			
9. Level	of education	1		
a)	Primary			
b)	secondary e	ducation		
c)	primary tead	cher training		

	d)	diploma	in education	
	e)	technical	education	
	f)	university	y education	
	g)	other		
	h)	(specify)		
10. P	rese	ent grade		
	a)	P2 🗆		
	b)	P3 🗆		
	c)	P1 🗆		
	d)	AT IV		
	e)	Diplom	a in Education	
	f)	Univers	sity Degree in Ed	ducation
	g)	Other (S	Specify)	
11. H		ehold inc ly	come	
i) Sa	lary			
ii) Ot	her	income		
12. N	Iari	tal status		
a)	Sin	ngle		
b)	Ma	arried		
c)	Se	parated		

d) Widowed				
e) Divorced \square				
13. Form of marriage				
a) Polygamous \square				
b) Monogamous				
c) Other				
d) (Specify)				
14. Number of children/ dependa	ants	•••••	•••••	
15. Region: □				
a) Protestant \square				
b) Catholic				
c) Muslim				
d) Non-Committed				
e) Any other \square				
f) Specify				
16. Work related characteristics				
a) Are you				
i) A Head teacher				
ii) Deputy Head teach	er 🗆			
iii) Senior Teacher				
iv) Class Teacher				
v) Any other			*	
vi) Specify				
b) Have you ever been interd	icted?	Yes \square	No□	
If Yes				
i) What was the accusation?				
 Absenteeism 				
 Carnal Knowledg 	ge			
 Desertion 				
		91		

	Alcoholism						
	• Any other						
	Specify						
ii) Did t	he commission puni	sh you	Yes \square	N	No□		
iii) How wer	e you punished by th	ne Commiss	sion?				
	Suspension						
	Dismissal						
	• Salary recovery						
	Demotion						
	Warning						
	Any other						
	Specify						
c) Quantitati	ve demands						
i) Is your am	ount of work so exte	ensive that	you do n	ot have tim	me to th	ink and tal	k about
anything else	than work?						
☐ Almost all	working hours	\Box $\frac{3}{4}$ of	working	hours	\Box $\frac{1}{2}$	of working	hours
□ ¼ of worl	king hours	□ Seldo	m		□ Ne	ver	
ii) Do you hav	ve time for leisure?			Yes		No	
iii) Do you do	other jobs other tha	n teaching?		Yes		No	
iv) Are you s	tudying at the mome	ent as well?		Yes		No	
d) Influence a	nt work						
i) In your wor	rk, is it possible for	you to decid	le your v	work pace?	,	¥ .	
☐ Almost all	working hours	\Box $\frac{3}{4}$ of	working	hours	\Box $\frac{1}{2}$ (of working	hours
□ ¼ of worl	king hours	□ seldom			□ Nev	/er	
	volved in planning y	our work?					
□Always	☐ usually		□ us	ually not		\square Ne	ever

iii) Do you receive information on those decisions that affect your work place?

Always	us	ually		usually not			Never
e) Possibilit	ies for develop	oment					
i) Does your	r work require t	hat you repea	t the same	work tasks 1	many times	per h	our?
Almost a	all working hou	ırs 🗆 3	4 of working	ng hours	\Box ½ of	worki	ng hours
□ 1/4 of wo	orking hours	□ sel	dom		□ Never	•	
ii) Do you h	ave the possibi	lity to learn no	ew things a	nd to qualif	y yourself a	at wor	k?
☐ Always	\Box us	sually		usually not			Never
iii) Is your v	vork varied?						
□ To a large	e extent \square	To some ext	tent 🗆	only to a le	ss extent	□ no	t at all
f) Social Su	pport from su	pervisors					
i) Do you re	ceive support f	rom superviso	ors?				
☐ Always	□ us	ually		usually not			Never
☐ Do not ha	ve a supervisor	•					
g) Social Su	pport from co	workers					
i) Do you re	ceive support fi	rom your cow	orkers?				
☐ Always	\square usually	□ usually n	ot 🗆 1	Never [☐ do not ha	ve co	workers
h) Job insec	urity						
i) Are you w	orried about an	y of the follow	wing?				
	 Becoming un 	nemployed		□Yes		No	
	 Being trans 	sferred against	your will	□Ye	es	□ No)
	• Becoming re	dundant becau	ise of new	technology	\Box Yes	No	
	 Having diffic 	culty in securi	ng another	job if you b	ecame uner	nploy	ed
		□Yes	3	□ No			
i) How would	d you describe	your worklo	ad?				
i) Ov	verworked '	Yes	No				
ii) U	nder worked	Yes	No				
iii) N	formal	Yes]	No			
			00				

J) Are you currently undertaking any studies as you work fully	? Yes	No
k) Are you satisfied with your job? Yes No		
l) If you had the opportunity to get another job outside teachi	ng, 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 iii) Did you stay away from work for other reason iv) Specify the reasons	hospital	
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 I'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 I'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 I'm alone.

