

**PSYCHOSOCIAL HAZARDS AND HEALTH STATUS OF  
POLICE OFFICERS IN IBADAN**

**BY**

**JOLAOLUWA OLUWATOSIN OLUFEMI**

**MATRIC NO. 139794**

**M.B.Ch.B, (OGUN) NIGERIA**

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FACULTY OF CLINICAL SCIENCES,  
COLLEGE OF MEDICINE,  
UNIVERSITY OF IBADAN.**

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## **DEDICATION**

To GOD ALMIGHTY, the giver of life, who desires that we prosper and be in good health, even as our soul prospers, and who has not given us the spirit of fear, but of power, love and a sound mind.

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## ABSTRACT

Police officers while maintaining law and order may experience psychosocial hazards which adversely affect their health. Work conditions can influence psychosocial well being, which in turn could influence their work performance, therefore affecting their attitude to the public. As there is little information on this subject, this study was conducted to determine the psychosocial hazards and health status of police officers in Ibadan, Nigeria.

A cross-sectional study was conducted, which utilized cluster sampling technique to select 435 police officers in the two area commands in Ibadan. A total of 37 divisions in both area commands were grouped into large and small, based on a calculated average population of 100 police officers per division. Three divisions each (one large and two small) were selected by balloting from the two area commands. All police officers in the selected divisions were requested to participate in the study. A structured self administered questionnaire was used to collect data on socio-demographic characteristics, operational and organizational stressors, psychosocial hazards and general health status. The General Health Questionnaire 12 was used to assess psychological distress with a maximum obtainable score of 12 and scores of  $\geq 3$  were indicative of psychological distress. Descriptive statistic, chi-square test and logistic regression were used for data analysis. Results were deemed significant at  $p < 0.05$ .

Among the respondents 72.4% were males. Mean age was  $31.8 \pm 8.3$  years and 87.6% were junior officers. Organizational stressors experienced included multiple tasks, working overtime and poor support from superiors. The most important operational stressor among junior and senior officers was witnessing the death of a colleague 45.7% and 61.1% respectively ( $p < 0.05$ ). Psychosocial problems consisted of low public regard for their work (32.6%) and dissatisfaction with their living environment (46.2%). The use of sedatives (3.0%) and alcohol abuse (4.8%) were reported. Only 58.4% had a medical checkup in the preceding one month. General health symptoms at the time of interview included cough (21.1%), catarrh (30.6%), urethral and vaginal discharge (1.4%) and (3.9%), headaches (36.3%) and low back pain (27.8%). Psychological distress was observed in 34.3% of police officers: 34.9% junior officers and 29.6% senior officers. Significant predictors of

psychological distress were female sex (O.R:1.91, 95% CI 1.16-3.15), multiple tasks (O.R:2.74, 95% CI 1.53-4.89), special duty (O.R:2.36, 95% CI 1.28- 4.37), confused feedback (O.R:3.05, 95% CI 1.44- 6.42), bureaucratic hassles (O.R:2.71, 95%CI 1.33-5.51), constant use of sedatives (O.R:2.15, 95% CI 1.22-3.79), and frequent alcohol consumption (O.R:5.15, 95% CI 1.58- 16.75).

Psychosocial hazards and psychological distress were common among police officers. Improved work conditions and early interventions to prevent psychological ill health should be instituted in the Nigeria Police Force. There is need for provision of adequate health services for psychological screening, and treatment of the common ailments which were prevalent in this study.

**Key words:** Police officers, Psychosocial hazards, Organizational stressors, Operational stressors, Psychological distress.

**Word Count:** 450

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## CERTIFICATION

This is to certify that **Jolaoluwa Oluwatosin, OLUFEMI** (Dr.) of the Department of Community Medicine, Faculty of Clinical Sciences, College of Medicine, and University of Ibadan, Nigeria carried out this research work.

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### Signature

**Prof Folashade O. Omokhodion**  
**MBBS (Ib); Msc (Lond); Ph.D**  
**(Lond); FWACP; MFOM(UK),**  
**Dept. of Community Medicine,**  
**Faculty of Clinical Sciences,**  
**College of Medicine,**  
**University of Ibadan, Ibadan,**  
**Nigeria.**

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## LIST OF ABBREVIATIONS

<b>ASP</b>	Assistant Superintendent of Police.
<b>CPL</b>	Police Corporal.
<b>CSP</b>	Chief Superintendent of Police.
<b>DSP</b>	Deputy Superintendent of Police.
<b>GHQ</b>	General Health Questionnaire.
<b>HIV</b>	Human Immunodeficiency Virus.
<b>INSPR</b>	Inspector of Police.
<b>NPF</b>	Nigeria Police Force
<b>SGT</b>	Sergeant.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

The work of the Nigerian Police Force since its inception, has involved amongst others, fighting crime by preventing it, as well as aggressively pursuing the violators of law and order. This has posed a great challenge within the Nigerian society.

However, the general public has consistently been faced with problems such as the intolerance and lack of sensitivity of police officers towards them, making the popular phrase “the police is your friend”, almost totally questionable. These problems may possibly be linked to police work conditions and psychosocial risk factors, with attendant health risks, especially to their psychosocial well being.

Psychosocial risk factors are factors that may affect workers psychological response to their work and work place conditions (including working relationships with supervisors and colleagues). Examples are: High work loads, tight deadlines, lack of work and working methods (MAC tool; Health and Safety Executive/Commission). Other psychosocial hazards include underpayment and inadequate compensation for work done, lack of monetary savings, long hours at work, appalling living environment, and poor job satisfaction, lack of promotion at work, work place violence, poor health service utilization, alcohol and substance abuse as well as poor remuneration. Work itself has a positive effect on human mental and physical health. However, work-related stress generated through certain adverse working conditions can have negative effects on an individual’s health (Kortum 2007). Work-related stress is perhaps one of the most common social determinants of health for the employed. At times it can be as dangerous as unemployment, known as a great cause of distress and poor health – (WHO Commission on Social Determinants of Health, 2006). Healthy work presupposes appropriate levels of psychological job demands, job variety, autonomy and support from others (Kompier 2002).

In 1981, the Swedish scientist Bertil Gardell defined five Central requirements for the psychosocial work environment thus: Work should be arranged in a way which allows the

individual worker to influence his own working situation, working methods and pace; allows for an overview and understanding of the work process as a whole; gives the individual worker possibilities to use and develop all his human resources; allows for human contacts and co-operation in the course of work; and makes it possible for the individual worker to satisfy time claims from roles and obligations outside work e.g. family, social and political commitments (Kompier 2002). When work does not provide a proper configuration of work characteristics (e.g. psychological demands that are too low or too high, responsibility that is too little or too much), may provoke stress reactions. In a process of chronic exposure to such risk factors and insufficient recovery, the reactions (behavioral, psychological, and physiological) may, on the long run, lead to serious illness (Kompier 2002).

The impact of psychosocial hazards and work-related stress on the health outcome of workers is multidimensional. Apart from their direct consequences on an individual's physiological, psychological and behavioral capabilities; the productive capacity of the worker is also affected. Only a healthy worker can contribute optimally and positively to an organization's objectives and successes (Ekore 2007).

Police officers in Nigeria are constantly faced with the challenges of maintaining law and order, as well as psychosocial related work stressors. The magnitude of the problem stems from the fact that these hazards and work stressors are being ignored despite their negative contribution to police health, which would result in devastating effects if not identified and dealt with appropriately. The Public Health implications of these problems would definitely include a rise in psychiatric morbidity rates, poor health and mortality rates, both among the police officers as well as among the citizens they ought to protect.

Law enforcement officers are subject to many factors that can act as work stressors such as:- (1) Aspects of their job linked to operational factors (job content) and (2) Aspects linked to organizational factors (job context) (Penalba *et al* 2008). Job content stressors include exposure to physical risk such as being a victim of violence, witness to the murder of a companion or having to kill when necessary (Burke 2000). Participating in an act of corruption as well as the afore mentioned have been found to be the most stressful job content

events (Evans and Coman, 1993).

Job context stressors include working overtime and lack of support (Berg *et al* 2005). A study in Australia found that the most stressful job content events are failing police training course, failure of promotional examinations and unsatisfactory personnel evaluation (Evans 1993). More job context stressors are: public contact that sometimes result in lack of respect, hostility, many hours of inactivity suddenly becoming a time of overwhelming responsibility, pressure for quick crucial decisions, lack of perceived value of their role in society, low income, equipment disrepair, internal organizational structure and dealing with the criminal justice system (Burke 2000).

The organizational culture and work load are key issues in officer stress where the degree of symptomatology worsens each year (Collins and Gibbs 2003). A variety of symptoms and reactions can occur such as negative psychological states (frustration, depression, anxiety, anger), psychosomatic and physical conditions such as headaches and ulcers (Burke 2000). Psychosomatic symptoms such as substance abuse, adjustment disorders, and personality disorders occur among police officers working in adverse psychosocial environment (Saathoff and Buckman, 1990).

This study will focus on the psychosocial hazards and health status of police officers in Ibadan, Oyo state, Nigeria.

## **1.2 Problem Statement**

The Nigeria Police have been faced with institutional and structural hindrances such as underpayment, frequent transfer/deployment, poor equipment and operational vehicles, poor accommodation, near absence of promotion and inadequate or erratic communication facilities (Adebayo 2005)

The insensitivity of many police officers to Nigerian citizens may be blamed on these hindrances caused by the poor economy and unstable polity, but it may also be connected to their psychosocial well being. Issues such as arriving late at a crime scene or armed robbery incident, (or not responding at all) and the shooting of innocent civilians at checkpoints by some police officers may be related to psychosocial factors in their job. Moreover, the Nigeria



police have been found to lack emotional intelligence (Aremu and Tejumola, 2008.) There is a constant pressure for police officers to control their emotions and to appear efficient, which results in a difficulty in admitting psychological weakness as well as reluctance to seek professional help for psychosocial problems (Burk 2000). This may manifest as overt signs of antisocial behaviour, as the only indicator of these problems.

### **1.3 Justification for the Study**

There are few studies on the Nigeria Police and none has sought to determine the psychosocial health status of police officers in Nigeria. The Nigeria Police is a very sensitive work force whose health should be optimal, because it directly affects the general public, and is of public health importance. There is therefore the need to identify work place factors that affect psychosocial well being among police officers, so as to forestall the attendant health risks that may arise, hence protecting police health, which would improve the performance of their duties. Moreover, studies have shown that interventions aimed at changing work place factors, reduce psychological ill-health (Michie and Williams, 2003).

This study is carried out to provide specific information on psychosocial hazards and health status of police officers in Ibadan. The information obtained would be useful for interventions for prevention and control of psychosocial problems and psychological distress in the Nigeria Police Force.

### **1.4 General Objective**

The general objective of this treatise is to determine the psychosocial hazards and health status of police officers in Ibadan, Oyo State, Nigeria.

#### **Specific Objectives**

The specific objectives are to:

1. Identify the psychosocial hazards in police officers' work environment.
2. Describe the general health problems reported by police officers.
3. Assess the psychological health status of police officers using the GHQ12.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 History of the Nigeria Police Force

In April 1861, the British Consul in Lagos obtained permission from his principal in London to establish a Consular Guard comprising of 30 men. Two years later in 1863, this small body of men became known as the "Hausa Guard". It was further regularized in 1879 by an ordinance creating a Constabulary for the Colony of Lagos. An Inspector-General of Police commanded this force recruited mainly from Hausas and known as the "Hausa Constabulary".

In the South, the Lagos Police Force and part of the Niger Coast Constabulary became the southern Nigeria Police Force in 1906, while the bulk of the Niger Coast Constabulary formed the southern Nigeria Regiments. After the amalgamation of Northern and Southern Nigeria in 1914, both Police Forces continued to operate separately until 1st April, 1930 when they were merged to form the present Nigeria Police Force with Headquarters in Lagos. Nigerians assumed overall leadership of the Force in 1964, when the late Mr. Louis Orok Edet was appointed the first indigenous Inspector-General of Police. Since then fourteen other Nigerians, including the incumbent Mr. Hafiz Ringim has held the Office (The Nigeria Police Force official website).

#### 2.2 Objectives of the Nigeria Police Force.

**The objectives of the NPF are the following:**

- To enhance the quality of life by working in partnership with the community and in accordance with constitutional rights to enforce the laws, preserve the peace, reduce fear, and provide a safe environment.
- Reduce overall crime including violent and drug-related crime – in line with the Government's Public Service Agreements (PSAs) service which responds to the needs

of communities and individuals, especially victims and witnesses, and inspires public confidence in the police, particularly among minority ethnic communities.

- Take action with partners to increase sanction detection rates and target prolific and other priority offenders.
- Reduce people's concerns about crime, and anti-social behaviour and disorder.
- Combat serious and organized crime, within and across force boundaries.
- In partnership with the community, the objectives are to:
- Protect the lives and property of fellow citizens and impartially enforce the law.
- Maintain a higher standard of integrity than is generally expected of others because so much is expected of the Nigerian police.
- Value human life, respect the dignity of each individual and render services with courtesy and civility (The Nigeria Police Force; official website)

### **2.3 Structure of the Nigeria Police Force**

Section 214 of the 1999 Constitution of the Federal Republic of Nigeria states that the Nigeria Police Force (NPF) is a Federal Police Force, and that the States and Local governments are not permitted to establish police forces on their own. The NPF is headed by an Inspector General of Police (IGP) who is appointed, by the country's president, after consultations with the Nigeria Police Council (CLEEN 9 July 2008; Nigeria 1999, Sec. 215), a Deputy Inspector General, who is second in command assists the IGP in his or her work. Assistant Inspector Generals are responsible for supervising staff operations in the various departments at the NPF's Abuja based headquarters. (World Encyclopedia of Police Forces and Correctional Systems 2006) NPF police commands within each state are under the authority of a Commissioner of Police (Nigeria 1999, Sec. 215).

The 2006 edition of the World Encyclopedia of Police Forces and Correctional Systems provides the following list of the seventeen ranks in the NPF, from highest to lowest rank: inspector general, deputy inspector general, assistant inspector general, commissioner of police, deputy commissioner, assistant commissioner, chief superintendent, superintendent,

deputy superintendent, assistant superintendent, chief inspector, inspector, sergeant major, sergeant, corporal, constable and recruit. According to a 2007 report on small arms and insecurity in Nigeria published by Small Arms Survey (SAS), "an independent research project located at the Graduate Institute of International Studies in Geneva, Switzerland with a mandate to provide information on small arms and light weapons" (SAS n.d.), the NPF is divided into 12 zones. Each zone reportedly has between two and four state commands as well as a "series of area commands, divisions, police stations, and police posts under these commands" According to the World Encyclopedia of Police Forces and Correctional Systems, the size and complexity of the NPF's state police commands vary, depending on such factors as population density and the need for a police presence. Many police posts and stations are reportedly located along railway lines and highways of major urban centres (World Encyclopedia of Police Forces and Correctional Systems 2006).

The headquarters of the NPF, located in Abuja, is reportedly divided into five departments, these include: Department A, in charge of general administration; Department B, responsible for communications, including the supervision of a country-wide police radio network; Department C, responsible for finance and other resources; Department D, in charge of criminal records and investigations and which includes the Criminal Investigation Department (CID), which is the central agency responsible for "the collection, compilation, classification, and recording of information concerning crimes and criminals and the dissemination of such information as required"; and Department E, referred to as the "Special Branch," which is in charge of internal security and "counter subversive activities". The CID investigates cases from all parts of Nigeria. The CID is reportedly divided into several sections, which include, among others, the Crime Section, the Missing Persons Section, the Fraud Section, the "X" Squad Section, the Post and Telecommunication Fraud Section, the National Central Bureau (which includes the Interpol, Narcotics and Antiquities Units), and the Police Public Complaint Bureau . (World Encyclopedia of Police Forces and Correctional Systems 2006).

The NPF also has several section units, including the Mounted Branch, the Police Dog Section, the Nigeria Railway Police, the Port Authority Police, the force Signals Section (which operates radio communications), and the Central Motor Registry (ibid., 699-700). In

addition, the NPF has an auxiliary force called the "Special Constabulary," which is involved in combating crime. (World Encyclopedia of Police Forces and Correctional Systems 2006).

In a 2007 report on the state of the NPF, the IGP announced the creation of several specialized NPF units, including an anti-terrorism squad with units deployed to Kano, Abuja, Lagos and Rivers State, and an anti-robbery squad with units deployed to Lagos, Abuja and the Niger Delta region (Nigeria Nov. 2007). The IGP also highlighted the importance of the "X" Squad, which was created to fight police corruption and handle and investigate official complaints against police officers.

#### **2.4 State of the Nigeria Police Force** (The Nigeria Police Force; official website).

**Manpower :** Data on the police force as at 1st June, 2007 in terms of manpower, showed the strength of the Nigeria Police as 371,800 personnel, with 21,905 senior officers, and 349,895 from constable to inspectors of police. Nigeria's population based on the 2006 census figures was 140,003,542. Thus, this police strength does not meet the United Nations recommendation of (1) Police man to 400 persons (1:400).

**Arms, Ammunition and Riot Control Equipment:** The total number of arms stood at 90,219 ammunition, 92,367,039 rounds, while the riot control equipment holding was 365,873,341.

**Motor Vehicles :** There were 5,962 that were serviceable, but the recommended vehicular holding stood at 30,010 thirty thousand, leaving a short fall of 24,051.

**Marine Section :** There was a total of 371, of these, 139 were unserviceable, 108 were serviceable, while 113 were for boarding.

**Mounted Troop :** Police horses for patrols, crowd control and quelling demonstration was 742 as against the standard requirement of 2,000, leaving a short fall of 1, 258 horses.

**Police Dog Section:** Out of the standard requirement of 500 dogs, the holding stood at 89, with a short fall of 411.

**Helicopters:** The Police Air wing had just 4 helicopters in its fleet.

(The Nigeria Police Force; official website).

## **2.5 The Police officer's Job**

The job of the police officer is more than aggressively pursuing criminals and enforcing the Law. The main duties of the police are classified into three (3) general areas thus: - Enforcing law, which includes investigating complaints, arresting suspects and attempting to prevent crime. Although most citizens perceive law enforcement to be the most important function of the police, it accounts for only about 10% of police activity. Maintaining order, including intervening in family and neighbourhood disputes, keeping traffic moving, noise levels down, rowdy persons off the streets and disturbances of the peace to a minimum degree are also functions of the police. It is estimated that 3 out of every 10 requests received by police officers, involve this type of activity; providing services, such as giving assistance in medical and psychological emergencies, finding missing persons, and helping stranded motorists. (Wrightsmann *et al* 2002). Although the stereotype of police work is that it must be extremely stressful because it entails a constant threat of danger and exposure to criminals, surprisingly little has been documented about whether policing is inherently stressful. (Wrightsmann *et al* 2002).