TRUE FALSE DK

26. I often seek advice or reassurance about everyday decisions.

RF

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 I'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. I'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

·			
If YES, go to the correspo	nding M.	I.N.I. m	odule
Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks?	NO	YES	∀ → A
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 ?	NO	YES	$\rightarrow A$
Have you felt sad, low or depressed most of the time for the last two years?	NO	YES	→ B
In the past month did you think that you would be better off dead or wish you were dead?	NO	YES	→ (
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.)	NO	YES	→ D
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?	NO	YES	→ D
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.	NO	YES	→ E
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	NO	YES	→ F
public, eating in public or with others, writing while someone watches, or being in social situations.	NO	YES	→ (
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.)	NO	YES	→ F
	∌Tu	rn Page	

IF YES, GO TO THE		

	******************************	***********	************	**************	***************	***************************************	**************	***********	000000000000000000000000000000000000000	*******************************		000000000000000000000000000000000000000	8
In the past mo like washing repeating, colle	or cleanin	g exces	ssively	, counti	ing or c	heckir	ng thing	s over			NO	YES	→ H
Have you ever that included EXAMPLES OF TH TERRORIST ATTA OF SOMEONE CLO	actual or RAUMATIC I ACK, BEING	threate EVENTS I HELD HO	ened of	leath or DE SERIOU E, KIDNAPI	serious US ACCIDI PING, FIRE	injury Ents, s	y to yo	u or s	someon ICAL AS	e else? SAULT, A	NO	YES	→I
Did you respon	nd to the tr	auma w	vith in	tense fea	r, helple	ssness	or hor	ror?			NO	YES	→ I
During the past dreams, intense	st month,	have yo	ou re-e	experienc	ed the e	event i	n a dist		way (s	such as,	NO	YES	→I
In the past 12 3 or more occa		ave you	ı had î	3 or mor	e alcoho	olic dri	nks witl	nin a 3	hour pe	eriod on	NO	YES	\rightarrow J
Now I am going the past 12 me better, or to ch	onths, did	you tal	ke any					_			NO	YES	→ K
amphetamines cocaine	speed crack			crystal r			edrine dball	Ritali	n, diet p	ills, rush			
heroin	morphine	e, metha	done	opium		Dem	erol	codei	ne, Pero	codan, Oxy	Contin		
LSD	mescalin	е		PCP, ar	ngel dust	MDA	, MDMA	ecsta	sy, keta	mine			
inhalants	glue			ether		GHB		stero	ids				
THC, marijuana	cannabis	, hashis	h	grass		weed	d, reefer	barbi	turates,	Valium, Xa	nax, Ativan		
How tall are yo	ou ?									inches	S		
What was your	r lowest w	eight in	the pa	ast 3 mor	nths?					lbs			
PATIENT'S WEIG E TABLE BELOW		R THAN	THE T	HRESHO	LD CORI	RESPO	NDING T	TO HIS	HER H	EIGHT ?	NO	YES	$\rightarrow N$
Height (ft in) 4'	9 4'10	4'11	5'0	5'1	5'2	5'3	5'4	5'5	5'6	5'7.			
Weight (lbs) 8		87	89	92	96	99	102	105	108	112			
Height (ft in) 5'		5'10	5'11		6'1	6'2	6'3						
Weight (lbs) 11	5 118	122	125	129	132	136	140						
In the past thr amount of food					g binges	or tim	es when	ı you a	ite a ve	ry large	NO	YES	→ N
In the last 3 m	onths, did	you hav	ve eati	ing binge	es as ofte	en as t	wice a v	veek?			NO	YES	→ N
Have you wo months?	rried exce	essively	or b	een anxi	ious abo	out sev	veral th	ings o	ver the	past 6	NO	YES	→ 0

M.I.N.I. SCREEN 5.0.0 / English version / DSM-IV 1/1/05 © 2001-2005 Sheehan DV & Lecrubier Y. All rights reserved. D. Sheehan, J. Janavs, R. Baker, (University of South Florida-TAMPA, USA): Y. Lecrubier, T. Hergueta, E. Weiller, (INSERM-PARIS, FRANCE). T. Proeschel.

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 the time 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 (A1b 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 un	uninterested,
---	---------------

	Over the two week period when you felt depressed or uninterested,	Current Episode		Past Episod		
a	Was your appetite decreased or increased nearly every day? Did your weight d without trying intentionally	ecrease o	r increase YES	NO	YES	
	(i.e., by $\pm 5\%$ of body weight or ± 8 lbs. or ± 3.5 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)?	NO	YES	NO	YES	
С	Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day?	NO	YES	NO	YES	
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 A3e = YES: ASK FOR AN EXAMPLE.

THE EXAMPLE IS CONSISTENT WITH A DELUSIONAL IDEA. O NO O YES

	Company to the property of the company of the compa					
	Did you have difficulty concentrating or making decisions almost every day?	NO	YES	NO	YES	
1	Did you repeatedly consider hurting yourself, feel suicidal, or wish that you were dead?	МО	YES	NO	YES	
	ARE 3 OR MORE A3 ANSWERS CODED YES (OR 4 A3 ANSWERS. IF A1a OR A2a ARE CODED NO FOR PAST EPISODE OR IF A1b OR A2b ARE CODED NO FOR CURPENT EPISODE.)?	NO	YES	NO	YES	
	VERILY IF THE POSITIVE SYMPTOMS OCCURRED DURING THE SAME 2 WEEK TIME FRAME.					
	If $A4$ is coded NO for current episode then explore $A3a$ - $A3g$ for most symptomatic past episode.			l		
	Did the symptoms of depression cause you significant distress or impair your ability to function at work, socially, or in some other important way?			NO	YES	
	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?			NO	YES	
a	Were you taking any drugs or medicines just before these symptoms began? π No π Yes					
b	Did you have any medical illness just before these symptoms began? $\pi \ No \pi \ Yes$					
	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	UNCI	ERTAIN	
			NO	NOTER HOMOOGRAPH, APPLICATED AND APPLICATE AND A	YES	7
	CODE YES IF A7(SUMMARY) = YES OR UNCERTAIN.		Major	Depress	sive Episode	PERSONAL IN CONTRACTOR PROPERTY.
S	SPECIFY IF THE EPISODE IS CURRENT AND/ OR PAST OR BOTH (RECURREN	Τ).	Current Past	1849 2-2011 - 18460 FABRUS (1840	0	D. CAL CO. BOOM ST. CO. CO. CO. CO. CO. CO. CO. CO. CO. CO
			NO		YES	
(CODE YES IF $A7b = YES$ AND $A7$ (SUMMARY) = NO.				r Due to a I Condition	-
	SPECIFY IF THE EPISODE IS CURRENT AND/ OR PAST OR BOTH (RECURREN	NT).	Current	n meatca	O	the distance of the designation
			Past			
			NO		YES	
					7.17	

		NO	1 L3
A10	CODE YES IF $A7a = YES$ AND $A7$ (SUMMARY) = NO.		Induced Mood Sorder
	SPECIFY IF THE EPISODE IS CURRENT AND/ OR PAST OR BOTH (RECURRENT).		
		Current	0
		Past	()

	CHRONOLOGY			
	How old were you when you first began having symptoms of depression?	age		
	During your lifetime, how many distinct times did you have these symptoms of depression (daily for at least 2 weeks)?			
	MAJOR DEPRESSIVE EPISODE WITH MELANCHOLIC	FEATURE	ES (op	tional
	(Means : go to the diagnostic box, circle ${ m NO}$, and move to the next	MODULE)		
	WITHENT CODES POSITIVE FOR A CURRENT MAJOR DEPRESSIVE EPISODE (A8 = YES, CURRENT). EX	CPLORE THE FOLI	LOWING	
a	During the most severe period of the current depressive episode, did you lose almost completely your ability to enjoy nearly everything?	NO	YES	
b	During the most severe period of the current depressive episode, did you lose your ability 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?	NO	YES	
	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 you experience when someone close to you dies?	NO	YES	
0	Did you feel regularly worse in the morning, almost every day?	NO	YES	
	Did you wake up at least 2 hours before the usual time of awakening and have difficulty getting back to sleep, almost every day?	NO	YES	
d	IS A3c CODED YES (PSYCHOMOTOR RETARDATION OR AGITATION)?	NO	YES	
2	IS A3a CODED YES FOR ANOREXIA OR WEIGHT LOSS?	NO	YES	
	Did you feel excessive guilt or guilt out of proportion to the reality of the situation?	NO	YES	
		NO		YES

ARE 3 OR MORE A14 ANSWERS CODED YES?

Major Depressive Episode with Melancholic Features, Current

JYPES OF MAJOR DEPRESSIVE EPISODE	M	lark all that apply.
Mild	O	296.21/296.31
Moderate	0	296.22/296.32
Severe without psychotic features	O	296.23
Severe with psychotic features	O	296.24
In partial remission	0	296.25
In full remission	O	296.26
Chronic	0	
With catatonic features	0	
With melancholic features	O	
With atypical features	O	
With postpartum onset	()	
With seasonal pattern	0	
With full interepisode recovery	O	
Without full interepisode recovery	0	

1A8 OR A9 OR A10 = YES, SKIP TO SUICIDALITY

B. DYSTHYMIA

(\ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

[patient's symptoms <u>currently</u> meet criteria for major depressive episode, do NOT explore <u>current</u> dysthymia, but do explore MST dysthymia. Make sure that the past dysthymia explored is not one of the past major depressive episodes, and that it was warated from any prior major depressive episode by at least 2 months of full remission. [APPLY THIS RULE ONLY IF YOU RE INTERESTED IN EXPLORING DOUBLE DEPRESSION.]