The wearing of a badge, uniform and gun makes a police officer separate from society. This segregation leads to many psychological effects which research shows can create negative personality traits. For example, psychological research shows that the wearing of a uniform will tend to make any person de-humanize people who are without a uniform, while wearing a gun makes one act more aggressively. The quasi-military and structured institution of the police requires the sacrifice of the individual for the good of society, where he/she is punished if not up to standards. This type of functioning results in an undesirable mental health situation, where the individual is not a consideration, but only the "goal" of the institution is paramount. (Goldfarb and Aumiller, [www.heavybadge.com](http://www.heavybadge.com); retrieved 2008).

Shift work is more hazardous for police officers than it is for workers who are not police officers, and police officers report significantly worse sleep quality and less than average sleep time compared to those who are not police. Although the life threatening aspects of police work has been found to be associated with having nightmares (which interfere with sleep), it is the routine stressors of police service that are the most common, affecting global sleep quality (Neylan *et al* 2002).

Another very important aspect of being a police officer is the existence of a 'fraternity-subculture'(social support from peers), as well as the 'macho culture'(control, dominance, and authority) which make them reluctant to seek help in dealing with stress, as well as the difficulty to admit to psychological weakness.(Burke, 2000)

Police officers have a different kind of stress in their jobs called "Burst Stress". This means, a sudden "burst" or uncontrolled entrance from a state of low stress into high stress, as opposed to the gradual build up of stress that occurs in people who are not police. They are also trained to interact with the world in a role. The emotional constraint of the role takes tremendous mental energy, much more energy than expressing true emotions. This energy drain is very strong and may make an officer prone to exhaustion outside of work and result in frustration on the job. (Goldfarb and Aumiller [www.heavybadge.com](http://www.heavybadge.com);retrieved 2008).

The job of police officers would also include their work ethics. This was described in a cross sectional survey that was designed to examine the influence of gender and age on attitudes towards professional ethics among Nigerian Police officers. The study revealed that gender and age differences affect their ethical beliefs. It was found that female and older police participants tended to be more ethical than their male and younger counterparts. (Adebayo 2005).

## **2.6 Psychosocial Hazards of Police Officers: The Global Perspective.**

In the less developed countries of the world, the fundamental psychosocial hazard is poverty, which is the cause of other factors, as well as organizational and operational stressors. For example, sixty (60) percent of the Philippine police live below the poverty line and most live in squalid slums. The Philippine National Police (PNP) has 233,000 uniformed and non-uniformed police to maintain law and order in a country with a population of 84 million

people scattered across 7,000 islands. The PNP is short of 45,000 personnel. (Manila Bulletin, June 2 2006)

The police in Guinea Bissau lack the most basic equipment, such as vehicles, radios and it is not uncommon to have fuel shortages. In order to carry out some operations, the police have had to borrow petrol from civilian sources. Abject poverty, state collapse, lack of means and endemic corruption has made Guinea Bissau a heaven for the Colombian drug lords. The low salaries of police officers further complicates issues, an inspector in the elite PJ(*Policia Judiciaria*) i.e. the judiciary police, make less than \$65 a month and PJ officers sometimes have had to go for several months without pay. (Horta, 2007).

In developed countries, available literature has shown that psychosocial hazards of police officers are due less to poverty and more of organizational stressors. A study was carried out within a nation wide sample of police agencies in the United States of America using the Police Stress Survey by Spielberger, Westberry, Grier and Greenfield (1981). For officers who had left the department, the researchers found three distinct, significant and consistent themes in responses to the police stress survey: (1) physical threats was the most noted stressor among officers; (2) the second most perceived stressor included a general lack of support experienced by officers; and (3) the third most noted stressor involved perceptions of organizational pressure. Examples of physical threats seen as highly stressful for most officers included having to participate in high-speed chases, responding to a felony in progress, and being physically attacked. Lack of support stressors included inadequate support by supervisors, inadequate support by the department, and strained relationships with non-police friends. Finally, examples of organizational pressure included political pressure from outside of the department, disagreeable department regulations and the perceived ineffectiveness of the judicial system. Surprisingly, although respondents in this study among police agencies in the United States of America, indicated that organizational pressure was the third ranked cause of police stress, this type of stress was also the most frequent reason most police officers left the department. Some other interesting general findings included the lack of influence education has on all three types of stressors; that is, the threat of physical violence,



the lack of departmental support, and the presence of organization pressure which creates stress for all officers, regardless of officers' education level. However, age plays a role in the amount of stress perceived by officers. Findings suggest that the younger the officers, the greater their perceptions of all three forms of stress. (O'Toole *et al*, 2003).

Experience on the job appears to have a beneficial effect on officers concerning stress. For instance, findings suggest that the longer an officer has been on the force, the less likely they are to experience stress from both a perception of organization pressure and of a lack of departmental support. (O'Toole *et al* 2003). However, regardless of time on the job, the stress incurred from threats of physical harm is equally as disturbing to all ranks and classes of officers. The participants in this study were officers who had left a nationwide sample of police agencies over the past five years. The results indicate that seven specific stressors stand out as directly contributing to the decision of these officers to leave their departments. The reasons cited were, "Inadequate support by supervisor" (25%) followed in succession by, "Inadequate support by department" (22%), "Political pressure from within the department" (18%), "Poor or inadequate supervision" (15%), "Inadequate salary" and "Difficulty getting along with supervisors" (11%-tie), and finally, "Excessive paperwork" (10%). Even though police work is very dangerous, more often, it seems, officers encounter stress and decide to leave the force because of organizational issues. (O'Toole *et al* ,2003).

### **2.7 Psychosocial Hazards and General Health Problems.**

Police officers may be exposed to different health and safety risks in their occupation. For example, police officers are at risk of assault and homicide; the dynamics of policing as an occupation creates opportunities for them to experience many psychosocial hazards such as stress, suicide, sexual harassment and discrimination. The failure to identify and solve health and safety concerns of police officers has potentially serious consequences for the health and well being of officers and their families. These consequences include depression, divorce, suicide and disease. Not addressing the health and safety issues associated with policing may also affect the general public. For example if an officer is stressed or fatigued, he/she may not perform his/her duties to the best of his/her ability, reducing the contribution of policing to the

community. Police officer fatigue might also increase the potential for a car accident, thus putting the public at risk (Parsons 2004).

Psychosocial hazards and stress in work has been implicated in increased blood pressure, breathing difficulties, anxiety, depression, increased gastrointestinal disorders, higher alcohol and substance abuse, impulsive behaviour, work- family interferences. High substance abuse and risky sexual behaviour are the common coping strategies for unpleasant experiences in the work place in Nigeria. (Ekore 2007).

### **Alcohol abuse**

Psychosocial hazards can also initiate alcohol use and vice versa. Stress has been shown to have a strong effect on alcohol use among the police, and alcohol use, along with cynicism are a coping mechanism during different phases of the police stress process. (Violanti *et al* 1985). A study was carried out to assess the prevalence of alcohol use and the associated psychosocial problems of alcohol use in the Uganda Police force (UPF). The prevalence for alcohol dependence was assessed using the ICD-10 criterion for alcohol dependence. The police officers were interviewed, and they provided data on the probable negative effects of alcohol use by members of the police force. This study revealed that members of the UPF experienced a variety of psychosocial and health problems related to alcohol use that ranged from 9.6% for poor health through 20% for alcohol dependence to 26% impairment in psychosocial functioning. The study showed that 1 in even 10 police officers were not functioning well in their jobs on account of harmful alcohol use. Police officers, who suffer from various forms of psychosocial impairment related to alcohol, when entrusted with security issues, are not able to perform optimally; hence the security of the public is seriously undermined and the trust of the public in the force is eroded. Furthermore, alcohol is frequently associated with physical ailments, and alcoholism commonly co-exists with psychiatric disorder. Individuals with alcohol use problems were more inclined to utilize private clinics rather than the police clinic, possibly out of fear of attracting disciplinary action. (Ovuga and Madrama, 2006).

### **Shift work and impaired sleep**

The Optimization of night and shift work plans among policemen was a study conducted in

Kuwait. This survey was designed to define incidence, rotation period, rotation direction and cycle of shift work plans in the production and service units in Kuwait. A control group on permanent day work was involved. The study showed that various types of shift plans cause disturbances in sleep duration, sleep quality, food intake and appetite, as well as psychosomatic complaints and subjective judgment of recovery. (Attia *et al*, 1985). A review on psychosocial stress and impaired sleep demonstrates that stress is closely related to impaired sleep in cross - sectional studies. In particular, the anticipation of high demands or effort the next day seems important. Sleep recordings show that stress is associated with shortened sleep, fragmentation, and possibly a reduction in sleep stages 3 and 4. Shortened or disturbed sleep causes an increase in levels of traditional stress markers (e.g. cortisol) and may exacerbate the effects of stress. Much knowledge is still lacking, however, particularly about the effects of real life work stress. (Akerstedt, 2006).

Bernadino Ramazzini, the father of Occupational Medicine, already noted the importance of musculoskeletal problems at work in the 17<sup>th</sup> century; he stated: “The first and most potent is the harmful character of the materials that are handled, for these emit noxious vapors and very fine particles inimical to human beings and induce particular diseases; the second cause I ascribe to certain violent and irregular motions and unnatural postures of the body, by reasons of which the natural structure is so impaired that serious diseases gradually develop”.(Yu Tak-sun 1992).

### **Injuries and Musculoskeletal strains**

Although psychological hazards do not cause musculoskeletal disorders directly, they are well known to affect the manifestations and progressions of such disorders. Stress fracture is as a result of unnoticed repeated minor trauma, the so called “March fracture” of soldiers and policemen is a typical example of this. Musculoskeletal diseases(e.g. osteoarthritis), may be considered as work related when aches and pains in the body region (e.g. shoulders, back) are associated with physical strain in these body areas during the course of work and at the same time, no other visible sign of general illness is seen in the musculoskeletal system. Continued pain and loss of function could occur after a low back injury (Yu Tak-sun 1992).

### **Stress and health complaints**

A study among 730 Dutch police officers was designed to investigate the causal relationships between (time and strain based) work – home interference and employee health. The effort – recovery theory provided the theoretical basis for the study. This study found that interference between stress at work and at home acts as a precursor of health impairment and that different patterns of this interference are related to different health courses as well as an accumulation of health complaints. (van Hooff *et al* 2005).

### **Exposure to air pollutants at work and respiratory disorders.**

The occupational exposure of policemen incorporates currently applicable occupational or medical exposure limits to air pollutants. This was confirmed by a study on exposure to carcinogenic air pollutants among policemen working close to traffic in the urban center of Grenoble, France, where personal air samples were collected during the work shift of the policemen, and analyzed. The air samples contained higher concentrations of benzo (a) pyrene, formaldehyde and benzene-toluene-xylene. (Maitre *et al* 2002).

### **2.8 Psychosocial Hazards and Psychological Distress in Police Officers.**

Psychosocial hazards may have a direct relationship with psychological distress in police officers which may have a bearing on interpersonal relations. A study that was carried out among police officers in Osogbo, Osun state, Nigeria, investigated the effect of two interactions—Social Skill Training (SST) and Problem-Solving Skills Training (PST)—on police interpersonal relationships. Ninety police officers (whose consent was sought through the Commissioner of Police (CP) Osun State Police Command, Nigeria) participated in the study. Participants who ranged in age between 28 and 47 years (mean = 37.8 years) were randomly and evenly distributed into two experimental and control groups. The interaction effects revealed that participants treated with SST and PST showed significant improvement in their interpersonal relationships. The relative effectiveness of the interaction effects also revealed that the SST was more effective than the PST in the improvement of police interpersonal relationships. (Aremu 2006).

Emotional intelligence is seen as an important factor for enhancing leadership effectiveness because of its emphasis on people and inter-personal relationships. (Caruso *et al.*2002). Similarly Schutte *et al.* 2001, gave an empirical report that emotional intelligence is related to interpersonal relations and cooperation. One of the reasons why emotional intelligence is germane to interpersonal relationship is that it has to do with understanding of feelings (most especially in other people). (Aremu and Tejumola 2008). An assessment of emotional intelligence was carried out among 285 police officers on a promotional training course at the Police College, Ikeja and at the Oyo state Police Command. A self reported emotional intelligence test (SREI) using the 33 item scale developed by Schutte et al (1998), was used to measure the emotional intelligence of the participants. The results obtained demonstrated that Nigerian police officers, irrespective of gender, age, job status, marital status, or their work experience, lack the emotional intelligence required, to make them do police work as is expected of them. (Aremu 2008). Emotional insanity is a specie of mental aberration (Black 1990). This differs from emotional intelligence and there is no known literature on emotional insanity in Nigerian Police officers.

In a study of the origins, prevalence and severity of stress-related symptoms, within a county police force in the U.K by Collins & Gibbs, 2003, a cross-sectional questionnaire survey of a population of 1206 police officers was performed to assess levels of strain associated with a series of potential home and work related stressors. The General Health Questionnaire (GHQ 12) was used to identify two groups among the police officers: a high scoring group with a threshold  $\geq 3$  and the remainder constituting the low scoring group. The high and low scoring groups were described as cases and, non-cases respectively. The term 'case' was used simply to define a statistically significant probability of psychological morbidity at the point of study, rather than a diagnostic or epidemiological term. 41% of the populations were cases. More cases were found within the 40-49 year age group. A significant association between gender and mental ill health was found with females more likely to score more highly on the GHQ than males. The study showed that occupational stressors ranking most highly within the population were not specific to policing, but to organizational issues such as the demands of work impinging upon home life, lack of consultation and communication, lack of control over work load, inadequate support and excess work load in general. These

organizational issues were significant stressors predictive of caseness. Other significant stressors that were predictive of caseness were; dealing with someone who is drunk, and being at risk of hepatitis or AIDS. This study confirms previous findings of organizational culture and work load as the key issues in officer stress. (Collins and Gibbs, 2003).

In January 2005, the Scottish Executive Justice Department Commissioned the Rivers Centre for Traumatic Stress to carry out a study to identify and develop pro-active measures Scottish police forces could implement to mitigate the psychological effects of repeated or prolonged exposure to traumatic stressors among their specialist post holders. Police stressors could usefully be categorized as either organizational or operational in their nature, with operational stressors generally sub divided into three types: "routine", "traumatic" and "vicarious". The major sources of police stress were not operational, but were organizational with human relations, personnel management, the organization of work and the structure of the police organization itself, being regularly identified as the most common sources of occupational stress. A total of 148 officers and support staff from eight (8) Scottish police forces were interviewed in the course of the study. Organizational Stressors that were specific to the police included geographical transfers and the multi-tasking found in small forces. Stressors whose source was external to the police organization included unrealistic societal expectations and perceptions of an unfair criminal justice system. Most interviewees described a process of "battle hardening" i.e. interpreting major events in an emotionally neutral way (Fyvie *et al* 2006).

It has been established that police officers encounter numerous stressors as part of their professional duties. Dissociation, the splitting off from awareness of thoughts, feelings, or memories of stressful events, is one psychological defense mechanism associated with avoidance of emotionally painful experience. (Aaron 2000). Dissociation, stressful or traumatic experiences, and psychological adjustment were measured in a sample of police officers in the United States of America. Stress was not directly associated with psychological adjustment, but increased stress predicted increased dissociation, while increased dissociation was associated with poorer adjustment. The study suggested that it is not the stressors themselves but the police officers' manner of coping with them that determine psychological adjustment. (Aaron 2000).

To establish whether psychosocial factors at work are predictors of depressive symptoms, a prospective cohort study was conducted among men and women employed in a wide variety of occupations by the French company Electricite De France – Gaz De France (EDF – GDF). The study showed that high levels of psychological demands, low levels of decision and low levels of social support at work were significant predictors of subsequent depressive symptoms in both the men and women. This strongly supports the possibility that psychosocial factors at work are predictive of depressive symptoms (Niedhammer *et al* 1998).

A study conducted in an elite unit of Brazilian Police officers, showed that frequent exposure to traumatic situations put police officers under an increased risk for developing post traumatic stress disorder (PTSD). (Maia *et al* 2003). Thus, although it is clear that police work is associated with a substantial risk of psychiatric morbidity, it is equally clear that experience of trauma is necessary but insufficient to explain the development of post traumatic reactions. Rather, psychiatric morbidity appears to result from an interaction between the event and individual characteristics. (Hodgins *et al* 2001).

Exposures to stressors as part of police officers' daily work may increase their potential for suicide. Stressors include organizational stressors such as authoritarian structure, lack of participation in decision-making, lack of administrative support, punishment-centered philosophy and unfair discipline. Other stressors are danger, shift work, public apathy, boredom, a sense of uselessness, and dealing with misery and death, particularly in shootings. Exposure to distress without access to multiple resources for coping may increase the potential for suicide (Violanti 1997).

The primary suggestion for handling the problem of police suicide in the United States is training on suicide prevention in stress management programs. A second suggestion is for organizational restructuring of the importance of the police role. In other words, new officers should be made aware that the role of police officer is important but that it is not the only role in their lives. These might help reduce suicide rates among police officers (Violanti 1997).

The significance of life events on police officers' psychological well-being suggests that loved ones and family members may be affected by the distress the officer is experiencing. This was concluded from a study that examined the effects of coping and social support on psychological distress in response to stressful work and life events among police officers in the U.S.A. Two hundred and thirty three (233) police officers within a mid-sized north eastern law enforcement organization took part in the study. The study found that the age of the police officer was associated with more years of police experience, higher rank, and reported fewer stressful work events. These stand to reason since older officers have more job tenure, get promoted and rise through the ranks of the police department, and consequently perform less of the work events that were measured in the study (such as handling domestic disputes and appearing in court). The study also suggested that older officers reported less education and that female officers were more likely to be married, hence reported fewer stressful work and life events. (Patterson 2003).

#### **Literature listing that utilized the GHQ 12 to assess Psychological distress.**

Alastair F.W, Anthony F.P. Hidden psychiatric illness: use of the general health questionnaire in general practice. *Journal of the Royal College of General Practitioners* 1987; 37:164-167.

Collins P.A., Gibbs A.C.C. Stress in police officers: A study of the origins, prevalence and severity of stress related symptoms within a county police force. *Occup. Medicine* 2003, 53:256-264. D01:10, 1093/occm/kqg061.

Golembiewski RT, Lloyd M, Scherb K, Munzenrider RF. Burnout and Mental Health Among Police Officers. *Journal of Public Administration Research and Theory* 2.4, 1992:424-439.

Hobson J, Beach JR, An investigation of the relationship between psychological health and work load among managers. *Occup. Med (London)* 2001:50: 518-522.

#### **Psychological interventions**

Psychological interventions which have been found to be of help to police officers in other countries of the world as follows:



- Stress reduction programmes, with emphasis on coping in response to life events.
- Relaxation
- Exercise therapies such as physical fitness, sports and training.
- Supportive therapies such as counseling sessions and social support.
- Psychotherapy to include cognitive behaviour therapy, exposure therapy, stress inoculation and psychodynamic therapy.
- Pharmacotherapy.