		SPECIFY WHICH TIME FRAME IS EXPLORED BELOW:	0	Current Past	
B1		Have you felt sad, low or depressed most of the time for the last two years? (OR IF EXPLORING PAST DYSTHYMIA: "In the past, did you ever feel sad, low or depressed for 2 years continuously?")		NO	YES
		depressed for 2 years continuously?			
B2		Was this period interrupted by your feeling OK for two months or more?		NO	YES
В3		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
	С	Did you feel tired or without energy?		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 ANSWERS CODED YES?		NO (YES
B4		Did the symptoms of depression cause you significant distress or impair your ability to function at work, socially, or in some other important way?		NO	YES

D. (HYPO) MANIC EPISODE

(MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

PATIENTS WHO APPEAR PSYCHOTIC BEFORE STARTING THE INTERVIEW OR WHO ARE SUSPECTED TO HAVE SCHIZOPHRENIA, PLEASE ADOPT THE BOWING ORDER OF ADMINISTRATION OF MODULES:

PART 1 OF MODULE M (PSYCHOTIC DISORDERS M1-M18). SECTIONS A-D (DEPRESSION TO (HYPO)MANIC EPISODE). PART 2 OF MODULE M (PSYCHOTIC DISORDERS M19-M23). OTHER MODULES IN THEIR USUAL SEQUENCE.

IF MODULE, M HAS ALREADY BEEN EXPLORED AND PSYCHOTIC SYMPTOMS HAVE BEEN IDENTIFIED (M1 TO M10b), EXAMINE FOR EACH POSITIVE RESPONSE TO THE FOLLOWING QUESTIONS IF THE (HYPO)MANIC SYMPTOMS ARE NOT BETTER EXPLAINED BY THE PRESENCE OF A PSYCHOTIC DISORDER AND CODE ACCORDINGLY.

		PRESENCE OF A PSYCHOTIC DISORDER AND CODE ACCORDINGLY.				
01	a	Have you ever had a period of time when you were feeling 'up' or 'high' or 'hy 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.)	per'		NO	YES
		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; INCRE NEEDING LESS SLEEP; HAVING RAPID THOUGHTS; BEING FULL OF IDEAS; HAVING AN INCREA IN PRODUCTIVITY, MOTIVATION, CREATIVITY, OR IMPULSIVE BEHAVIOR.		RGY;		
D2	a	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?			NO	YES
		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
)3		IF $D1b$ OR $D2b = YES$: EXPLORE ONLY CURRENT EPISODE, OTHERWISE IF $D1b$ AND $D2b = NO$: EXPLORE THE MOST SYMPTOMATIC PAST EPISODE	DE	*		
		During the times when you felt high, full of energy, or irritable did you:	Currei	nt Episode	Past E	pisode
	a	Feel that you could do things others couldn't do, or that you were an especially important person? IF YES, ASK FOR EXAMPLES.	NO	YES	NO	YES
		The examples are consistent with a delusional idea. $-\pi$ No $-\pi$ Yes		-		
	b	Need less sleep (for example, feel rested after only a few hours sleep)?	NO	YES	NO	YES
	С	Talk too much without stopping, or so fast that people had difficulty	NO	YES	NO	YES
		understanding?	**	**		

	Become easily distracted so that any little interruption could distract you?	NO	YES	NO	YES		
	Become so active or physically restless that others were worried about you?	NO	YES	NO	YES		
	Want so much to engage in pleasurable activities that you ignored the risks or consequences (for example, spending sprees, reckless driving, or sexual indiscretions)?	NO	YES	NO	YES		
	D3(SUMMARY): ARE 3 OR MORE D3 ANSWERS CODED YES (OR 4 OR MORE II D1a is NO (IN RATING PAST EPISODE) OF D1b is NO (IN RATING CURPLY) RULE: FLATION/EXPANSIVENESS PEQUIRES ONLY THREE D3 SYMPTOMS WHILE IRRITABLE MOOD ALOSE REQUIRES 4 OF THE D3 SYMPTOMS.	NO episode)?	YES	NO	YES		
	VERIFY IF THE SYMPTOMS OCCURRED DURING THE SAME TIME PERIOD.						
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? $\pi \ \text{No} \pi \ \text{Yes}$						
	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	UNCE	RTAIN		
	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?	NO	YES	NO	YES		
	IF D5 IS CODED NO FOR CURRENT EPISODE, THEN EXPLORE D3 , D4 AND D5 FOR THE MOST SYMPTOMATIC PAST EPISODE.						
			NO	Nacificated viscounts which seek have a seek an account	YES		
	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.		502 (1) 50.5	IANIC E	PISODE		
	SPECIFY IF THE EPISODE IDENTIFIED IS CURRENT OR PAST.		Current Past		0		
I	IF D3 (SUMMARY) = YES AND D4 (SUMMARY) = YES OR UNCERTAIN AND EITHER D5 = YES OR A DELUSIONAL IDEA WAS DESCRIBED IN D3a, CODE YES FOR MANIC EPISODE.		NO . MAN	NIC EPIS	YES SODE		
	SPECIFY IF THE EPISODE IDENTIFIED IS CURRENT OR PAST.	v	Current Past		0		
				Property and the second second second			
	IF D3 (SUMMARY) AND D4b AND D5 = YES AND D4 (SUMMARY) = NO. CODE YES?		NO		YES		
	SPECIFY IF THE EPISODE IDENTIFIED IS CURRENT OR PAST.		Due to a	oo) Manic Episode o a General Medical Condition			
			Current Past		0		
			Past		0		