(Michie and Williams, 2003)

### **Definitions and Terminology of Psychological distress and Occupational stressors**

**Cognitive behavior therapy:** Focuses on recognizing distorted thinking and learning to replace it with more realistic substitute ideas. (Penalba, McGuire and Leite 2008).

**Emotion:** A strong feeling of hate, love, sorrow, and the like arising within a person and not as a result, necessarily, of conscious activity of the mind. (Black 1990).

**Emotional insanity:** The species of mental aberration produced by a violent excitement of the emotions or passions though the reasoning faculties may remain unimpaired. A passion effecting for a space of time complete derangement of the accused intellect, or an impulse, which his mind is not able to resist to do the act. (Black 1990).

**Emotional intelligence:** The ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions so as to promote both better emotion and thought. (Mayer and Salovey 1997).

**Exposure therapy:** A form of behaviour therapy in which the person confronts feelings, phobias or anxieties about a traumatic event and relives it in the therapy situation. (Penalba, McGuire and Leite 2008).

**Job content stressors (operational):** Those which arise from the duties police officers carry out (Evans and Coman 1992).

**Job context stressors (organizational):** Those which derive from the nature of the police organization in which police officers perform their duties. (Evans and Coman 1992).

**Psychodynamic therapy:** A term given to approaches used in surfacing true feelings, enabling understanding. The therapy assumes the existence of an unconscious mind which stores over painful feelings. It works to unravel the natural defenses to these feelings, helping to diminish them. (Penalba, McGuire and Leite 2008).

**Stress inoculation:** A type of behaviour therapy that tries to cope with stressful situations and consists of three phases. The educational, rehearsal and application phases. (Penalba, McGuire and Leite 2008).

**Supportive therapy:** Focuses on supporting reality testing, providing ego support, and maintains or re-establishes a usual level of functioning. (Penalba, McGuire and Leite 2008).

## **2.9 Legislation and Policy on Psychosocial Hazards and Work – Related Stress.**

Despite the prevalence of psychosocial challenges to health and safety, psychosocial hazards are highly underestimated by organizations in Nigeria. Presently, these challenges are not emphasized in policies on health by public and private enterprises. Government legislation on workers' health places much emphasis on physical health outcomes, but there is little in existence to address psychosocial hazards and outcomes such as work – related stress (Ekore 2007).

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Description of Study Area

The study was conducted among police officers in Ibadan, the capital city of Oyo state in Nigeria. Ibadan is the third largest Metropolitan area in Nigeria and a major center for trade especially in agricultural produce (Wikipedia.org). The population growth of Ibadan city has been on the increase especially in the recent time based on its locational advantage over other settlements within the region. For instance, it grew by 65.4% between 1963 and 1986, and by 43.4% between 1986 and 2000. Furthermore, it is projected to grow by 68.5% between 2000 and 2020, a period of 20 years. Population of Ibadan city (2008): 2,614,069 (Projected from 2000 {8 years}), Population of Ibadan city (2020): 3,223,429 (Projected from 2000 {20 years}), Population Growth Rate: 2.3 (Oladele and Oladimeji,2011). The issues of godfatherism, violence and political insecurity have been manifest in the Nigerian polity since the commencement of the Fourth Republic, (Adebanwi, 2005) especially in Ibadan, the socio-economic and political centre of Oyo state. There is the alienation of the state from the citizenry as well as the existence of a state sponsored terrorism, based on the fact that political thugery groups are sponsored directly or indirectly by those in government, i.e. politicians against the people that the NPF should be protecting (Awe, 1999). Since the NPF by law answer to and is paid by the government, it finds itself many times in the cumbersome task of having to protect ordinary citizens from violence perpetrated by politicians' thugs on one hand and also having to answer to the same politicians for whom these thugs work on the other hand. This task and its associated challenges, are a psychosocial hazard and stress for police officers in Ibadan.

#### The Oyo State Police Command

The Oyo state police command with its headquarters in Eleyele, Ibadan is headed by a Commissioner of Police assisted by a Deputy Commissioner of police and supported by 8 assistant Commissioners of Police.

There are four (4) area commands in Oyo state, two (2) of which are in Ibadan namely, Iyaganku and Agodi area commands. The remaining two (2) area commands are in Oyo and Ogbomosho towns. Area commands are headed by area commanders and comprise divisions headed by divisional police officers. The study was carried out in Iyaganku and Agodi area commands in Ibadan comprising 18 and 19 divisions respectively.

### **Police Health Service**

There is only one police clinic in Oyo state, which is located in the state headquarters in Eleyele, Ibadan. The police clinic is headed by a medical director who is the Assistant Commissioner of Police in charge of medical services in the state. The clinic comprises thirty (30) staff, including two (2) doctors, with facilities such as a laboratory and an operating theatre presently under renovation, and presently not functional. The clinic provides free basic medical care for the police officers and their dependants, under the National Health insurance Scheme (NHIS), while referrals are made to specialist medical centres when appropriate.

### **Police Accommodation.**

Accommodation for police officers is called 'police barracks'. Each of the four area commands has police barrack. It is of worthy note that not all the police divisions have police barracks. From all the 37 divisions, under the two area commands in Ibadan, only 17 divisions have police barracks. Police officers, who are not accommodated within the barracks, usually find other means of accommodation.

## **3.2 Study Population**

The study population comprises junior and senior police officers of the male and female gender, of different ranks from the divisions within the two area commands in Ibadan. The Commissioner of police is the highest rank at the state level. The ranks starting from the lowest are:

1. Police Constable
2. Police Corporal (CPL)

3. Sergeant (SGT)
4. Inspector of Police (INSPR)
5. Assistant superintendent of Police II (ASPII)
6. Assistant superintendent of Police I (ASPI)
7. Deputy Superintendent of Police (DSP)
8. Superintendent of Police (SP)
9. Chief Superintendent of police (CSP)
10. Assistant Commissioner of police (ACP)
11. Deputy Commissioner of police (DCP)
12. Commissioner of police (CP)

The junior police officers are ranks 1 to 3 (also known as the rank & file), while the senior police officers (SPO's) are ranks 4 to 12 (also known as commissioned officers). Ranks 1 to 10 may be found in a division, while ranks 11 & 12 are based at the headquarters. There are a total of 8 Assistant Commissioners of police in Oyo state, with one in charge of each of the four commands, and the other four at the State Headquarters in charge of different departments. There is only 1 Deputy Commissioner of Police and only 1 Commissioner of Police. This study will include police officers that serve in the divisions (ranks 1 to 10).

### **3.3 Study Design**

A descriptive cross – sectional study was carried out in Ibadan between October and December 2008.

### **3.4 Sample Size Determination.**

In a previous study, the prevalence of high GHQ (General health Questionnaire) scores, which predicted the psychosocial health status among police officers within a county police force in

the U.K, was 41 % (Collins and Gibbs 2003), and with this value, a sample size was calculated using the formula:

$$N = \frac{Z^2 pq}{d^2}$$

Where N=minimum sample size.

P = proportion of police officers who scored high on the GHQ (0.41).

$$q = 1 - p$$

$$= 0.59$$

d = degree of accuracy (5%) =0.05.

z = a constant at 95% confidence level=1.96

$$N = \frac{1.96^2 \times 0.59 \times 0.41}{0.05^2} = 371$$

Four hundred and thirty five police officers (435) were interviewed.

### 3.5 Sampling Procedure

The list of divisions in Iyaganku and Agodi area commands as well as the population of police officers in each division was obtained with permission. Iyaganku area command with 18 divisions had 1,717 police officers, while Agodi area command with 19 divisions had 2,005, making a total of 3,722 police officers. The calculated average number of police officers within divisions in Iyaganku area command was 96, while the calculated average number of police officers within divisions in Agodi area command was calculated to be 105. The divisions were grouped into large and small. Divisions with more than 100 police officers was categorized as large, while those divisions with less than 100 police officers, was categorized as small. Each division constituted a cluster. Hence a cluster sampling procedure was used.

From each of these area commands, three (3) police divisions (1 large and 2 small) were selected by balloting, making a total of six (6) police divisions. All the junior and senior police officers, in the selected divisions were requested to participate in the study. Senior and junior police officers in a division, who are not on special outside duty postings, are required to be present during the weekly Tuesday lecture, which takes place at the divisional premises. All police officers on shift work are required to sign in and out during their exchange of duties. The researcher with research assistants was present at these periods.

### **3.6 Instrument Design.**

The study was carried out using a self-administered, structured questionnaire. Most of its questions were closed ended, while just a few were open ended, to allow for free responses to questions which required them. The questionnaire was developed by the researcher from a review of relevant records, as well as literature of previous related studies from developed countries. All questions were based on the specific objectives of the study, and were in the English language.

The questionnaire was divided into four sections:

**Section A** contained questions on socio-demographic variables.

**Section B** contained questions on occupational variables such as rank, promotions, demotions, job description, and hours of work, organizational and operational stressors.

**Section C** contained questions on psychosocial variables such as financial status, living conditions, and work satisfaction, availability of basic and social amenities.

**Section D** contained questions on the general health status of the police officers.

**The GHQ12 (general health questionnaire)** was used. It is a self reporting screening questionnaire which identifies individuals who have a high probability of suffering from psychological illness. (Goldberg 1972). It was used in this study to determine the psychological health status of the police officers by identifying those with psychological distress. The questionnaire comprises twelve (12) questions. Each question is rated on a

four-point scale, (better than usual, same as usual, less than usual or much less than usual). A Bi-modal (0-0-1-1) scoring method was used to compute the scores for each respondent. The 'standard' threshold of > 3 was used to differentiate 'cases' (presence of minor psychological distress by GHQ12), from 'non-cases' (absence of minor psychological distress by GHQ12), (Coomber *et al.*2002).

### **Validity and Reliability.**

The GHQ12 has been well validated and correlates well with the assessments of consultant psychiatrists. It is specifically designed for use in community settings. (Alastair and Anthony 1987). Public health and community medicine experts examined the whole questionnaire to ensure the relevance, appropriateness, and adequacy of the items in each of the sections. The feedback obtained was used to improve the questionnaire. Research assistants were trained before data collection, with emphasis laid on the objectives of the study, the need to collect valid data as well as being patient and courteous. The respondents were also persuaded to be honest so as to ensure valid responses. The questionnaire was pretested among police officers in a different division apart from the divisions that were selected by balloting. The response and acceptability of the questionnaire was good and average completion time was 15minutes.

### **3.7 Data Collection**

Data collection was achieved by the principal investigator and three (3) research assistants. The divisional police officers also gave good support in the distribution of questionnaires to all the police officers within the divisions visited. Administration of questionnaires was achieved during the weekly Tuesday lecture between 8am and 10am. The purpose of the research was carefully explained to the police officers and informed verbal and written consent obtained, before the questionnaires were filled. The trained research assistants were available to supervise the filling of the questionnaires, especially with questions that were not clearly understood and required explanation. Due to the busy schedule of the police officers, some of them were not present at the divisional premises, hence, some divisions had to be re-visited at least once, which also required waiting patiently for the police officers to return to



their various divisions later in the day. Most police officers were very cooperative and eager to participate.

### **3.8 Ethical Consideration**

Ethical clearance was sought and obtained from the UI/UCH Institutional Review Board. Permission to carry out the study was also sought and obtained from the Commissioner of Police in Ibadan, Oyo State, as well as the Director of Medical Services of the Nigeria Police medical unit, Oyo State, who is also one of the Assistant Commissioners of Police.

#### **Confidentiality of Data Collected from the Respondents**

Careful explanation of the purpose, content & implication of the research was made known to the participants, and verbal as well as written informed consent obtained. Respondents' privacy and confidentiality was guaranteed by anonymity of responses.

#### **Beneficence**

Information obtained from the study provide data on psychosocial hazards and the psychological state of police officers, which would be useful for developing interventions for prevention and control of psychosocial risks in the Nigeria Police Force. This would be beneficial in ensuring the psychological well being of police officers in Nigeria.

#### **Non- maleficence**

The aim and objectives of the study were carefully explained to the respondents and assurance given that no ill effects or harsh treatment was to be expected from participating in the study, neither would information obtained be used negatively against them.

#### **Respect for persons**

The intended participants were assured that they had the right to choose to participate, not participate, or to discontinue answering the questionnaire, without fear of repercussion.

### **3.9 Data Analysis**

The questionnaires were checked for completeness, and the open ended questions in the survey instrument were coded. Statistical Package for Social Science (SPSS) version 12 was used to analyze the data. Frequencies, percentages, means & proportions were generated with appropriate tables. T test and ANOVA were used to test associations between quantitative variables, while  $\chi^2$  (Chi – square) test was used to test associations between qualitative variables.

### **3.10 Limitation of the Study.**

The response of some of the police officers may be influenced by rumors of disciplinary action, fear of retrenchment, sudden transfer or deployment to undesirable postings, if they told the truth about their health status. The researcher and research assistants prevented these fears, by assuring them that being honest will very much be in their best interest, and that the research was not sponsored by the Federal or State Government. Some of the police officers were not willing to fill in their real ages. To ameliorate the problem, research assistants were informed to peruse filled questionnaires to check for missing information, which was recollected before leaving every respondent.

## CHAPTER FOUR

### RESULTS

#### 4.1 Socio-Demographic Data.

**Table 1. Socio-Demographic Characteristics of Respondents**

Characteristic	N = 435 n (%)
<b>Age &lt;30</b>	260 (59.8)
31-40	115 (26.4)
41-50	42 (9.7)
50years and above	18 (4.1)
<b>Sex</b>	
Male	315 (72.4)
Female	120 (27.6)
<b>Marital Status</b>	
Single	151 (34.7)
Married	278 (63.9)
Divorced	3 (0.7)
Widowed	3 (0.7)
<b>Educational level</b>	
Secondary and below:	
Primary	8 (1.8)
Secondary	252 (57.9)
Post-secondary:	
Technical college	18 (4.1)
Polytechnic	83 (19.1)
College of education	44 (10.1)
University	30 (6.9)
<b>Religion</b>	
Christianity	342 (78.6)
Islam	90 (20.7)
*Others	3 (0.7)
<b>Ethnicity</b>	
Yoruba	327 (75.2)
Hausa	23 (5.3)
Igbo	30 (6.9)
** Other tribe	55 (12.6)

\* African Traditional

\*\* Ebira, Tiv, Edo

Table 1 above shows that four hundred and thirty five police officers agreed to be interviewed. Their mean age was  $31.8 \pm 8.30$  years (range 18-58). Over half of the police officers 260 (59.8%) were within age group of less than 30 years. A majority of the police officers 315 (72.4%) were also males, 342 (78.6%) were Christians and 327 (75.2%) were of Yoruba ethnicity. Most police officers 278 (63.9%) were married, while 260 (59.8%) had at most secondary education, and 175 (40.2%) had post secondary education.

**Table 2. Location of The Respondents: Area Command & Divisions of Respondents**

<b>Area Command</b>	<b>Divisions</b>	<b>N = 435 n(%)</b>
AGODI	Agodi	172 (39.5)
	Monatan	28 (6.4)
	Iyanna offa	25 (5.7)
IYAGANKU	Mokola	77 (17.7)
	Eleyele	84 (19.3)
	Felele	49 (11.3)

Table 2 shows that the highest proportion of respondents, 172 (39.5%) were from the Agodi Division, while the lowest 25 (5.7%) were from the Iyana-offa Division.

## 4.2 Occupational Data : Tables 3-8.2.

**Table 3. Classification of Occupational History of Respondents Since Leaving School \***

<b>Classification</b>	<b>N = 435 n (%)</b>
Semiprofessional/managers	39 (9.0)
Skilled non-manual	21 (4.8)
Skilled manual	8 (1.8)
Semiskilled manual	20 (4.6)
Unskilled manual	3 (0.7)
Joined the NPF after leaving school	344 (79.1)

\* *Based on Registrar General's classification of social class (England & Wales 1968).*

Table 3 shows the occupational background of the police officers after leaving school. Thirty-nine (9.0%) police officers had been semi-professionals/managers prior to joining the Nigeria Police Force (NPF), 8 (1.8%) were on skilled manual jobs, 3 (0.7%) had unskilled manual jobs, while 344 (79.1%) joined the NPF immediately after completion of their education.

**Table 4. Respondents Rank, Promotions and Demotions**

<b>Present Rank</b>	<b>N = 435</b> <b>n (%)</b>
Constable	270 (62.1)
Corporal	63 (14.5)
SGT	48 (11.0)
Inspector	32 (7.4)
ASP	17 (3.9)
DSP	4 (0.9)
CSP	1 (0.2)
<b>Rank of entrance into NPF</b>	
Constable	428 (98.4)
Corporal	-
SGT	-
Inspector	7 (1.6)
ASP	-
DSP	-
CSP	-
<b>Promotion</b>	
Yes	152 (34.9)
Never	283 (65.1)
<b>No. of years before promotion to present rank.</b>	
≤5years	62 (14.3)
6-10years	71 (16.3)
>10years	10 (2.3)
No response	9 (2.0)
<b>Demotion</b>	
*Yes	8 (1.8)
No	427 (98.2)

\* *Reasons given for demotion include (N = 8): Escape of suspect =1, Leaving duty post=2, Lack of supervision=1, Sleeping on duty =3, no reason given=1.*

Table 4 shows that 270 (62.1%) respondents were constables, 32 (7.4%) were inspectors of police, while 17 (3.9%) were assistant Superintendents of police (ASP). The rank of entrance into the NPF was constable for 428(98.4%) and Inspector (INSPR) for 7 (1.6%) police officers. 283 (65.1%) police had never been promoted. Out of the 152 (34.9%) police officers

who had been promoted, 71 (16.3%) had served between six to ten years before being promoted to the next rank.

Only 8 (1.8%) police officers had been demoted on their course of duty.

**Table 5. Job Description and Work Conditions of Respondents**

<b>Job Description and Work Conditions</b>	<b>N = 435 n (%)</b>
<b>Total hours/day</b>	
< 8 hours	116 (26.7)
8-12hours	65 (14.9)
> 12hours	254 (58.3)
<b>Break hour/day</b>	
No break	336 (77.2)
30 minutes	14 (3.2)
>30 minutes	65 (15.0)
No response	20 (4.6)
<b>Days/week</b>	
Everyday	424 (97.5)
Every other day	11 (2.5)
<b>Years in present rank</b>	
≤5years	237 (54.5)
6-10years	160 (36.8)
>10years	5 (1.1)
No response	33 (7.6)
<b>Total years in police service</b>	
≤5years	111 (25.5)
6-10years	150 (34.5)
>10years	104 (23.9)
No response	70 (16.1)
**	
<b>Rotating shift duty</b>	
Yes	341 (78.4)
No	94 (21.6)
<b>Duty Post</b>	
General Duty (GD)	356 (81.8)
Charge Room Officer (CRO)	18 (4.1)
Divisional Traffic Officer (DTO)	5 (1.1)
Divisional Crime Officer (DCO)	4 (0.9)
Divisional Police Officer (DPO)	1 (0.2)
Patrol and Guard Officer (P & G)	9 (2.1)
Other	42 (9.7)
<b>Job Description*</b>	
Patrol	122 (28.0)
Guard	122 (28.0)
Escort	20 (4.6)
Settlement of cases/court	76 (17.5)
Recorder	28 (6.4)

Special duty	81 (18.6)
Supervision	34 (7.8)
Commanding	7 (1.6)
Other	80 (18.4)

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\* For multiple responses.