D7

D8

ı	IF D3 (SUMMA CODE YES?	RY) AND D4a AND D5 = YES AND D4 (SUM	MARY) = NO ,	NO	YES
ı	SPECIFY IF TI	HE EPISODE IDENTIFIED IS CURRENT OR PAS	ST.	1	ce Induced Ianic Episode O
ı	IF D8 OR D9 =	YES, GO TO NEXT MODULE.			
UBT	YPES				
	Rapid Cycling			NO	YES
	Have you had 12 months?	four or more episodes of mood disturbance in		Rapid	d Cycling
	Mixed Episod	3		NO	YES
		TS CRITERIA FOR BOTH MANIC EPISODE AN RLY EVERY DAY DURING AT LEAST A ONE V		Mixe	d Episode
	Seasonal Patter	m		NO	YES
		ND REMISSIONS OR SWITCHES FROM DEPRE CONSISTENTLY OCCUR AT A PARTICULAR T		Season	nal Pattern
	With Full Inter	-episode Recovery		NO	YES
	Between the tw	o most recent mood episodes did you fully rece	over?		th Full ode Recove r y
		CIRCLE ONE			erent any recent of Author Committee and Record and Author Committee and Author Committee and Author Committee
	MOST RECEN	T EPISODE WAS A MANIC / HYPOMANIC / M	HIXED / DEPRESSED EP	ISODE	
	SEVERITY				
	V1	LIME			
	X1 X2	Mild Moderate	0		
	X3	Severe without psychotic features	0		
	X4	Severe with psychotic features	0		
	X5	In partial remission	0		
	X6	In full remission	0		
	CHRONOLO	GY			
0		GY you when you first began having symptoms of	manic hypomanic episod	es? age	

E. PANIC DISORDER

(MEANS: GO TO E6 AND E7 AND E8 AND E9 AND E10, CIRCLE NO TO ALL AND MOVE TO NEXT MODULE - MODULE F)

a	frig	ve you, on more than one occasion, had spells or attacks when you suddenly felt anxious, htened, uncomfortable or uneasy, even in situations where most people would not feel	NO	YES
b		t way? I the spells surge to a peak within 10 minutes of starting?	NO	YES
		any time in the past, did any of those spells or attacks come on unexpectedly or ntaneously, or occur in an unpredictable or unprovoked manner?	NO	YES
		we you ever had one such attack followed by a month or more of persistent concern out having another attack, or worries about the consequences of the attack?	NO	YES
	Du	ring the worst spell that you can remember:		
	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	YES
	e	Did you have a choking sensation or a lump in your throat?	NO	YES
	f	Did you have chest pain, pressure or discomfort?	NO	YES
	g	Did you have nausea, stomach problems or sudden diarrhea?	NO	YES
	h	Did you feel dizzy, unsteady, lightheaded or faint?	NO	YES
	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?	NO	YES
	j	Did you fear that you were losing control or going crazy?	NO	YES
	k	Did you fear that you were dying?	NO	YES
	1	Did you have tingling or numbness in parts of your body?	NO	YES
	m	Did you have hot flushes or chills?	NO	YES
		E4 (SUMMARY): ARE 4 OR MORE E4 ANSWERS CODED YES?	NO	YES
a		Were you taking any drugs or medicines just before these symptoms began? π No π Yes		
b		Did you have any medical illness just before these symptoms began? π No π Yes		
	IN T	THE CLINICIAN'S JUDGMENT: ARE FITHER OF THESE TIKELY TO BE DIRECT		
		ISES OF THE PATIENT'S PANIC DISORDER?	V**	

ı	DOES E3 AND E4 (SUMMARY) AND E5 (SUMMARY) = YES?	NO Pani	YES IC DISORDER LIFETIME	
н	IF E6 = YES, SKIP TO E8.			
ı	IF E6 = NO, ARE ANY E4 ANSWERS CODED YES?	NO <i>Limi</i>	TED SYMPTOM	
ı	THEN SKIP TO F1.	A	TTACKS LIFETIME	
ı	In the past month, did you have such attacks repeatedly (2 or more), followed by persistent concern about having another attack?	NO Pan	IC DISORDER	
ı	(IF THIS IS DENIED BY THE PATIENT—CHALLENGE BY REVIEWING THE SYMPTOMS ENDORSED IN E4).		CURRENT	
9	ARE E3 AND E4 (SUMMARY) AND E5b ALL CODED YES AND E5 (SUMMARY) CODED NO?	NO Anxiety Disora Attacks 1		
н		General Media CURR		
н				
E10	ARE E3 AND E4 (SUMMARY) AND E5a ALL CODED YES AND E5 (SUMMARY) CODED NO?	NO Substance Anxiety Disora Atta CURF	der with Panic acks	
C	HRONOLOGY			
E11	How old were you when you first began having symptoms of panic attacks?	age		
E12	During the past year, for how many months did you have significant symptoms of panic attacks or worries about having an attack?			
			saddissalasistation erection valvorada habitations consistence or on the	

F. AGORAPHOBIA

Have you ever felt anxious or uneasy in places or situations where you might have a panic 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?

NO YES

IF F1 = NO, CIRCLE NO IN F2 AND IN F3.

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

NO

YES

AGORAPHOBIA LIFETIME

Do you NOW fear or avoid these places or situations?

NO

YES

AGORAPHOBIA CURRENT

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

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

NO

YES

Panic Disorder, Current without AGORAPHOBIA

b IS PANIC DISORDER, CURRENT (E8), CODED YES, AND IS AGORAPHOBIA, CURRENT (F3), CODED YES?

NO

YES

Panic Disorder, Current with AGORAPHOBIA

c IS PANIC DISORDER, LIFETIME (E6), CODED NO, AND IS AGORAPHOBIA, CURRENT (F3), CODED YES?

NO

YES

AGORAPHOBIA, CURRENT without history of Panic Disorder

d IS AGORAPHOBIA, CURRENT (F3) CODED YES, AND IS PANIC DISORDER CURRENT (E8) CODED NO, AND IS PANIC DISORDER, LIFETIME (E6) CODED YES?

NO

YES

AGORAPHOBIA, CURRENT without current Panic Disorder but with a past history of Panic Disorder

	e	IS AGORAPHOBIA, CURRENT (F3) CODED YES, AND LIMITED SYMPTOM	NO	YES
		ATTACKS (E7) CODED NO?	without	BIA, CURRENT history of
		CHRONOLOGY	Limited Syr	nptom Attacks
15		How old were you when you first began to fear or avoid these situations (agoraphobia)?	age	
F6		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)		
		($^{\mbox{\scriptsize (}}$ means: go to the diagnostic box, circle NO, and move to the next mode	OULE)	
G1		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 situation	**	O YES
G2		Is this fear excessive or unreasonable?	N	O YES
33		Do you fear these situations so much that you avoid them or suffer through them?	N	O YES
G 4		Does this fear disrupt your normal work or social functioning or cause you significant distress?	(Social An	YES L PHOBIA xiety Disorder) RRENT
	SI	UBTYPES		
		Do you fear and avoid 4 or more social situations? If YES \prod generalized social phobia (social anxiety disorder) If NO \prod social phobia (social anxiety disorder), not generalized	N	O YES
		CHRONOLOGY		
35		How old were you when you first began to fear social situations?	age	
i6		During the past year, for how many months did have you have significant fear of social situations?		

H. SPECIFIC PHOBIA

(\(MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

			THE RESERVE THE PARTY OF THE PA	_		
In the past month, have you been excessively afraid of things like: flying, driving, heights, storms, animals, insects, or seeing blood or needles?		NO	YES			
Is this fear excessive or unreasonable?		NO I	YES			
Do you fear these situations so much that you avoid them or suffer through them?		NO	YES			
Does this fear disrupt your normal work or social functioning or cause you significant distress?		IFIC PI URREI	YES HOBIA NT			
CHRONOLOGY						
How old were you when you first began to fear or avoid this situation?	ag	ge				
During the past year, how many times have you had significant fear of this situation?						
I. OBSESSIVE-COMPULSIVE DISORDER OVE 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 unwanted, distasteful, inappropriate, intrusive, or distressing? (For example, the idea that were dirty, contaminated or had germs, or fear of contaminating others, or fear of harmin someone even though you didn't want to, or fearing you would act on some impulse, or fe 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.)	g gear	NO (to I4	YES			
(DO NOT INCLUDE SIMPLY EXCESSIVE WORRIES ABOUT REAL LIFE PROBLEMS. DO NOT INCLUDE OBSESSI DIRECTLY RELATED TO EATING DISORDERS, SEXUAL DEVIATIONS, PATHOLOGICAL GAMBLING, OR ALCOH DRUG ABUSE BECAUSE THE PATIENT MAY DERIVE PLEASURE FROM THE ACTIVITY AND MAY WANT TO RESONLY BECAUSE OF ITS NEGATIVE CONSEQUENCES.)	OL OR		·			
Did they keep coming back into your mind even when you tried to ignore or get rid of the	m?	NO \ to 14	YES			
Do you think that these obsessions are the product of your own mind and that they are not imposed from the outside?		NO [YES obsession	s		