\*\*Mean number of years in police service=10.65 years (S.D=8.62), ranging from 1 to 35 years.

With respect to the period of work of the police officers, Table 5 shows that 229 (52.6%) worked for more than 12hours in a day. It also shows that 336 (77.2%) had no break hours per day and 424 (97.5%) worked every day of the week. Table 5 also shows that in terms of type of work, 341 (78.4%) police officers were involved in shift duty, 356 (81.8%) were involved with general duty, 122 (28.0%) police worked as patrol officers, while 34 (7.8%) police officers did supervision duties.

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**Table 6.1 Organizational Stressors of Respondents and Rank.**

Organizational stressors	Transfer N= 435 n (%)		Multiple tasks N= 435 n (%)		Working overtime N= 435 n (%)		Poor support from supervisor N= 435 n (%)		Job responsibility not clear N= 435 n (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Junior Police</b>	161(42.3)	220 (57.7)	125(32.8)	256(67.2)	243(63.8)	138 (36.2)	95 (24.9)	286 (75.1)	54 (14.2)	327 (85.8)
<b>Senior police</b>	28(51.9)	26(48.1)	30 (55.6)	24 (44.4)	44 (81.5)	10 (18.5)	22 (40.7)	32 (59.2)	10 (18.5)	44 (81.5)
<b>Total</b>	189 (43.4)	246 (56.6)	155 (35.6)	280 (64.4)	287 (66.0)	148 (34.0)	117 (25.9)	318 (73.1)	64 (14.7)	371 (85.3)
$\chi^2$	1.77		10.67		6.60		6.01		0.71	
<b>P value</b>	0.18		0.001		0.01		0.01		0.39	

**Table 6.2. Organizational Stressors of Respondents and Rank**

Organizational stressors	Confused feedback N= 435 n (%)		Experienced poor leadership from administrators N= 435 n (%)		Experienced poor job performance from fellow police N= 435 n (%)		Bureaucratic hassles N= 435 n (%)		Failure of promotional course N= 435 n (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Junior Police</b>	53 (13.9)	328 (86.1)	97 (25.5)	284 (74.5)	71 (18.6)	310(81.4)	46 (12.1)	335 (87.9)	86 (22.6)	295 (77.4)
<b>Senior police</b>	8 (14.8)	46 (85.2)	14 (25.9)	40 (74.1)	18 (33.3)	36(66.7)	14 (25.9)	40 (74.1)	10 (18.5)	44 (81.5)
<b>Total</b>	61 (14.0)	374 (86.0)	111 (25.5)	324 (74.5)	89 (20.5)	346 (79.5)	60 (13.8)	375 (86.2)	96 (22.1)	339 (77.9)
$\chi^2$	0.03		0.005		6.27		7.63		0.45	
<b>P value</b>	0.85		0.94		0.01		0.006		0.50	

### **Organizational Stressors of Respondents and Rank.**

Table 6.1 and 6.2 shows that, junior and senior police officers experienced multiple tasks, worked overtime, received poor support from their supervisors, experienced bureaucratic hassles, and had attested to poor job performance by their fellow police officers in the previous one year. More than half of the senior police officers(55.6%) and a third of the junior police officers (32.8%) experienced multiple tasks,  $p=0.001$ . More than half of the junior police officers (63.8%) as well as the senior police officers (81.5% ) had worked overtime,  $p=0.01$ . More of the senior police officers (40.7%) than junior police officers(24.9%) had experienced poor support from their supervisors,  $p=0.01$ .

Thirty three percent of the senior police officers and 18.6% of the junior police officers had experienced poor job performance by their fellow police,  $p=0.01$ . Twenty six percent of the senior police officers as well as 12.1% of the junior police officers had experienced bureaucratic hassles,  $p=0.006$ .

### **Operational Stressors of Respondents and Rank**

Table 7 shows that in the previous one year, 174(45.7%) junior police officers and 33(61.1%) senior police officers had witnessed the death of a partner (colleague). A higher percentage of the senior police officers (61.1%), had experienced the death of a partner. This was statistically significant  $p=0.03$  i.e. witnessing the death of a partner was associated with the rank of the police officers. Other operational stressors such as participating in an act of corruption, having to kill when necessary, being attacked, and confrontation and use of force were not significantly associated with the rank of the police officers.

**Table 7. Operational Stressors of Respondents and Rank of Police.**

Operational Stressors	Witnessing the death of a partner N= 435 n (%)		Confrontation and use of force N= 435 n (%)		Being attacked N= 435 n (%)		Having to kill when necessary N= 435 n (%)		Participating in an act of corruption N= 435 n (%)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Junior Police</b>	174(45.7)	207 (54.3)	131 (34.4)	250 (65.6)	155 (40.7)	226 (59.3)	56 (14.7)	325 (85.3)	17 (4.5)	364 (95.5)
<b>Senior police</b>	33 (61.1)	21 (38.9)	19 (35.2)	35 (64.8)	27 (50)	27 (50)	13 (24.1)	41 (75.9)	3 (5.6)	51 (94.4)
<b>Total</b>	207 (47.6)	228 (52.4)	150 (34.5)	285 (65.5)	182 (41.8)	253 (58.2)	69 (15.9)	366 (84.1)	20 (4.6)	415 (95.4)
$\chi^2$	4.52		0.01		1.68		3.11		0.12	
<b>P value</b>	0.03		0.90		0.19		0.07		0.72	

**Table 8.1. Satisfaction With Police Work And Rank**

<b>Satisfaction</b>	Not at all	Moderately so	Very much so	<b>X<sup>2</sup></b>	<b>P value</b>
<b>Junior Police</b> N= 381 n (%)	61 (16)	108 (28.3)	212 (55.6)		
<b>Senior Police</b> N= 54 n (%)	10 (18.5)	18 (33.3)	26 (48.1)	1.07	0.58
<b>Total number of police officers</b> N= 435 n (%)	71 (16.3)	126 (29.0)	238 (54.7)		

Table 8.1. shows that 61(16%) of the junior police officers reported that they were not at all satisfied with their jobs. There was no association between satisfaction with police work and police rank; p=0.58.

**Table 8.2. Desire for a Change of Job and Rank of Police. N=304**

<b>Desire for a change of job</b>	<b>Yes</b>	<b>No</b>	<b>X<sup>2</sup></b>	<b>P value</b>
<b>Junior Police</b> N= 267 n (%)	61 (22.8)	206 (77.2)	Fishers exact	0.40
<b>Senior Police</b> N= 37 n (%)	11 (29.7)	26 (70.3)		
<b>Total number of police officers</b> N= 304 n (%)	72 (23.7)	232 (76.3)		

Table 8.2 shows that 61 (22.8%) of the junior police officers desired a change of job. However, desiring a change of job or not, was not associated with the rank of the police officers;  $p= 0.40$ . Overall, 238 (54.7%) of the respondents indicated that they were satisfied with their jobs while 71 (16.3%) indicated that they were not at all satisfied.

### 4.3 Socio-Economic Data: Tables 9 – 14.

**Table 9. Socio-Economic Characteristics of Respondents and their Rank.**

Socio-economic characteristic		Junior police N=381 n(%)	Senior police N=54 n(%)	Total no. of police officers N=435 n(%)	X <sup>2</sup>	P value
Salary meeting basic needs						
	Not at all	188 (49.3)	25 (46.3)	213 (49)	4.32	0.11
	Moderately so	116 (30.4)	23 (42.6)	139 (32.0)		
	Very much so	77 (20.2)	6 (11.1)	83 (19.1)		
**Other sources of income	Yes	30 (6.9)	0 (0.0)	30 (6.9)	Fishers exact	0.03
	No	351 (92.1)	54 (100)	405 (93.1)		
Bank savings	Yes	141 (37.0)	21 (38.9)	162 (37.2)	Fishers Exact	0.88
	No	240 (63.0)	33 (61.1)	273 (62.8)		
Own development project.	Yes	65 (17.1)	25 (46.3)	90 (20.7)	Fishers Exact	0.00
	No	316 (82.9)	29 (53.7)	345 (79.3)		

\*\* Other sources of income include: trading, business centre, cobbler, lesson teacher, wife's income, GSM, petty trader, Musician, Film producer, 'Okada' transportation, furniture maker, patent medicine seller, printing.

Table 9 shows that more of the junior police officers 188 (49.3%) than the senior police officers 25(46.3%), reported that their salaries did not at all meet their basic needs. 351(92.1%) of the junior police officers and all 54 (100%) of the senior police officers had no other source of income. The police officers 30(6.9%) who had other sources of income were all junior police officers. This difference was statistically significant; p= 0.03.i.e having other source of income was associated with the rank of the police. A majority, 345 (79.3%) of all the police officers had no development projects e.g. landed property, building projects or business outfits. More senior police officers, 25 (46.3%) than junior police officers 65 (17.1%) had development projects. This difference was statistically significant; p=0.00 i.e. owning a development project was associated with the rank of police officers. Two hundred and forty (63%) of the junior police officers and 33 (61.1%) of the senior police officers had

no bank savings. This difference was not statistically significant;  $p= 0.88$  i.e. there was no association between having bank savings and rank of police.

**Table 10.1. Accommodation of Respondents and their Rank.**

Accommodation	Junior police N=379 n%	Senior police N=53 n%	Total number of police N=432 n%	X <sup>2</sup>	P value
Police barracks	76 (20.1)	12 (22.6)	88 (20.4)		
Rented 1 room	131 (34.6)	6 (11.3)	137 (31.7)		
Rented room and palour	125 (33.0)	15 (28.3)	140 (32.4)	31.76	0.00
Rented flat	37 (9.8)	14 (26.4)	51 (11.8)		
Personal house	8 (2.1)	6 (11.3)	14 (3.2)		
**Other	2 (0.5)	0 (0)	2 (0.5)		

\*\* *Squatting.*

Table 10.1 shows that not all the police officers were accommodated within the police barracks. More junior police officers lived in a rented one room apartment and a rented room and palour (34.6% and 33.0% respectively), while more senior police officers lived in rented flats and their personal houses (26.4% and 11.3% respectively). This was statistically significant. i.e the type of accommodation was associated with the rank of police officers. In general, senior police officers had better accommodation.



## Living Conditions and Rank of Respondents.

**Table 10.2 Total number of people that live with Respondents and Rank.**

Number of people living with the Police	Junior Police N=381 n(%)	Senior Police N=54 (n%)	Total number of police officers N=435 (n%)	X <sup>2</sup>	P value
None	175 (45.9)	11 (20.4)	186 (42.8)	92.0	0.00
1-5	179 (47.0)	14 (25.9)	193 (44.4)		
6-10	24 (6.3)	25 (46.3)	49 (11.3)		
>10	3 (0.8)	4 (7.4)	7 (1.6)		

The total number of people that live with the police officers include members of their nuclear and extended families. Table 10.2 shows that the proportion of the junior police officers who had none, 175 (45.9%) and between one to five persons, 179 (47.0%) living with them, was higher than the proportion of the senior officers, 11 (20.4%) and 14 (25.9%) respectively. The proportion of those who had more than six persons living with them was higher among the senior police. This difference was statistically significant;  $p=0.00$ . i.e. the number of persons living with the police was associated with their rank.

## Water Source of Respondents and Their Ranks.

**Table 11. Water source of Respondents and their Rank.**

**Type of water		Junior Police N=381 n%	Senior Police N=54 n%	Total no. of police officers N=435 n%	X <sup>2</sup>	P value
(1.) Pipe-borne	Yes	98 (25.7)	21 (38.9)	119 (27.4)	Fishers	0.05
	No	283(74.3)	33 (61.1)	316 (72.6)	exact	
(2.) Well	Yes	259(68.0)	31 (57.4)	290 (66.7)	Fishers	0.12
	No	122(32.0)	23 (42.6)	145 (33.3)	exact	
(3.) Rain	Yes	18 (4.7)	1 (1.9)	19 (4.4)	Fishers	0.49
	No	363(95.8)	53 (98.1)	416 (95.6)	exact	
(4.) River	Yes	1 (0.3)	0 (0.0)	1 (0.2)	Fishers	1.00
	No	380(99.7)	54 (100)	434 (99.8)	exact	
(5.) Spring	Yes	3 (0.8)	2 (3.7)	5 (1.1)	Fishers	0.11
	No	378(99.2)	52 (96.3)	430 (98.9)	exact	
(6.) Bore hole	Yes	50 (13.1)	6 (11.1)	56 (12.9)	Fishers	0.82
	No	331(86.9)	48 (88.9)	379 (87.1)	exact	

\*\* – *For multiple responses*

Table 11 shows that 316 (72.6%) of the police officers did not have pipe-borne water where they lived. More senior police officers, 21 (38.9%) than junior police officers, 98 (25.7%) reported the use of pipe- borne water. This difference was statistically significant,  $p = 0.05$  i.e. the use of pipe-borne water was associated with the rank of police officers.

## Toilet Facility of Respondents

**Table 12: Toilet Facility of Respondents and their Rank**

<b>Toilet facility</b>	<b>Junior Police N=381 n(%)</b>	<b>Senior Police N=54 (n%)</b>	<b>Total no. of police N=435 (n%)</b>	<b>X<sup>2</sup></b>	<b>P value</b>
Water closet	288 (75.6)	43 (79.6)	331 (76.1)		
Pit latrine	72 (18.9)	9 (16.7)	81 (18.6)	0.52	0.77
Bush	21 (5.5)	2 (3.7)	23 (5.3)		

Table 12 shows that 331 (76.1%) of the police officers reported that they utilized water closets where they lived, while 23 (5.3%) use the bush. The type of toilet facility used was not associated with the rank of police officers;  $p=0.77$

**Amenities Owned by Respondents and Rank**

**Table 13.1 Amenities owned by Respondents and Rank**

Amenities*	Refrigerator		Television		G.S.M phone		Motor cycle		Car	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Junior Police</b> N=381 n(%)	164(43.0)	271(57.0)	311 (81.6)	70 (18.4)	313 (82.2)	68 (17.8)	65 (17.1)	361 (82.9)	61 (16.0)	320 (84)
<b>Senior police</b> N=381 n(%)	34 (63)	20 (37)	48 (88.9)	6 (11.1)	45 (83.3)	9 (16.7)	12 (22.2)	42 (77.8)	30 (55.6)	24 (44.4)
<b>Total</b> N=435 n(%)	198 (45.5)	237 (54.5)	359 (82.5)	76 (17.5)	358 (82.3)	77 (17.7)	77 (17.7)	358 (82.3)	91 (20.9)	344 (79.1)
$\chi^2$	Fishers exact		Fishers exact		Fishers exact		Fishers exact		Fishers exact	
<b>P value</b>	0.008		0.25		1.00		0.22		1.00	

**Table 13.2. Amenities owned by Respondents and Rank**

Amenities*	Computer		None		Others**	
	Yes	No	Yes	No	Yes	No
<b>Junior Police</b> N=381 n(%)	44(11.5)	337(88.5)	15 (3.9)	366 (96.1)	14(3.7)	367 (96.3)
<b>Senior police</b> N=54 n(%)	8 (14.8)	46 (85.2)	2 (3.7)	52(96.3)	6 (11.1)	48(88.9)
<b>Total</b> N=435 n(%)	52 (12.0)	383 (88.0)	17(3.9)	418 (96.1)	20 (4.6)	415 (95.4)
$\chi^2$	Fishers exact		Fishers exact		Fishers exact	
<b>P value</b>	0.5		1.00		0.02	

(\*) For multiple responses.

(\*\*)Land phone, fan, bicycle

Table 13.1 and 13.2 show that a greater percentage of the senior police officers 34 (63.0%) than junior police officers 164 (43.0%) owned refrigerators. This was statistically significant  $p=0.008$ . i.e. owning a refrigerator was associated with the rank of the police officers. With respect to owning a car, 344 (79.1%) of all the police officers did not own cars but more of the senior police officers 30 (55.6%) owned cars. This was statistically significant  $p=0.00$  i.e. owning a car was associated with the rank of police officers. The proportion of senior police officers 6 (11.1%) who reported that they had other amenities such as land phones, fans and bicycles was higher than the proportion of the junior police officers 14 (3.7%) who also had these amenities. This difference was statistically significant;  $p=0.02$ . i.e. owning such amenities was associated with the rank of the police officers. Owning amenities such as television sets, G.S.M phones, motorcycles, computers, were not statistically significant i.e. not associated with their ranks.

**Table 14. Respondents Satisfaction with Living and Work Conditions, and Rank.**

Respondents satisfaction		Junior police N=381 n%	Senior police N=54 n%	Total no. of Police N=435 n%	X <sup>2</sup>	P value
Satisfaction with living environment	Yes	199 (52.2)	35 (64.8)	234 (53.8)	Fishers exact	0.10
	No	182 (47.8)	19 (35.2)	201 (46.2)		
Opportunity to help average	Unsatisfied	74 (19.4)	8 (14.8)	82 (18.9)	1.83	0.40
	Satisfied on average	128 (33.6)	23 (42.6)	151 (34.7)		
	Very satisfied	179 (47.0)	23 (42.6)	202 (46.4)		
Public regard for work	Unsatisfied	130 (34.1)	12 (22.2)	142 (32.6)	3.10	0.21
	Satisfied on average	160 (42.0)	26 (48.1)	186 (42.8)		
	Very satisfied	91 (23.9)	16 (29.6)	107 (24.6)		
Opportunity for personal growth and development	Unsatisfied	132 (34.6)	16 (29.6)	148 (34.0)	3.51	0.17
	Satisfied on average	141 (37.0)	27 (50.0)	168 (38.6)		
	Very satisfied	108 (28.3)	11 (20.4)	119 (27.4)		
Good pay for work	Unsatisfied	153 (40.2)	29 (53.7)	182 (41.8)	3.82	0.14
	Satisfied on average	161 (42.3)	19 (35.2)	180 (41.4)		
	Very satisfied	67 (17.6)	6 (11.1)	73 (16.8)		
Work load	Unsatisfied	176 (46.2)	28 (51.9)	204 (46.9)	1.75	0.41
	Satisfied on average	144 (37.8)	21 (38.9)	165 (37.9)		
	Very satisfied	61 (16.0)	5 (9.3)	66 (15.2)		
Support from seniors	Unsatisfied	124 (32.5)	14 (25.9)	138 (31.7)	2.54	0.28
	Satisfied on average	154 (40.4%)	28 (51.9)	182 (41.8)		
	Very satisfied	103 (27.0)	12 (22.2)	115 (26.4)		
Opportunity to give suggestions apart from obeying orders	Unsatisfied	134 (35.2)	18 (33.3)	152 (34.9)	0.09	0.95
	Satisfied on average	134 (35.2)	20 (37.0)	154 (35.4)		
	Very satisfied	113 (29.7)	16 (29.6)	129(29.7)		

Table 14 shows that a greater percentage of the senior police officers, 35 (64.8%) than junior police officers, 199 (52.2%) were more satisfied with their living environment. This was not statistically significant  $p=0.10$  i.e. respondents satisfaction with their living environment was irrespective of their rank. There was no association between the police officers' satisfaction with the opportunity to help; public regard for their work; payment for work done; the work load that they had; the support received from their seniors, and their rank. Dissatisfaction with payment for work done was reported among both junior police officers 153 (40.2%) as well as senior police officers 29 (53.7%).

#### 4.4 General Health Data: Tables 15 – 21.

**Table 15.1. Respondents Rank and Sickness absence in the preceding one month.**

Rank	Sickness absence		Total no. of police officers	$X^2$	P-value
	Sick	Not sick			
Junior police N=381 n(%)	110 (28.9)	271 (71.1)	381 (100)	3.15	0.07
Senior police N=54 n(%)	22 (40.7)	32 (59.3)	54 (100)		
Total N=435 n(%)	132 (30.3)	303 (69.7)	435 (100)		

Table 15.1 shows that in the preceding month, 132 (30.3%) of the total population had been sick, resulting in absence from duty while 303(69.7% ) had not been sick. Junior police officers were more regular at their duty than the senior officers. However, this was not statistically significant  $p=0.07$  i.e. being absent from duty due to sickness was not associated with the rank of police officers.

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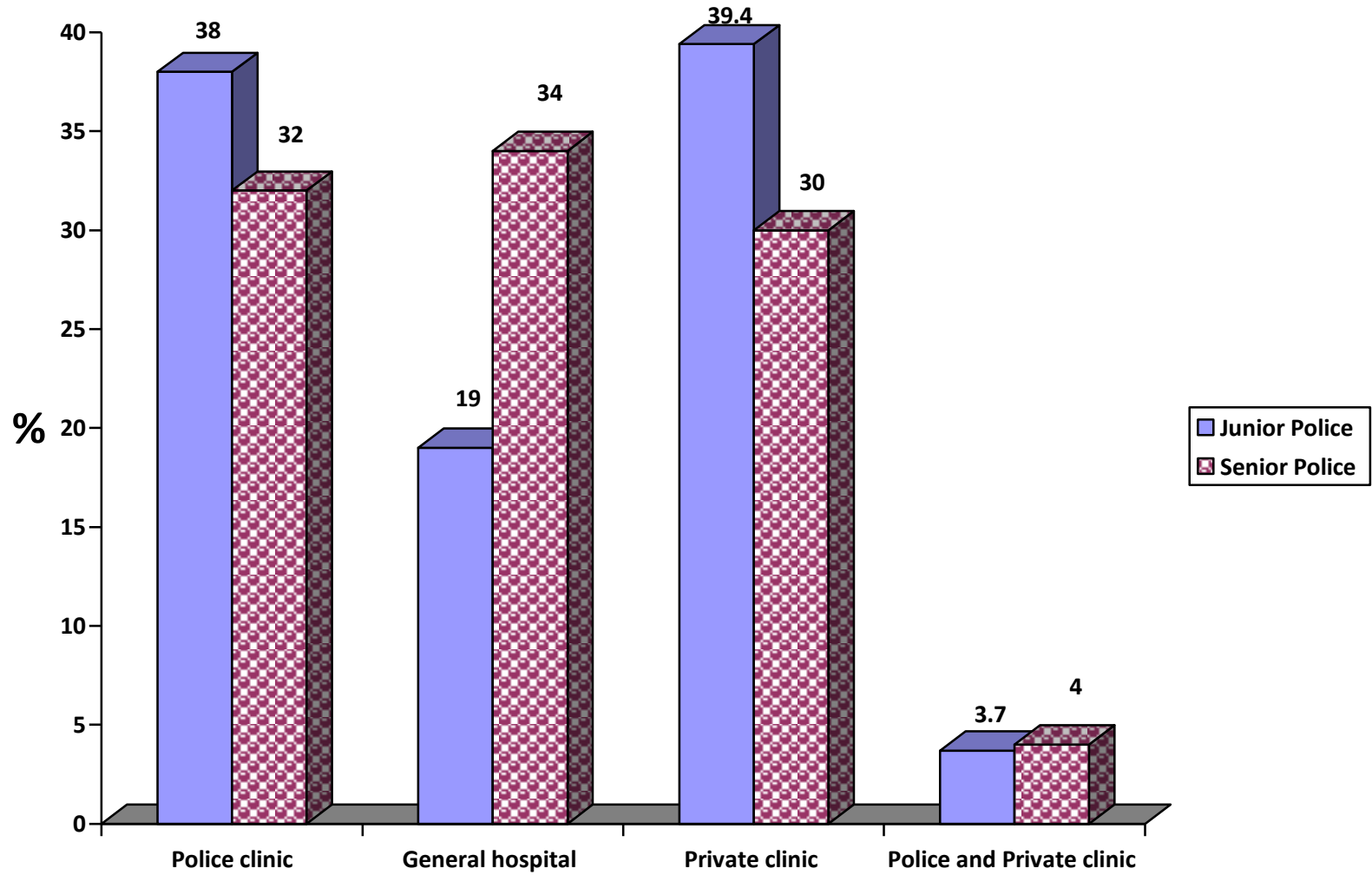
**Table 15.2 . Respondents Organizational stressors and Sickness Absence**

<b>Organizational stressors</b>	Multiple tasks		Working overtime		Poor support from supervisors		Job responsibility unclear		Poor leadership from administrators	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sick	52 (33.5)	80(28.6)	93 (32.4)	39 (26.4)	45 (38.5)	87 (27.4)	28 (43.8)	104 (28)	45 (40.5)	87 (26.9)
Not Sick	103 (66.5)	200 (71.4)	194 (67.6)	109 (73.6)	72 (61.5)	231 (72.6)	36 (56.2)	267 (72)	66 (59.5)	237 (73.1)
<b>Total</b>	155 (100)	280 (100)	287 (100)	148 (100)	117 (100)	318 (100)	64(100)	371(100)	111 (100)	324 (100)
$\chi^2$	1.16		1.69		4.98		6.38		7.32	
<b>P value</b>	0.28		0.19		0.02		0.01		0.007	

**Respondents organizational stressors and sickness absence in the preceding one month.**

Table 15.2 shows that organizational stressors such as poor support from supervisors, job responsibility not being clear, and poor leadership from administrators were significantly associated with sickness absence in the NPF; p=0.02, 0.01 and 0.007 respectively.

**Chart 1: Health Facilities Utilized by Respondents.**



### **Health Facilities Utilized by Respondents.**

Chart 1 shows that 136 (38%) of the junior police officers utilized the police clinic, while 141 (39.4%) utilized private clinics, whenever they were sick. The police officers also utilized general hospitals or a combination of the police and private clinics. The results were not statistically significant  $p=0.17$ . i.e. the place of treatment utilized was not associated with the rank of the police officers.

### **Substance use Profile of Respondents and Rank.**

Table 16.1 and 16.2 show that 99 (22.8%) of all the police officers used sedatives. A greater percentage of the senior police officers, 17 (31.5%) than of the junior police, 82 (21.5%), reported the use of sedatives. This was not statistically significant  $p=0.10$  i.e. the use of sedatives was not associated with the rank of police officers.

With respect to alcohol consumption, 177 (40.7%) of the police officers consumed alcohol. A greater percentage of the senior police officers 31 (57.4%), than of the junior police officers, 146 (38.3%) consumed alcohol. More of the senior police officers ingested alcohol, than the junior police officers. This was statistically significant  $p=0.008$  i.e. alcohol consumption was associated with the rank of police. The proportion of police officers who smoked cigarettes, 46 (10.6%). was more than the proportion of those who smoked Indian hemp, 31 (7.1%). More police officers smoked cigarettes than they did Indian hemp.

**Table 16.1. Substance use Profile of Respondents and Rank**

Substance use	Sleeping drugs		Alcohol		Tobacco		Cigarettes	
	Yes	No	Yes	No	Yes	No	Yes	No
<b>Junior Police</b> N=381 n(%)	82 (21.5)	299 (78.5)	146 (38.3)	235 (61.7)	43 (11.3)	338 (88.7)	40 (10.5)	341 (89.5)
<b>Senior police</b> N=54 n(%)	17 (31.5)	37 (68.5)	31 (57.4)	23 (42.6)	4 (7.4)	50 (92.6)	6 (11.1)	48 (88.9)
<b>Total</b> N=435 n(%)	99 (22.8)	336 (77.2)	177 (40.7)	258 (59.3)	47 (10.8)	388 (89.2)	46 (10.6)	389 (89.4)
$\chi^2$	2.66		7.14		0.73		0.02	
<b>P value</b>	0.10		0.008		0.39		0.89	

**Table 16.2. Substance use Profile of Respondents and Rank**

Substance use	Indian hemp		Glue		Other substance*	
	Yes	No	Yes	No	Yes	No
<b>Junior Police</b> N=381 n(%)	28 (7.3)	353 (92.7)	27 (7.1)	354 (92.9)	17 (4.5)	364 (95.5)
<b>Senior police</b> N=54 n(%)	3 (5.6)	51 (94.4)	2 (3.7)	52 (96.3)	2 (3.7)	52 (96.3)
<b>Total</b> N=435 n(%)	31 (7.1)	404 (92.9)	29 (6.7)	406 (93.3)	19 (4.4)	416 (95.6)
$\chi^2$		0.23		0.87		0.06
<b>P value</b>		0.63		0.35		0.79

\* - paw-paw leaves.

**Table 17. Respondents participation in Recreational activities (Games and Sports).**

<b>Participation in Recreational Activities</b>	Yes	No	No response
<b>Junior Police</b> N=381 n(%)	167(43.8%)	213 (55.9%)	1 (0.3%)
<b>Senior police</b> N=54 n(%)	20(37.0%)	34(63.0%)	0 (0.0%)
<b>Total</b> N=435 n(%)	187(43.0%)	247(56.8%)	1 (0.2%)
$\chi^2$		1.06	
<b>P value</b>		0.58	

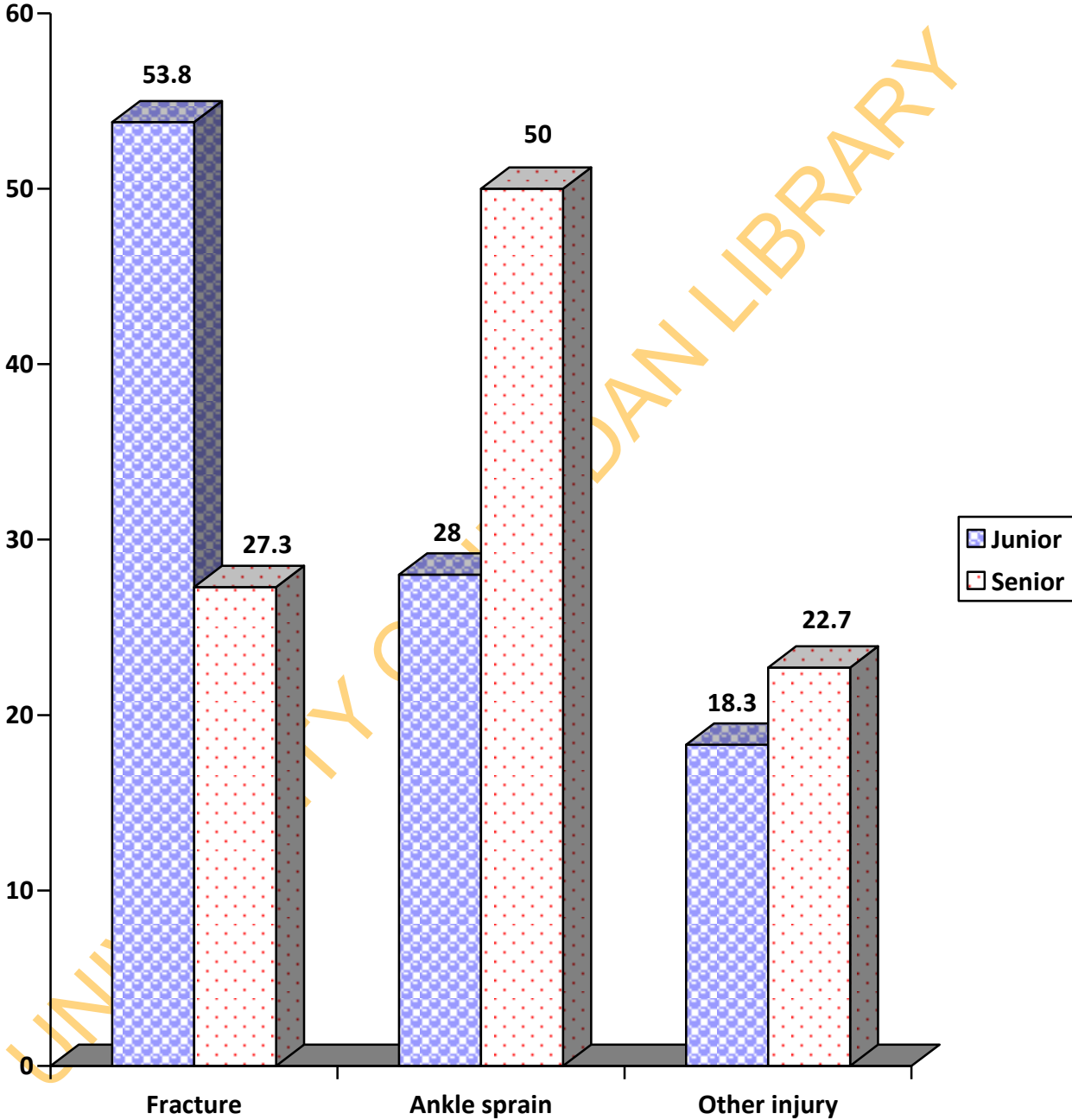
**Respondents Participation in Recreational activities (Games And Sports).**

Table 17 shows that 187 (43.0%) of all the police officers participated in recreational activities such as games and sports. More of the junior police officers, 167 (43.8%), than the senior police officers, participated in recreational activities but this difference was not statistically significant  $p=0.58$ .

**Injury sustained at work in the preceding three months.**

Chart 2 on the next page shows that, with respect to the injury sustained at work in the preceding three months, 115 (26.4%) police officers had sustained some injury. More of the junior police officers 50 (53.8%), than the senior police officers 6 (27.3%), had sustained fracture injuries.

**Chart 2. Injury sustained at work by Respondents in the preceding three months**



**Table 18. Respondents Last Medical Check- up and Knowledge of HIV status**

<b>Last medical check-up</b>	Last month	Last week	Yesterday	Others*	None at all	$\chi^2$	<b>P value</b>
<b>Junior police</b> N=381 n (%)	188 (49.3)	27 (7.1)	10 (2.6)	68 (17.8)	88 (23.1)	3.24	0.51
<b>Senior police</b> N=54 n (%)	25 (46.3)	3 (5.6)	1 (1.9)	15 (27.8)	10 (18.5)		
<b>Total</b> N=435 n (%)	213 (49.0)	30 (6.9)	11 (2.5)	83 (19.1)	98 (22.5)		
<b>Knowledge of HIV status</b>							
	Yes		No		Total		
<b>Junior police</b> N=381 n (%)	241 (63.3)		140 (36.7)		381 (100)		
<b>Senior police</b> N=54 n (%)	33 (61.1)		21 (38.9)		54 (100)		
<b>Total</b> N=435 n (%)	274 (63.0)		161 (37.0)		435 (100)		
<b>Reasons for ignorance of HIV status</b>							
	Lack of interest	No time to check	Others**		Total		
<b>Junior police</b> N=141 n (%)	41 (29.3)	88 (62.9)	11 (7.9)		141 (100)		
<b>Senior police</b> N=21 n (%)	5 (23.8)	14 (66.7)	2 (9.5)		21 (100)		
<b>Total</b> N=161 n(%)	46 (28.6)	102 (63.4)	13 (8.1)		161 (100)		

\* = 2 years ago, 3 years ago, long time ago, can't remember.

\*\*= no reason, I don't know.



### **Respondents Last Medical Check- up and Knowledge of HIV Status.**

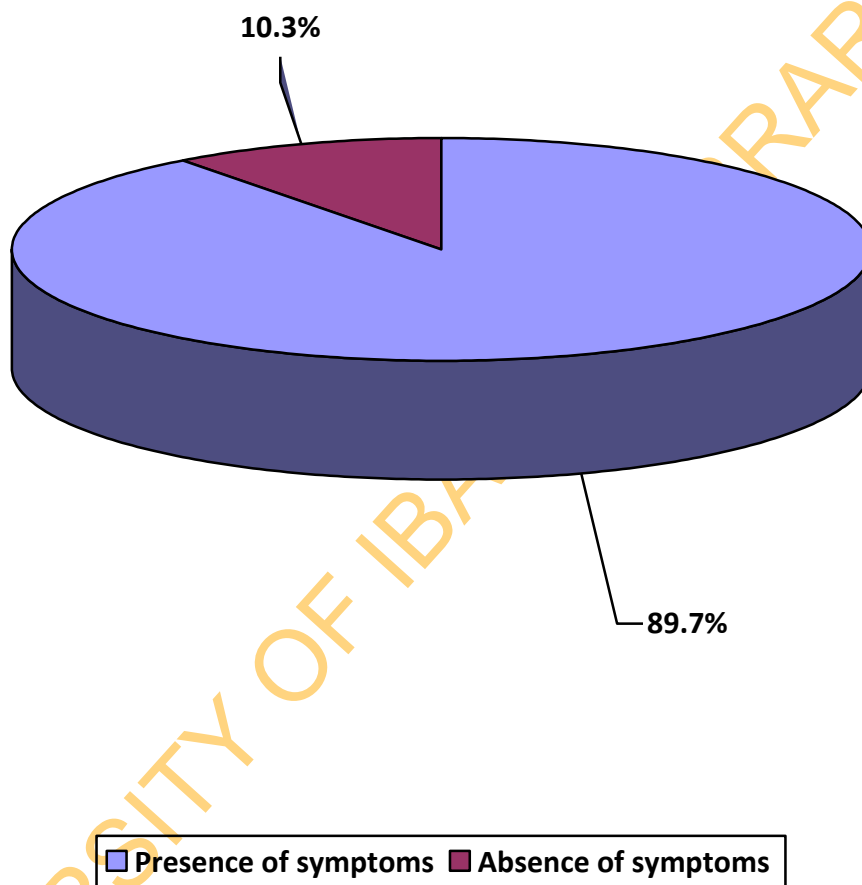
Table 18 shows that within the preceding month, 254 (58.4%) of the police officers had a medical check -up. More of the junior police officers 27(7.1%) than the senior police officers, 3 (5.6%) had a medical check-up in the previous week.