4		In the past month, did you do something repeatedly without being able to resist doing it, li		NO	YES
ı		washing or cleaning excessively, counting or checking things over and over, or repeating, collecting, arranging things, or other superstitious rituals?		<u>[c</u>	ompulsions
Ī		IS 13 OR 14 CODED YES?		, NO	YES
15		Did you recognize that either these obsessional thoughts or compulsive behaviors were excessive or unreasonable?		NO NO	YES
16		Did these obsessions or compulsions significantly interfere with your normal routine, occupational functioning, usual social activities, or relationships, or did they take more than one hour a day?		NO	YES
17	a	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? $\pi \ No \pi \ Yes$			
		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?	NO		YES
				O.C.D.	1
18		ARE I6 AND I7b CODED YES	NO		YES
		AND I7 (SUMMARY) CODED NO?		O.C.D. CURRE ue to a Ge edical Cor	NT eneral
19		ARE I6 AND I7a CODED YES	NO		YES
		AND I7 (SUMMARY) CODED NO?	Cı	Induce O.C.D	d
		CHRONOLOGY			
110		How old were you when you first began having symptoms of OCD?		age	
111		During the past year, for how many months did you have significant symptoms of OCD?			

J. POSTTRAUMATIC STRESS DISURDER (OPHORAL)

_	-			
ı		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?	NO	YES
		EXAMPLES OF TRAUMATIC EVENTS INCLUDE: SERIOUS ACCIDENTS, SEXUAL OR PHYSICAL ASSAULT, A TERROIST ATTACK, BEING HELD HOSTAGE, KIDNAPPING, FIRE, DISCOVERING A BODY, SUDDEN DEATH OF SOMEONE CLOSE TO YOU, WAR, OR NATURAL DISASTER.		
2		Did you respond with intense fear, helplessness or horror?	NO	YES
3		During the past month, have you re-experienced the event in a distressing way (such as, dreams, intense recollections, flashbacks or physical reactions)?	NO	YES
14		In the past month:		
П	a	Have you avoided thinking about or talking about the event ?	NO	YES
п	b	Have you avoided activities, places or people that remind you of the event?	NO	YES
Н	c	Have you had trouble recalling some important part of what happened?	NO	YES
	d	Have you become much less interested in hobbies or social activities?	NO	YES
	e	Have you felt detached or estranged from others?	NO	YES
	f	Have you noticed that your feelings are numbed?	NO	YES
	g	Have you felt that your life will be shortened or that you will die sooner than other people?	NO	YES
		J4 (SUMMARY): ARE 3 OR MORE J4 ANSWERS CODED YES?	NO	YES
J5		In the past month:		
	а	Have you had difficulty sleeping?	NO	YES
	b	Were you especially irritable or did you have outbursts of anger?	NO	YES
	С	Have you had difficulty concentrating?	NO	YES
	d	Were you nervous or constantly on your guard?	NO	YES
	e	Were you easily startled?	NO	YES
		J5 (SUMMARY): ARE 2 OR MORE J5 ANSWERS CODED YES?	NO	YES
J6		During the past month, have these problems significantly interfered with your work or social activities, or caused significant distress?	NO	YES

IS J6 CODED YES?

NO

YES

Posttraumatic Stress Disorder CURRENT

CHRONOLOGY	
How old were you when you first began having symptoms of PTSD?	age
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?	

K. ALCOHOL ABUSE AND DEPENDENCE

(MEANS: GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN BOTH AND MOVE TO THE NEXT OPTIONAL K. MODULE)

K1		In the past 12 months, have you had 3 or more alcoholic drinks within a 3 hour period on 3 or more occasions?	NO	YES
K2		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 started drinking?	NO	YES
	b	When you cut down on drinking, did your hands shake, did you sweat or feel agitated? 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.	NO	YES
	С	During the times when you drank alcohol, did you end up drinking more than you planned when you started?	NO	YES
	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 alcohol, drinking, or in recovering from the effects of alcohol?	NO	YES
	f	Did you spend less time working, enjoying hobbies, or being with others because of your drinking?	NO	YES
	g	Have you continued to drink even though you knew that the drinking caused you health or mental problems?	NO	YES
		ARE 3 OR MORE K2 ANSWERS CODED YES?	NO	YES*
		* IF YES, SKIP K3 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.	ALCOHOL DE CURRI	
K3		In the past 12 months:		
	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 CAUSED PROBLEMS.)	NO	YES
	b	Were you intoxicated more than once in any situation where you were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?	NO	YES
	С	Did you have legal problems more than once because of your drinking, for example, an arrest or disorderly conduct?	NO	YES
	d	Did you continue to drink even though your drinking caused problems with your family or other people?	NO .	YES