With respect to knowledge of their HIV status, 274 (63.0%) of the police officers knew their status. More of the junior police officers 241 (63.3%) than the senior police officers, 33 (61.1%), had knowledge of their HIV status. The most common reason given by the police officers for not knowing their status was that they had no time to go for a check 102 (63.4%). A greater percentage of the senior police officers, 14 (66.7%) attested to this reason.

### **Current Health Problems of Respondents.**

Chart 3 on the next page shows the percentage of police officers who reported any health symptom or symptoms and those who did not report any symptom at all. Only 45 (10.3%) of the police officers did not report any symptom of ill-health at all.

**Chart 3. Presence and Absence of health symptoms in respondents**



**Table 19. Respondents Characteristics and Presence of any Symptom(s).**

Respondents characteristic	Presence of symptom(s)		Total no. of police officers	X <sup>2</sup>	P -value
	Yes n(%)	No n(%)			
<b>Age</b>					
<30	227 (87.3)	33 (12.7)	260 (100)	6.91	0.07
31-40	104 (90.4)	11 (9.6)	115 (100)		
41-50	42 (100)	0 (0%)	42 (100)		
50years and above	17 (94.4)	1 (5.6)	18 (100)		
<b>Sex</b>					
Male	281 (89.2)	34 (10.8)	315 (100)	Fishers exact	0.72
Female	109 (90.8)	11 (9.2)	120 (100)		
<b>Rank</b>					
Junior police officers	337 (88.5)	44 (11.5)	381 (100)	Fishers exact	0.02
Senior police officers	53 (98.1)	1 (1.9)	54 (100)		
<b>Length of employment</b>					
<b>N=365</b>					
≤5years	93 (83.8)	18 (16.2)	111 (100)	7.58	0.02
6-10years	138 (92.0)	12 (8.0)	150 (100)		
>10years	98 (94.2)	6 (5.8)	104 (100)		

Table 19 above shows the association between the respondents age, sex, rank and length of employment and the presence of any symptom(s). More of the female police officers had symptoms, 109 (90.8%) while more of the junior police officers 337 (88.5%) reported the presence of symptoms of ill-health. This was statistically significant;  $p=0.02$ .i.e the rank of police officers was significantly associated with the presence of symptoms of ill-health. Police officers who had spent 6 to 10 years in service, 138 (92.0%) reported more symptoms than those who had spent less than 5 years, 93 (83.8%). $p=0.02$ .i.e length of service was significantly associated with the presence of symptoms of ill health.

**Table 20. Current Health Problems of Respondents**

<b>Symptoms*</b>	<b>Police Officers N = 435, n (%)</b>
<b>Respiratory system</b>	
Cough	92 (21.1)
Catarrh	133 (30.6)
Chest pain	31 (7.1)
Sore-throat	15 (3.4)
Difficult breathing	10 (2.3)
Coughing out blood	2 (0.5)
<b>Cardiovascular system</b>	
Palpitations	32 (7.4)
Breathlessness climbing a stair case	46 (10.6)
Breathless, walking a short distance	43 (9.9)
<b>Gastrointestinal system</b>	
Abdominal pain	54 (12.4)
Burning sensation in the stomach	25 (5.7)
Frequent stooling	11 (2.5)
Constipation	23 (5.3)
Vomiting blood	1 (0.2)
<b>Central nervous system</b>	
Headaches	158 (36.3)
Blurring of vision	27 (6.2)
Hearing difficulty	8 (1.8)
<b>Urogenital system</b>	
Vaginal discharge	17 (3.9)
Urethral discharge	6 (1.4)
Pelvic pain	22 (5.1)
Frequent urination	13 (3.0)
Genital ulcers	2 (0.5)
<b>Musculoskeletal system</b>	
Low back pain	121 (27.8)
Joint pains	45 (10.3)
<b>Fever</b>	230 (52.9)

\* = for multiple responses.

### **Current health problems of respondents**

Table 20 above shows that with respect to current health symptoms; 92 (21.1%) police officers had cough and 31 (7.1%) police officers had chest pain. Cardiovascular symptoms such as palpitations were experienced by 32 (7.4%) of the police officers, while breathlessness on climbing a staircase and walking a short distance were experienced by 46 (10.6%) and 43 (9.9%) police officers respectively. Gastrointestinal symptoms such as burning sensation in the stomach were experienced by 25 (5.7%) police officers. Headaches were reported by 158 (36.3%) police officers.

Urethral discharge was reported by 6 (1.4%) police officers and vaginal discharge by 17 (3.9%) police officers. Low back pain was reported by 121 (27.8%) police officers and joint pains by 45 (10.3%) police officers. Fever was reported by 230 (52.9%) police officers.

### **Shift duty and respondents' use of sedatives.**

Table 21.1 on the next page shows that 13 (3.0%) of the total police officers used sedatives constantly and 12 (3.5%) of them worked shift duties. The use of sedatives is an indicator of the absence or quality of sleep of the police officers. The lack or inability to sleep is a symptom of ill health. Shift duty was associated with the use of sedatives.  $p=0.05$ .

**Table 21.1. Shift Duty and Respondents' Use of Sedatives.**

Shift duty	Use of sedatives			Total	X <sup>2</sup>	P-value
	Every time	Sometimes	Not at all			
Yes	12 (3.5)	60(17.6)	269(78.9)	341(100.0)	5.81	0.05
No	1 (1.1)	26 (27.7)	67 (71.3)	94 (100.0)		
Total	13 (3.0)	86 (19.8)	336 (77.2)	435 (100.0)		

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**Table 21.2. Respondents Stress Symptoms and Working overtime.**

Stress symptoms	Working overtime.		Total no. of police officers N=435	X <sup>2</sup>	P -value
	Yes N= 287	No N=148			
<b>Headaches</b>				Fishers exact	0.04
Yes	114 (72.2)	44 (27.8)	158 (100)		
No	173 (62.5)	104 (37.5)	277 (100)		
<b>Low-back pain</b>				Fishers exact	0.02
Yes	90 (74.4)	31 (25.6)	121 (100)		
No	197 (62.7)	117 (37.3)	314 (100)		
<b>Joint pains</b>				Fishers exact	0.50
Yes	32 (71.1)	13 (28.9)	45 (100)		
No	255 (65.4)	135 (34.6)	390 (100)		

**Respondents stress symptoms and working overtime.**

Table 21.2 above shows that there was a significant association between headaches, low-back pain and working overtime;  $p= 0.04$  and  $0.02$  respectively. 114 (72.2%) of the respondents with headaches had been working overtime, and 90 (74.4%) of the respondents who had low back pain had also been working overtime. Joint pain was not significantly associated with working overtime;  $p=0.5$ .

**Respondents Characteristics and Low-Back Pain.**

Table 21.3 below shows the association between the respondents age, sex, rank and length of employment and low-back pain. More of the male police officers 93 (29.5%) than female police officers 28 (23.3%) reported low-back pain. However, this was not statistically significant.  $p= 0.23$  i.e. there was no association between the sex of the police officers and low-back pain.

Police officers who were between 31 and 40 years; 39 (33.9%) reported more low-back pain than police officers aged between less than 30 years of age; 60 (23.1%);  $p=0.057$

Age, sex, rank and length of employment were not significantly associated with low-back pain in the police officers.

**Table 21.3. Respondents Characteristics and Low-Back Pain.**

<b>Respondents characteristic</b>	<b>Low-back pain</b>			<b>X<sup>2</sup></b>	<b>P -value</b>
	<b>Yes n(%)</b>	<b>No n(%)</b>	<b>Total no. of police officers</b>		
<b>Age</b> <30	60 (23.1)	200 (76.9)	260 (100)	7.52	0.057
31-40	39 (33.9)	76 (66.1)	115 (100)		
41-50	16 (38.1)	26 (61.9)	42 (100)		
50years and above	6 (33.3)	12 (66.7)	18 (100)		
<b>Sex</b>				Fishers exact	0.23
Male	93 (29.5)	222 (70.5)	315 (100)		
Female	28 (23.3)	92 (76.7)	120 (100)		
<b>Rank</b>				Fishers exact	0.33
Junior police officers	103 (27.0)	278 (73.0)	381 (100)		
Senior police officers	18 (33.3)	36 (66.7)	54 (100)		
<b>Length of employment</b> <b>N=365</b>				2.19	0.33
≤5years	30 (27.0)	81 (73.0)	111 (100)		
6-10years	40 (26.7)	110 (73.3)	150 (100)		
>10years	36 (34.6)	68 (65.4)	104 (100)		



#### 4.5. GHQ 12 Scores and Psychological Distress Data: Tables 22 – 34.

**Table 22. Police Officers Response to the GHQ 12**

GHQ12	Police Officers N= 435, n (%)
(1.) Concentration	
- Better than usual	183 (42.1)
- Same as usual	171 (39.3)
- Less than usual	56 (12.9)
- Much less than usual	25 (5.7)
(2.) Lost much sleep over worry	
- Not at all	226 (52.0)
- No more than usual	110 (25.3)
- Rather more than usual	67 (15.4)
- Much more than usual	31 (7.1)
- No response	1 (0.2)
(3.) Playing a useful part in things	
- More so than usual	111 (25.5)
- Same as usual	238 (54.7)
- Less so than usual	59 (13.6)
- Much less than usual	27 (6.2)
(4.) Capable of decision making	
- More so than usual	159 (36.6)
- Same as usual	204 (46.9)
- Less so than usual	54 (12.4)
- Much less than usual	18 (4.1)
(5.) Constantly under strain	
- Not at all	199 (45.7)
- No more than usual	117 (26.9)
- Rather more than usual	95 (21.8)
- Much more than usual	24 (5.5)
(6.) Feeling that difficulties can't be overcome	
- Not at all	249 (57.2)
- No more than usual	110 (25.3)
- Rather more than usual	45 (10.3)
- Much more than usual	31 (7.1)
(7.) Enjoying daily activities	
- More so than usual	98 (22.5)
- Same as usual	224 (51.5)
- Less so than usual	75 (17.2)
- Much less than usual	38 (8.7)
(8.) Facing up to problems	
- More so than usual	126 (29.0)
- Same as usual	225 (51.7)
- Less so than usual	59 (13.6)
- Much less than usual	25 (5.7)

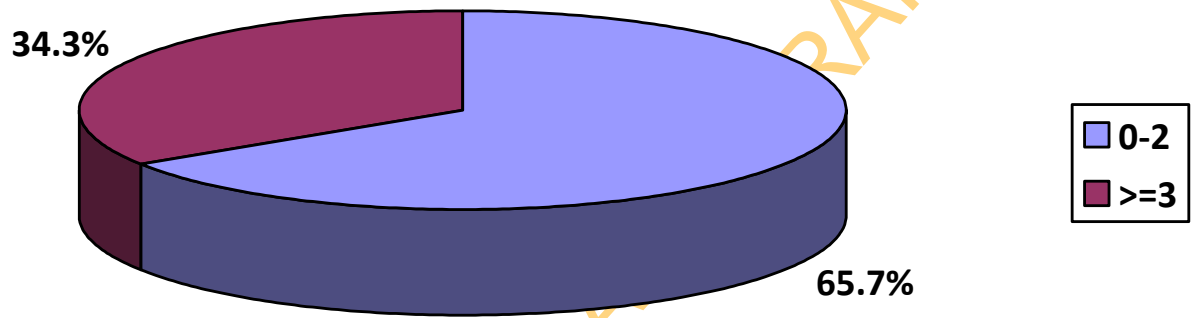
**Table 22 contd. Police Officers Response to the GHQ 12**

GHQ12	Police Officers N= 435, n (%)
(9.) Feeling unhappy or depressed	
- Not at all	258 (59.3)
- No more than usual	95 (21.8)
- Rather more than usual	52 (12.0)
- Much more than usual	30 (6.9)
(10.) Loss of self confidence	322 (74.0)
- Not at all	56 (12.9)
- No more than usual	47 (10.8)
- Rather more than usual	10 (2.3)
- Much more than usual	
(11.) Thoughts of being worthless	
- Not at all	324 (74.5)
- No more than usual	58 (13.3)
- Rather more than usual	34 (7.8)
- Much more than usual	19 (4.4)
(12.) Feeling reasonably happy, all things considered	
- More so than usual	132 (30.3)
- Same as usual	214 (49.2)
- Less so than usual	48 (11.0)
- Much less than usual	41 (9.4)

**Police officers response to the GHQ 12**

Table 22 shows the response of the police officers to each of the twelve (12) questions on the GHQ 12. It shows that recently, 56 (12.9%) police officers had less than usual concentration while 171 (39.3%) police officers reported their concentration being same as usual. Thirty-one (7.1%) police officers had recently much more than usual lost much sleep over worrying. Twenty-seven (6.2%) police officers reported much less than usual playing a useful part in things. Eighteen (4.1%) police officers reported much less than usual capability of decision making while 204 (46.9%) police officers decision making capability remained the same. One hundred and ninety-nine (45.7%) police officers are not at all under constant strain, while 24 (5.5%) police officers reported being much more than usual, under constant strain.

**Chart 4: GHQ 12 scores of respondents**



**GHQ 12 scores of respondents**

Chart 4 above shows that 149 (34.3%) of all the police officers had GHQ scores of  $\geq 3$  indicating psychological distress.

**Table 23. Socio-Demographic Characteristics of Respondents and GHQ 12 Scores.**

Characteristic	GHQ scores (n= %)		X <sup>2</sup>	P value
	0 -2	≥ 3		
Sex				
Male (N=315)	216 (68.6)	99 (31.4)	Fishers	0.05
Female (N=120)	70 (58.3)	50 (41.7)	Exact	
Age group				
≤ 30	170 (65.4)	90 (34.6)		0.55
31 – 40	72 (62.6)	43 (37.4)	2.06	
41 – 50	31 (73.8)	11 (26.2)		
> 50	13 (72.2)	5 (27.8)		
Marital status				
- Never Married	97 (64.2)	54 (35.8)	Fishers	0.67
- Married	189 (66.5)	95 (33.5)	Exact	
Highest level of education				
- Secondary & below	169 (65.0)	91 (35.0)	Fishers	0.75
- Post Secondary	117 (66.9)	58 (33.1)	Exact	
Religion				
- Christianity	233 (68.1)	109(31.9)	8.49	0.01
- Islam	53 (58.9)	37 (41.1)		
- African traditional	0 (0.0%)	3 (100)		
Ethnicity				
Yoruba	212 (64.8)	115(35.2)		0.28
Hausa	13 (56.5)	10 (43.5)	3.82	
Igbo	19 (63.3)	11 (36.1)		
Other tribe	42 (76.4)	13 (23.6)		

### **Socio-demographic characteristics of respondents and GHQ 12 scores.**

Table 23 shows that in this study, there were more male police officers ,315(72.4%), than female police officers 120(27.6%). A greater percentage of the female police officers 50 (41.7%), than male police officers 99 (31.4%), scored  $\geq 3$ , indicating psychological distress. This was statistically significant  $p=0.05$ .i.e. Sex of the police officers was associated with psychological distress. Female officers were more psychologically distressed than their male counterparts.

Table 23 also shows that more than half, 43 (37.4%) of the police officers between the ages of 31-40 years had more psychological distress among those aged 41-50 and over fifty years;11 (26.2%) and 5 (27.8%) respectively. The younger police officers were more psychologically distressed than the older police officers. However, this was not statistically significant,  $p=0.55$  i.e. age of police officers was not associated with psychological distress.

Concerning marital status, more than half of police officers who had never married 54 (35.8%) were more psychologically distressed than those who were married 95 (33.5). This was not statistically significant,  $p=0.67$  i.e. marital statuses were not associated with psychological distress.

**Table 24. Occupational Characteristics of Respondents and GHQ 12 Scores.**

Characteristic		GHQ scores N=435 n (%)		X <sup>2</sup>	P value
		0-2	≥ 3		
<b>Rank</b>	Junior Police	248 (65.1)	133 (34.9)	0.58	0.44
	Senior Police	38 (70.4)	16 (29.6)		
<b>Total no. of years in police service</b>				1.09	0.57
	≤5years	72 (64.9)	39 (35.1)		
	>10years	66 (63.5)	38 (36.5)		
<b>Special duty</b>	Yes	65 (80.2)	16 (19.8)	Fishers Exact	0.003
	No	221 (62.4)	133 (37.6)		
<b>Demotion</b>	Yes	6 (75.0)	2 (25.0)	Fishers exact	0.72
	No	280 (65.6)	147 (34.4)		
<b>Shift duty</b>	Yes	226 (63.3)	115 (33.7)	Fishers Exact	0.71
	No	60 (63.8)	34 (36.2)		

**Occupational characteristics of respondents and GHQ 12 scores.**

Table 24 shows the occupational characteristics of the police officers and their association with GHQ 12. Working on special duties was found to be associated with psychological distress.  $p=0.003$ .

With respect to the rank of the police officers, more than half of the junior police officers 133 (34.9%) scored highly on the GHQ 12. However there was no association between rank or length of service in the NPF and psychological distress.  $p=0.44$  and  $p=0.57$  respectively.

Two (25%) of the 8 police officers who had been demoted scored highly on the GHQ 12, and 115 (33.7%) of those who worked shift duties also had high scores. There was however no significant association between demotion or working shift duty and psychological distress.

**Table 25. Organizational Stressors of Respondents and GHQ 12 Scores.**

Organizational stressors		GHQ scores		Total no. of police N=435	X <sup>2</sup>	P-value
		0 -2	≥ 3			
Transfer in the last 1 year						
	Yes	118 (62.4)	71 (37.6)	189(100.0)	Fishers	0.1
	No	168 (68.3)	78 (31.7)	246(100.0)	exact	
Multiple tasks in the last 1 year						
	Yes	110 (71.0)	45 (29.0)	155(100.0)	Fishers	0.05
	No	176 (62.9)	104 (37.1)	280(100.0)	exact	
Working overtime in the last 1 year						
	Yes	189 (65.9)	98 (34.1)	287(100.0)	Fishers	0.51
	No	97 (65.5)	51 (34.5)	148(100.0)	exact	
Poor support from Supervisors in the last 1 year						
	Yes	76 (65.0)	41 (35.0)	117(100.0)	Fishers	0.45
	No	210 (66.0)	108 (34.0)	318(100.0)	exact	
Job responsibility not clear in the last 1 year						
	Yes	39 (60.9)	25 (39.1)	64(100.0)	Fishers	0.23
	No	247(66.6)	124 (36.4)	371(100.0)	exact	
Confused feedback					Fishers	
	Yes	30 (49.2)	31 (50.8)	61(100.0)	Exact	0.003
	No	256 (68.4)	118 (31.6)	374(100.0)		
Poor leadership					Fishers	
	Yes	71 (64.0)	40 (36.0)	111(100.0)	exact	0.36
	No	215 (66.4)	109 (33.6)	324(100.0)		
Poor job performance by fellow Police					Fishers	
	Yes	52 (18.2)	37 (24.8)	89 (100.0)	exact	0.06
	No	234 (81.8)	112 (75.2)	346(100.0)		
Bureaucratic hassles					Fishers	
	Yes	31 (51.7)	29 (48.3)	60 (100.0)	Exact	0.01
	No	255 (68.0)	120 (32.0)	375(100.0)		
Failure of promotional course					Fishers	
	Yes	57 (59.4)	39 (40.6)	96 (100.0)	exact	0.08
	No	229 (67.6)	110 (32.4)	339(100.0)		

### **Organizational stressors of respondents and GHQ 12 scores.**

Table 25 shows that, in the previous one year, 45 (29%) of the police officers with multiple tasks had GHQ scores of  $\geq 3$ , indicative of psychological distress. This was statistically significant  $p=0.05$  i.e. there was an association between multiple tasks and psychological distress. Thirty-one police officers (50.8%) who reported that feed back was confusing had GHQ scores of  $\geq 3$ . This was more than half of the total number of police officers that reported feed back as confusing. This was statistically significant  $p=0.003$ . i.e there was an association between confused feedback and psychological distress. Furthermore, 29 (48.3%) of the police officers who had experienced bureaucratic hassles had GHQ scores of  $\geq 3$ . This was statistically significant  $p=0.01$  i.e. an association existed between bureaucratic hassles and psychological distress. There was no association between police officers' being transferred and psychological distress.