NO N/A YES

ALCOHOL ABUSE CURRENT

(Optional) K. LIFETIME ALCOHOL ABUSE AND DEPENDENCE

(Means: go to the diagnostic boxes, circle NO in both, and move to the next module)

K4		Did you ever have 3 or more alcoholic drinks within a 3 hour period on 3 or more occasions?	NO	YES
(5		In your lifetime:		
а		Did you need to drink more in order to get the same effect that you did when you first started drinking?	NO	YES
b)	When you cut down on drinking did your hands shake, did you sweat or feel agitated? 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.	NO	YES
С		During the times when you drank alcohol, did you end up drinking more than you planned when you started?	NO	YES
d	ĺ	Have you tried to reduce or stop drinking alcohol but failed?	NO	YES
е		On the days that you drank, did you spend substantial time in obtaining alcohol, drinking, or in recovering from the effects of alcohol?	NO	YES
f	•	Did you spend less time working, enjoying hobbies, or being with others because of your drinking?	NO	YES
g	7	Have you continued to drink even though you knew that the drinking caused you health or mental problems?	NO	YES
		ARE 3 OR MORE K5 ANSWERS CODED YES?	NO	YES*
	į	* IF YES, SKIP K6 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.	ALCOHOL DEP LIFETII	
		In your lifetime:		
.6 a	ì	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 CAUSED PROBLEMS.)	NO	YES
b)	Were you intoxicated in any situation where you were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?	NO	YES
C	· ·	Have you had any legal problems because of your drinking, for example, an arrest or disorderly conduct?	NO	YES
				YES

NO

N/A

YES

ALCOHOL ABUSE LIFETIME

L. NON-ALCOHOL PSYCHOACTIVE SUBSTANCE USE DISORDERS

(MEANS: GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

Now I am going to show you/read to you a list of street drugs or medicines.

		Now I am going to snow you/read to you a list of street drugs or medicines.		
.1	a	Have you ever taken any of these drugs more than once to get high, to feel better, or to change your mood?	NO	YES
ı		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, O	OxyContin.	
	Hallucinogens: LSD ("acid"), mescaline, peyote, PCP ("Angel Dust", "peace pill"), psilocybin, STP, "mushroon			
	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	3,
		Miltown, GHB, Roofinol, "Roofies".		
		Miscellaneous: steroids, nonprescription sleep or diet pills. Any others?		
		Specify MOST USED Drug(s):		
		ONLY ONE DRUG / DRUG CLASS HAS BEEN USED	CHECK O	NE BOX
)	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 THE CONCURRENT OR SEQUENTIAL POLYSUBSTANCE USE:	RE IS	
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 / drug class selected) to get the same effect that you did when you first started taking it?	NO	YES
	b	When you reduced or stopped using (name of drug / drug class selected), did you 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? IFYES TO FITHER QUESTION, CODE YES.	NO	YES
	С	Have you often found that when you used (name of drug / drug class selected),	NO	YES

-1		you ended up taking more than you thought you would?			
1	d	Have you tried to reduce or stop taking (name of drug / drug class selected), but failed?		NO	YES
ı	С	On the days that you used (name of drug / drug class selected), did you spend substantial time (> 2 hours) in obtaining, using or in recovering from drug(s), or thinking about drug	(s)?	NO	YES
ı	f	Did you wend less time working, enjoying hobbies, or being with family or friends because of your drug use?		NO	YES
	g	Have you continued to use (name of drug / drug class selected) even though it caused you health or mental problems?		NO	YES
		ARE 3 OR MORE L2 ANSWERS CODED YES?	NO		YES
		SPECIFY DRUG(S):	SUBSTA	NCE DEF	PENDENCE
				LIFETIN	1E
L3	a	Have you used (most used drug, any drug) in the past 12 months?		(NO	YES
	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):	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.	SUBSTA	ANCE DEP CURRE	PENDENCI NT
		Considering your use of (name the drug / drug class selected), in the past 12 months	:		
L4	а	Have you been intoxicated, high, or hungover from (name of drug / drug class selected) 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.)		NO	YES
	b	Have you been high or intoxicated from (name of drug / drug class selected) more than once, in any situation where you were physically at risk, (for example, driving a car. riding a motorbike, using machinery, boating, etc.)?		NO	YES
	С	Did you have legal problems more than once, because of your drug use, for example, an arrest or disorderly conduct?		NO	YES
	d	Did you continue to use (name of drug / drug class selected) even though it caused problems with your family or other people?		NO	YES
		ARE 1 OR MORE L4 ANSWERS CODED YES?	NO	N/A	YES
		SPECIFY DRUG(S):	SUE	SSTANCE CURRE	

CHRONOLOGY

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

age