The perception of poor support from supervisors, and job responsibility not being clear, was not associated with psychological distress i.e.  $p=0.45$ , and  $p=0.23$ , respectively. The perception of poor leadership, poor job performance by fellow police officers, and the failure of a promotional course had no association with psychological distress.  $p=0.36$ ,  $p=0.06$ , and  $p=0.08$  respectively.



**Table 26. Operational Stressors of Respondents and GHQ12 Scores.**

Operational stressors	GHQ scores		Total no. of police officers N= 435	X <sup>2</sup>	P-value
	0 -2	≥ 3			
Witnessing the death of a partner in the last one year					
Yes	126(60.9)	81(39.1)	207(100.0)	Fishers exact	0.04
No	160(70.2)	68(29.8)	228(100.0)		
Confrontation and use of force in the last 1 year					
Yes	102(68.0)	48(32.0)	150 (100.0)	Fishers exact	0.52
No	184(64.6)	101(35.4)	285 (100.0)		
Type of confrontation and use of force.					
Not stressful	46 (59.7)	31 (40.3)	77 (100.0)		
Moderately stressful	33 (82.5)	7 (17.5)	40 (100.0)		
Very stressful	23 (69.7)	10 (30.3)	33 (100.0)	6.32	0.04
Being attacked					
Yes	113(62.1)	69 (37.9)	182 (100.0)	Fishers exact	0.18
No	173(68.4)	80 (31.6)	253 (100.0)		
Having to kill when necessary					
Yes	47 (68.1)	22 (31.9)	69 (100.0)	Fishers exact	0.68
No	239(65.3)	127(34.7)	366 (100.0)		
Participating in an act of corruption					
Yes	14 (70.0)	6 (30.0)	20 (100.0)	Fishers exact	0.81
No	272(65.5)	143(34.5)	415 (100.0)		

**Operational stressors of respondents and GHQ 12 scores.**

Table 26 shows that 81 (39.1%) of the police officers who had witnessed the death of a partner i.e. a colleague in the previous one year, had psychological distress. This was statistically significant  $p= 0.04$  i.e. there was an association between witnessing the death of a partner and psychological distress. Ten (30.3%) of the police officers who perceived confrontation and the use of force as very stressful, had psychological distress. This was statistically significant  $p=0.04$  i.e. there was an association between the perception of stress in the confrontation and use of force, and psychological distress. There was no association between being attacked; having to kill when necessary; participating in an act of corruption; and psychological distress.

**Table 27.1. Respondents Satisfaction with their Jobs and GHQ 12 Scores.**

Satisfaction	GHQ 12 Scores		X <sup>2</sup>	P-value
	0 – 2	≥ 3		
	n (%)	n (%)		
Not at all	34 (47.9)	37 (52.1)		
Moderately	86 (68.3)	40 (31.7)	12.09	0.002
Very so much	166 (69.7)	72 (30.3)		

**Respondents' satisfaction with their jobs and GHQ 12 scores.**

Table 27.1 shows that more of the police officers who were not at all satisfied with their jobs, scored high in the GHQ 12, than those who claimed to be very satisfied ; p=0.002 i.e. there was an association between the police officers' level of satisfaction with their jobs, and psychological distress.

**Table 27.2. Desire for a Change of the Police Job and GHQ 12 Scores.**

Lack of satisfaction and willingness to change the job	GHQ 12 Scores		Total no. of police officers n (%)	X <sup>2</sup>	P-value.
	0-2	≥ 3			
Yes	35 (48.6)	37 (51.4)	72 (100)	Fishers	0.001
No	166 (71.6)	66 (28.4)	232 (100)	Exact	
Total	201 (66.1)	103(33.9)	304 (100)		

Table 27.2 shows that 37 (51.4%) of the police officers who reported that they wanted a change of job had psychological distress. There was a significant association between the desire for a change of job and psychological distress;  $p=0.001$ .

**Table 28. Socio-Economic Characteristics of Respondents and GHQ 12**

**Scores.**

Socio-economic characteristic	GHQ 12 Scores		Total no. of police officers. N=435	X <sup>2</sup>	P- value
	0 – 2	≥ 3			
Salary/income meeting basic needs					
Not at all	125 (58.7)	88 (41.3)	213 (100.0)	10.74	0.005
Moderately	105 (75.5)	34 (24.5)	139 (100.0)		
Very so much	56 (67.5)	27 (32.5)	83 (100.0)		
Other source of income					
Yes	21 (70.0)	9 (30.0)	30 (100)	Fishers exact	0.69
No	265 (65.4)	140 (34.6)	405 (100)		
Bank savings					
Yes	104 (64.2)	58 (35.8)	162 (100.0)	Fishers exact	0.60
No	182 (66.7)	91 (33.3)	273 (100.0)		
Total no. of people living with respondents					
None	118 (63.4)	68 (36.6)	186 (100)	1.99	0.57
1-5	128 (66.3)	65 (33.7)	193 (100)		
6-10	36 (73.5)	13 (26.5)	49 (100)		
>10	4 (57.1)	3 (42.9)	7 (100)		

**Socio-economic characteristics of respondents and GHQ 12 scores.**

Table 28 shows the association between the police officers socio-economic characteristics and psychological distress. More of the police officers, 88 (41.3%), who reported that their salaries did not at all meet their basic needs, scored high in the GHQ 12 than those who reported that their salaries met their basic needs. This was statistically significant i.e.  $p=0.005$ ; there was an association between the police officers salary not at all meeting their basic needs, and psychological distress. There was no association between bank savings, other sources of income, or the total no. of people living with the police officers and psychological distress..

**Table 29. Respondents Satisfaction With Living and Work Conditions  
and GHQ 12 Scores**

Respondents satisfaction with living and work conditions	GHQ 12 Scores		Total no. of police officers N=435	X <sup>2</sup>	P -value
	0 – 2	≥ 3			
Satisfaction with living environment.					
Yes	159 (67.9)	75 (32.1)	234 (100)	Fishers	0.31
No	127 (63.2)	74 (36.8)	201 (100)	Exact	
Opportunity to help other people					
Unsatisfied	35 (42.7)	47 (57.3)	82 (100)		0.00
Satisfied on average	105 (69.5)	46 (30.5)	151 (100)	24.15	
Very satisfied	146 (72.3)	56 (27.7)	202 (100)		
Regard received for work from public					
Unsatisfied	74 (52.2)	68 (47.9)	142 (100)		0.00
Satisfied on average	138 (74.2)	48 (25.8)	186 (100)	18.16	
Very satisfied	74 (69.2)	33 (30.8)	107 (100)		
Opportunity for personal development					
Unsatisfied	85 (57.4)	63 (42.6)	148 (100)	8.70	0.01
Satisfied on average	123 (73.2)	45 (26.8)	168 (100)		
Very satisfied	78 (65.5)	41 (34.5)	119 (100)		
Good pay for work					
Unsatisfied	114 (62.6)	68 (37.4)	182 (100)		0.29
Satisfied on average	126 (70.0)	54 (30.0)	180 (100)	2.46	
Very satisfied	46 (63.0)	27 (37.0)	73 (100)		
Work load					
Unsatisfied	119 (58.3)	85 (41.7)	204 (100)		0.001
Satisfied on average	126 (76.4)	39 (23.6)	165 (100)	13.62	
Very satisfied	41 (62.1)	25 (37.9)	66 (100)		
Support from senior colleagues.					
Unsatisfied	73 (52.9)	65 (47.1)	138 (100)		0.00
Satisfied on average	137 (75.3)	45 (24.7)	182 (100)	17.45	
Very satisfied	76 (66.1)	39 (33.9)	115 (100)		
Opportunity to give suggestions apart from obeying orders.					
Unsatisfied	87 (57.2)	65 (42.8)	152 (100)		0.004
Satisfied on average	116 (75.3)	38 (24.7)	154 (100)	11.27	
Very satisfied	83 (64.3)	46 (35.7)	129 (100)		

### **Respondents Satisfaction with Living and Work conditions and GHQ 12 Scores.**

Table 29 above shows the association between respondents' satisfaction with living and work environment, and psychological distress.

More of the police officers who were not satisfied with the opportunity they had to help other people, scored high on the GHQ 12, than those who reported that they were very satisfied.  $p=0.00$  i.e. there was an association between the lack of satisfaction with the opportunity to help other people, and psychological distress. Further more, a greater percentage of police officers who were not satisfied with the regard they received from the public for their work, scored high on the GHQ 12, than those who were very satisfied.  $p=0.00$  i.e. The lack of satisfaction with public regard for work was associated with psychological distress.

A greater percentage of the police officers who were not satisfied with the opportunity for personal development, scored high on the GHQ 12 than those who claimed to be very satisfied.  $p = 0.01$  i.e. not being satisfied with the opportunity for personal development was associated with psychological distress. The level of satisfaction with work load, support from senior colleagues, and the opportunity to give suggestions apart from obeying orders, were all associated with psychological distress;  $p=0.001$ ,  $p=0.00$ , and  $p=0.004$  respectively.

**Table 30. Respondents Sickness Absence in the Previous One Month and GHQ 12 Scores.**

Sickness absence	GHQ scores		Total no. of police officers. n (%)	X <sup>2</sup>	P-value
	0 -2	≥ 3			
Sick	72 (54.5)	60 (45.5)	132 (100)	Fishers exact	0.001
Not sick	214 (70.6)	89 (29.4)	303 (100)		

**Respondents' sickness absence and GHQ 12 scores.**

Table 30 shows that more police officers who had been absent from duty due to ill-health, 60 (45.5%) had high GHQ 12 scores than police officers who were not sick, 89 (29.4%); p=0.001. i.e. there was an association between police officers' absence from duty due to ill-health in the previous one month, and psychological distress.

**Table 31. Substance use Profile of Respondents and GHQ 12 Scores.**

Substance use	GHQ 12 Scores		Total no. of police officer	X <sup>2</sup>	P value
	0 – 2	≥ 3			
Alcohol consumption					
Frequently	7 (33.3)	14 (66.7)	21 (100)	11.67	0.009
Occasionally	77 (67.0)	38 (33.0)	115 (100)		
Rarely	31 (75.6)	10 (24.4)	41 (100)		
Never	171(66.3)	87 (33.7)	258 (100)		
Indian hemp smoking					
Frequently	0 (0)	2 (100.0)	2 (100)	7.89	0.04
Occasionally	0 (0)	2 (100.0)	2 (100)		
Rarely	17 (63.0)	10 (37.0)	27 (100)		
Never	269 (66.6)	35 (33.4)	404 (100)		
Cigarette smoking					
Frequently	3 (50)	3 (50)	6 (100)	2.9	0.39
Occasionally	4 (44.4)	5 (55.6)	9 (100)		
Rarely	19 (61.3)	12 (38.7)	31 (100)		
Never	260 (66.8)	129 (33.2)	389 (100)		
Use of sedatives					
Every time	5 (38.5)	8 (61.5)	13 (100)	14.18	0.001
Sometimes	45 (52.3)	41 (47.7)	86 (100)		
Not at all	236 (70.2)	100 (29.8)	336 (100)		

**Substance use profile of respondents and GHQ 12 scores.**

Table 31 shows that a greater percentage of police officers, 14 (66.7%), who consumed alcohol frequently, as well as all the police officers who used Indian hemp frequently and occasionally, had high GHQ 12 scores. More of the police officers, 8 (61.5%) who used sedatives every time, also had high GHQ 12 scores. i.e. There was an association between the use of alcohol; Indian hemp and sedatives, and psychological distress ( p=0.009, p=0.04, and p=0.001 respectively). However, cigarette smoking was not associated with psychological distress; p=0.39.



**Table 32.1. Presence or Absence of Symptoms of Ill-Health and GHQ 12 Scores of Respondents.**

Symptoms	GHQ 12 Scores. n (%)		Total no. of police officers	X <sup>2</sup>	P-value
	0 – 2	≥ 3			
<b>Presence</b>	257 (65.9)	133 (34.1)	390 (100)	Fishers exact	0.86
<b>Absence</b>	29 (64.4)	16 (35.6)	45 (100)		
<b>Total</b>	286 (65.7)	149 (34.3)	435 (100)		

**Current health symptoms and GHQ scores.**

Table 32.1 shows the GHQ scores of the police officers who reported symptoms of ill-health and those who did not report any symptoms at all. There was no association between having symptoms of ill-health and psychological distress  $p= 0.86$ .

**Table 32.2. Symptoms of Ill-Health in each Body System and GHQ 12 Scores.**

BODY SYSTEM	GHQ12 Scores		Total no. of police officers N=435 n (%)	X <sup>2</sup>	P-value
	0-2 n (%)	≥ 3 n (%)			
<b>Respiratory</b>					
Yes	152(62.8)	90(37.2)	242 (100)	2.09	0.14
No	134(69.4)	59(30.6)	193 (100)		
<b>Cardiovascular</b>					
Yes	71 (62.8)	42(37.2)	113 (100)	0.57	0.44
No	215(66.8)	107(33.2)	322 (100)		
<b>Gastrointestinal</b>					
Yes	70 (66.0)	36 (34.0)	106 (100)	0.005	0.94
No	216(65.7)	113(34.3)	329 (100)		
<b>Urogenital</b>					
Yes	30 (52.6)	27 (47.4)	57 (100)	Fishers exact	0.03
No	256(67.7)	122(32.3)	378(100)		
<b>Musculoskeletal (Low-back pain)</b>					
Yes	72 (59.5)	49 (40.5)	121(100)	Fishers exact	0.05
No	214(68.2)	100(31.8)	314(100)		
<b>Central nervous</b>					
Yes	124(66.0)	64 (34.0)	188(100)	0.007	0.93
No	162(65.6)	85 (34.4)	247(100)		
<b>Fever</b>					
Yes	159(69.1)	71 (30.9)	230(100)	2.48	0.11
No	127(62.0)	78 (38.0)	205(100)		

Table 32.2 shows that 49 (40.5%) of the police officers with low-back pain and 100 (31.8%) of those who did not have low-back pain had psychological distress.  $p=0.05$ . The presence of Urogenital symptoms was also associated with psychological distress in the police officers  $p=0.03$ .

**Table 33. Significant variables associated with Psychological distress selected for inclusion into Multivariate Analysis.**

Variables	Chi-Square	P value
Alcohol (frequently)	11.67	0.009
Bureaucratic hassles	Fishers exact	0.01
Confused feedback	Fishers exact	0.003
Desire for a change of the police job	Fishers exact	0.001
Female sex	Fishers exact	0.05
Multiple tasks	Fishers exact	0.05
Religion	8.49	0.01
Salary not meeting basic needs	10.74	0.005
Satisfaction with the police job	12.09	0.002
Sedatives (every time)	14.18	0.001
Special duty (Yes)	Fishers exact	0.003
Stress in confrontation and use of force	6.32	0.04
Witnessing the death of a colleague	Fishers exact	0.04

Table 33 shows some significant variables associated with psychological distress that were selected for inclusion into the Multivariate Analysis.

**Table 34. Multivariate Logistic Regression Showing Significant Predictors of Psychological Distress (GHQ 12 Scores  $\geq 3$ ).**

Variables	(Exp B) OR	95% CI		P value
	Odds ratio	Lower	Upper	
Alcohol (frequently)	5.15	1.58	16.75	0.006
Break hours (none)	6.09	1.78	20.81	0.004
Bureaucratic hassles	2.71	1.33	5.51	0.006
Confused feedback	3.05	1.44	6.42	0.003
Female sex	1.91	1.16	3.15	0.01
Multiple tasks	2.74	1.53	4.89	0.001
Sedatives (every time)	2.15	1.22	3.79	0.008
Special duty (Yes)	2.36	1.28	4.37	0.006
Work hours/day (>12 hrs)	4.31	1.17	15.90	0.02

Variables which were significant at  $X^2$  at  $p=0.05$  were selected for inclusion into the model for the regression analysis results in Table 34. This table shows that female police officers were more likely than male police officers to have psychological distress. Organizational stressors in the police officers occupation such as multiple tasks, confused feedback, bureaucratic hassles, and work hours of more than 12 hours in a day, were the major predictors of psychological distress. Special duty, frequent alcohol consumption and constant use of sedatives, were also significant predictors of psychological distress in the police officers.

## CHAPTER FIVE

### DISCUSSION

This study was designed to determine the psychosocial hazards and health status of a sample of Nigerian police officers in Ibadan. The mean age of the police officers was  $31.8 \pm 8.30$  years. A similar finding was reported in another study conducted among the Nigeria Police Force in Ibadan to examine the influence of gender and age on work-place ethical attitudes, where the mean age was found to be 32.20 (S.D = 7.28) years. (Adebayo 2005).

A large percentage of the police officers (72.4%) were of the male gender. This is also similar to the study by Adebayo 2005, where the male police officers were found to be predominant (65.6%).

More police officers (63.9%) were married. A similar finding in another study among Norwegian police officers at all hierarchical levels, which attributed high levels of stress to police-specific stressors, also showed that more of the police officers (84.3%) were married (Berg *et al* 2005).

Only 40.2% of the police officers in this study had post secondary education, of which 6.9% were University graduates. The remaining 60% had no higher education. In comparison to another study among a sample of north eastern American police officers conducted in 2003, which examined the effects of coping and social support on psychological distress in response to stressful work and life events, it was reported that 20.6% of the police officers were high school graduates, 38.1% were associates, 35.4% had bachelor's degrees, 3.1% had master's degrees, while only 2.7% had been to high school but had no diploma (Patterson 2003). This shows that the Nigerian police officers were less educated than their foreign counterparts. About three quarter's of the respondents (75.2%) were of Yoruba ethnicity, because Ibadan, the capital city of Oyo State, where this study was carried out, has a predominantly Yoruba population.

#### **Socio-economic characteristics of the police officers**

Concerning accommodation for police officers in the NPF, it is worthy of note that most police officers were not accommodated in the police barracks, and hence lived in rented

apartments. It was also found that living conditions were poor, as a large proportion had no pipe-borne water, nor basic amenities. Maintaining the law is almost impracticable when police officers live in squatter camps alongside criminals. (Manila Bulletin, June 2 2006).

Eighty-eight (41.3%) of the police officers who reported that their salaries did not at all meet basic needs, had psychological distress. This was statistically significant. Inadequate salaries may be the reason Nigerian police officers demand bribes from the public. Furthermore, 93.1% of the police officers reported that they had no other source of income, 62.8% reported that they had no bank savings, and only 20.7% reported that they owned development projects such as business outfits or building projects. A large percentage of junior police officers had between one to five dependants, while more senior police officers had between six to ten and more than ten dependants. i.e. Senior police officers had a greater number of dependants than the junior police officers.

This finding further buttresses the point that the police officers meager monthly income, could never be sufficient to cater for a growing number of dependants, which comprises of their wives, children and extended family members. In comparison, a study carried out in the Ugandan Police Force (from constables to senior superintendents of police) in the Kampala district in 2002 to determine the prevalence of alcohol dependence and associated psychosocial problems, showed that 60 (57%) of the police officers had saved from their monthly income, and 22 (21.2%) reported that they had other sources of income to supplement their monthly income. 66 (63.5%) of the police officers reported that they owned development projects (Ovuga and Madrama, 2006). These results show that the Ugandan police officers had better socio-economic prospects than the Nigerian police officers.

### **Corruption among the police officers**

Only very few 20 (4.6%) of the Nigerian police officers confessed that they participated in acts of corruption which was irrespective of their rank. Only 6 (30%) of the police officers who reported that they participated in acts of corruption had psychological distress, but there was no significant association.

Representatives of the rank and file of the NPF when interrogated by the Nigerian Senate Committee on Police Affairs, were reported to have said they wondered why they were often accused of demanding bribes from Nigerians. They stated that they demanded bribes because

they usually augmented operational costs such as maintaining and buying fuel into the patrol vehicles used to combat crime, as well as levied themselves to generate funds for the treatment of their injured colleagues. (Ologbondiyan 1996). These facts may be the reason for the prevalence of police corruption in Nigeria. Similarly, the Philippine National Police (PNP) have to pay out of their own pockets just to fill their squad cars because oil and petrol is in short supply. (Manila Bulletin, June 2 2006). This shows that poverty is an important psychosocial hazard in the developing nations of the world, but is definitely not a justification for demanding bribes, and as such, developing nations and the NPF needs to provide practicable welfare schemes for her members and make enough funds available for petrol or other items needed for the job.

### **Occupational characteristics and work stressors of the police officers**

A majority (79.1%) of police officers that were interviewed, had joined the NPF immediately after they had left school, while very few had worked on other jobs before becoming police officers. 1.8% had been on skilled manual jobs. 34.5% of the police officers had spent a total of 6 to 10 years in police service, and the average length of service was 10.65 years (S.D=8.62). There was the absence of any association of increased likelihood of psychological distress with rank or length of service, as might have been predicted simply by increased exposure to work stressors. Similarly, another study conducted among British police officers which showed that the organizational culture and work load were major predictors of psychological distress in police officers, reported that 37% of the police had spent 10 to 19 years in police service and that there was also no evidence of association between either rank or length of service and psychological distress. (Collins and Gibbs, 2003).

Seven (7) Police ranks were represented in this study. The most common rank of entrance into the NPF was “Police constable” (rank and file), while the least common rank of entrance was “Inspector of Police”. Some University graduates, second degree holders and medical doctors are usually employed directly on higher ranks in the NPF, for example, Inspector of Police (INSPR), and Assistant Superintendent of Police (ASP).

There were more police constables (62.1%) among the sample of Nigerian police officers who participated in this study. A study conducted among British police officers in 2003, also reported a greater percentage of police constables (80%). This was because the target population were constables and sergeants within a county police force, which were selected on the basis of both their predominance within the organization, constituting 85% of the force, as well as indications from previous studies of increased liability to strain (Collins and Gibbs, 2003). This shows that junior police officers are predominant in the work force of police organizations.

A greater percentage (65.1%) of the police officers had never been promoted in the course of their service, while 16.3% of those who had been, had spent six to ten (6 to 10) years in a particular rank before eventual promotion to the next rank. According to reliable information from the NPF, the normal period of time police officers ought to spend before being promoted to the next rank is 3-4 years for the rank and file and 2 years for the senior police officers.

Seventy eight percent (78.4%) of the police officers worked on shift duty, which definitely involves night duties, as part of the organizational set up. About ninety -eight percent of police officers reported that they worked every day of the week. A third of the police officers who reported that they worked on shift duty had high GHQ 12 scores. Although shift duty was associated with the use of sedatives, indicating the absence or poor quality of sleep in the police officers, there was however no evidence that working shifts was associated with psychological distress. Similarly, a study conducted among British police officers to examine stress related symptoms and to measure the prevalence of significant associated mental ill-health, found that there was no evidence that working full rotating shifts (including night work), with the potential disruption of circadian rhythms, carried any increased association with mental ill health (Collins and Gibbs, 2003).

Another study conducted among police officers in Kuwait reports that shift duty affects sleep quality and duration, and is associated with psychosomatic complaints. (Attia *et al.* 1985). The results of this study showed that specific organizational stressors that were significantly associated with the rank of the Nigerian police officers were multiple tasks, bureaucratic hassles, work hours of > 12 hours, perception of poor job performance by fellow police and



poor support from supervisors. The only operational stressor which was significant was witnessing the death of a colleague. More junior police officers had witnessed the death of a colleague than had their senior counterparts.

With respect to job satisfaction, not being satisfied and desiring a change of job was irrespective of the rank of the police officers. Seventy-two (23.7%) of the police officers who were not satisfied, reported that they desired a change of job while 37 (51.4%) of those who wanted a change of job had psychological distress. These individual feelings about continuing a career in the police, served as an index of job satisfaction and enjoyment. There was an association between the perception of satisfaction with police work and the desire for a change of job and psychological distress.

A study carried out among British police officers in 2003 showed that occupational stressors were more specific to organizational issues such as demands of work impinging upon home life, lack of consultation and communication, lack of control over workload, inadequate support and excess workload in general. Job perception was significantly more negative for the police officers who had psychological distress, as evidenced by high GHQ scores, with a clear association between the desire to leave policing altogether in 55% of the police officers with high scores. Organizational stressors were perceived as more stressful than operational issues as a whole. (Collins and Gibbs, 2003). These studies show that there is an association between the perception of satisfaction with police work and the desire to leave the job and psychological distress.

An important psychosocial hazard which was associated with psychological distress among police officers in this study, was the low regard that the public had for their work. The policing job is essentially and primarily based on human contact, and for a rewarding contact, there must be a proper understanding by the person making the contact (Aremu and Tejumola, 2008). It has been proposed that the NPF needs to properly value themselves by having high self concept. The Nigerian police are not only undervalued, but they are also reticent of the public good will. This could affect their self presentation as police officers. (Aremu and Tejumola, 2008).

In comparison with other occupations, police work has been identified as a particularly stressful occupation. Negative aspects of the job such as boredom, lack of respect from members of the public, contacts with the public that are sometimes negative and confrontational, shift work, threats of violence, and the militaristic nature of the bureaucratic structure of policing are among the work stressors that confront police officers. (Burk 2000).

### **Current general health characteristics, symptoms and practices of the police officers**

A study in the U.K reported that as a result of the work stressors in the police officers job, a variety of symptoms and reactions may occur. These include deteriorating work performance (absenteeism, low morale), negative psychological states (emotional burn-out, frustration, depression, anger), and psychosomatic and physical conditions (headaches and ulcers). (Burke 2000).

#### **Sickness absence**

In order to solve the problem of work related psychological ill health, evidence is needed about the work factors associated with psychological ill- health and sickness absence. (Michie and Williams, 2003). Further more, periodic sickness records, evaluation and monitoring are needed for occupational hazard control. (Asuzu 1994). This study among the NPF shows that the prevalence of sickness absence in the preceding one month was 30.3% of the total population of police officers. A larger percentage (83.3%) of the police officers that had been absent from duty due to sickness were the junior police officers. However, sickness absence was not associated with the rank of police officer. The study also shows that sickness absence was significantly associated with poor support from supervisors, job responsibility not being clear and poor leadership from administrators.

Work factors that have been found to be associated with psychological ill-health and sickness absence in workers are long working hours, work overload and pressure, and the effects of these on personal lives; lack of control over work; lack of participation in decision making; poor social support; and unsupportive management style. (Michie and Williams, 2003). Similarly, annually increasing absence rates among police officers in the United Kingdom

demonstrate that epidemiological data regarding health are urgently needed. (Gyi and Porter, 1998).

### **Health Problems**

Current health symptoms were reported by the Nigerian police officers. Respiratory symptoms were the most prevalent symptoms of ill-health reported by 55.6% of the respondents, which may be due to the police officers continuous exposure to environmental pollutants such as automobile exhaust fumes, particulate matter and weather in the dry and rainy seasons. A study was conducted among police officers working close to traffic in Grenoble, France, to evaluate individual airborne exposure to gases and particulate carcinogenic pollutants. Personal active air samples were collected and analyzed during work shifts of the police men in summer and in winter. The personal air concentrations of aldehydes, respirable particles, polycyclic hydrocarbons and benzene-toluene-xylene were higher in the winter, than the corresponding stationary levels for both seasons. (Maitre *et al* 2002).

Cardiovascular symptoms such as palpitations, and features of exercise intolerance such as breathlessness when climbing a staircase and on walking a short distance were also reported among the police officers; 7.4%, 10.6% and 9.9% respectively. Chest pain was reported in 7.1% of the police officers. A European study suggests that senior police officers in more than one country have an increased risk of developing ischemic heart disease compared to other occupations. (Tuchsen *et al.* 1996). Possible causes of cardiovascular disease include the nature of shift work, the psychologically demanding nature of the job and unsatisfactory decision authority. (Tuchsen *et al.* 1996). Headaches (36.3%), dyspepsia reported as feelings of burning sensation in the stomach (5.7%) and abdominal pain (12.4%) were reported among the Nigerian police officers. Almost twenty eight percent (27.8%) of the Nigerian police officers reported low-back pain, and low-back pain was significantly associated with working overtime. Headaches were also significantly associated with working overtime.

Police officers are trained to be combat ready, and are therefore exposed to repetitive strain from the nature and duration of work which results in low-back pain and /or injuries. Driving,

poor postures and lifting methods result in low back pain due to prolonged exposure (Gyi and Porter, 1998). Similarly, a study conducted among a rural police force in the United Kingdom, found that European police officers whose job mainly involved driving, experienced lower back pain than those police officers whose job mainly involved activities other than driving, such as sitting or standing tasks. Thirty-eight percent of traffic car drivers, 29% of general duty 'standers' and 22% of general duty 'lifters' experienced low back pain for more than 8 days in 1997. (Gyi and Porter 1998).

The prevalence of low-back pain is lower among the Nigerian police officers, compared to other occupations. This is evidenced by a study that was carried out in a rural hospital in south-western Nigeria in 1999 to determine the prevalence of low-back pain among its staff, which was found to be 46%. The highest prevalence of low back pain (69%) was reported among nursing staff, followed by secretaries/ administrative staff (55%) and cleaners/aides (47%). Many sufferers of low-back pain also complained of being overworked. (Omokhodion *et al*, 2000). Therefore, there is the need to introduce health education on posture and correct lifting techniques as well as the regulation of working hours into the work environment of Nigerian police officers, to reduce the prevalence of low-back pain. The first known systematic review to report on the findings of low back pain (LBP) prevalence and low back pain risk factors among African populations showed that the most common population group studied was "workers". It was found from the systematic review that the one-year LBP prevalence among Africans ranged from 14% to 72%. The mean low back pain point prevalence among African adolescents was 12% and among the African adults it was 32% (range 10% to 59%). (Louw *et al*, 2007). The prevalence of low back pain in African adult workers is higher than the prevalence of low back pain reported among the Nigerian police officers. This may be because the police officers work is active, and they assume varying postures.

Twenty-six percent (26.4%) of the Nigerian police officers had sustained injuries inclusive of fractures in the preceding three months. Urogenital symptoms were reported in 60 (13.8%) of the police officers. The prevalence of urethral discharge which is a symptom of sexually transmitted infection was 1.4%. Urogenital symptoms may be the evidence of sexually

transmissible infections and may be an indicator that risky sexual behaviours were present among the police officers. There is therefore the need for health education on safe sexual behaviours among police officers, in order to prevent sexually transmissible infections (STI's), especially with the increasing prevalence of HIV/AIDS in Nigeria.

Of worthy note was that 52.9% of police officers while still at work reported that they currently had fevers. It has been found that the 'macho culture' (e.g. control, dominance and authority) among police officers also makes it difficult for them to admit to psychological weakness and as well puts them under constant pressure to control their emotions and to appear efficient (Burke 2000). As such they may come to work even when they have symptoms of ill-health.

### **Health Practices**

Of the total number of Nigerian police officers who utilized health services, only 37.3% reported the use of the police clinic. Others utilized private clinics, General hospitals and other places. The utilization of the police clinic should be encouraged so as to effectively evaluate and monitor the health of the NPF. In comparison to a study conducted among the Ugandan police officers, it was found that police officers with alcohol use problems were more inclined to utilize private clinics rather than the police clinic, possibly out of fear of attracting disciplinary problems related to alcohol use (Ovuga and Madrama, 2006).

This study found that 57% of the Nigerian police officers did not engage in recreational activities such as sports and games. In contrast, the study among the Ugandan police officers showed that only 5.8% of the police officers did not engage in any type of recreational activity. Physical activity and fitness have been identified as possible moderators of the stress-illness relationship, and may play an important role in the management of mild to moderate mental health diseases, especially depression and anxiety. (Penalba and McGuire, 2008). Therefore there is the need to encourage and provide facilities for recreation in the police officers' quarters.

More than half (58.4%) of the police officers had gone for a medical check-up within the previous one month. Thirty- seven percent of the police officers did not know their HIV

status. The most frequent reason for this lack of knowledge was that they had no spare time, while 28.6% reported that they lacked interest in knowing their HIV status. In 2007, just three percent of health facilities in Nigeria had HIV testing and counseling services, (WHO, UNAIDS & UNICEF, 2008) and only 11.7 percent of women and men aged 15-49 had received an HIV test and found out the results. (UNGASS, 2010). In 2009 there was only one HIV testing and counseling facility for approximately every 53,000 Nigerian adults, which shows how desperately the government needs to scale up HIV testing services. (WHO, UNAIDS & UNICEF, 2010). Moreover, HIV/AIDS is an important global psychological hazard that is often associated with stigma and discrimination. Some reports have suggested that health care facilities offering HIV testing in Nigeria do not follow international standards about confidentiality and ethics. (Physicians for Human Rights, 2006). This may be a plausible explanation for the unwillingness to acquiring knowledge of HIV status that was found among police officers in this study.

In contrast, a knowledge, attitude and practice (KAP) survey of the Nigerian Armed Forces concerning HIV/AIDS and STD conducted in 2001 showed that only 40% of the respondents had been tested for HIV, 35% of whom had taken the test voluntarily (Adebajo *et al* 2002). There is therefore the need to provide a secure non-discriminatory and confidential, environment for police officers to receive testing as well as treatment services. Moreover, people may be more likely to take advantage of testing services when they are linked with treatment programmes.

### **Substance Use**

Substance abuse as well as risky sexual behaviour is said to be a common coping strategy for unpleasant experiences in the work place in Nigeria (Ekore 2007). Alcohol abuse is associated with several physical ailments, as well as poor psychological functioning. The Nigerian police officers reported current alcohol consumption as being frequently (4.8%) and occasionally (26.4%), while those police officers who ingested alcohol rarely, made up 9.4% of the population. However, a study on the burden of alcohol use among Ugandan police officers reported that 73.1% had consumed alcohol in their life time, and 63.5% of the police officers, currently consumed alcohol (Ovuga and Madrama, 2006). Current alcohol use was higher

among the Ugandan police officers than the Nigerian police officers, probably because they also had better socio-economic prospects, and could afford more alcohol. A study conducted in two cities in Nigeria showed that the prevalence rates of alcohol use among youth (senior secondary school students) were 56% and 51.5% in Ibadan and Abeokuta cities respectively. (Odejide *et al* 1987). These rates are higher in comparison to the rates found among the Nigerian police officers, although there may also have been the possibility that not all the police officers who consumed alcohol, reported that they did.

A study in the UK found that there is a high prevalence of alcohol consumption among police officers, which is of particular concern but more active health promotion and provision of brief interventions among police may reduce morbidity and mortality associated with unhealthy life-styles (Richmond *et al* 1998). The prevalence of current cigarette smoking among the Nigerian police officers was 3.5% ( reported as frequently 1.4% and occasionally 2.1%), 7.1% reported that they rarely smoked cigarettes. These rates are lower in comparison with a study conducted among New South Wales police officers in Sydney to examine the prevalence of life style factors. It was found that over one quarter (27%) of male and one-third (32%) of the female police officers reported cigarette smoking. (Richmond *et al* 1998). Only 3% of the Nigerian police officers reported the use of addictive sedatives.

### **Psychological Distress among the Police Officers**

The GHQ12 was used to determine psychological distress in this study, using a threshold score of  $\geq 3$ , which indicated psychological distress. 34.3% of the police officers had GHQ12 scores of  $\geq 3$ , which indicated psychological distress. A number of variables which were associated with psychological distress among police officers, and found statistically significant in this study, include: female sex, multiple tasks, work hours of  $> 12$  hours in a day, no break hours, special duty, confused feedback, bureaucratic hassles, constant use of sedatives and frequent alcohol consumption.

In comparison to another study among police officers in the United Kingdom which also utilized the GHQ 12 to measure psychological distress, 41% of the population had psychological distress. There was also a significant association between gender and mental ill-

health, as females were more likely to score more highly on the GHQ than males. (Collins and Gibbs, 2003). The study carried out among the Norwegian police officers showed that female police officers perceive and experience all factors on the stress measure as more severe than their male colleagues, and that females are more worried about various work situations than their male counterparts, although they appear to be exposed to severe incidents less frequently than male police. (Berg *et al.* 2005). The Nigerian female police officers may also perceive work factors as more stressful than their male counterparts, as evidenced by their susceptibility to psychological distress.

These levels of psychological distress are comparable with high measurable mental ill-health in managerial occupations (Hobson and Beach, 2001). Other occupational groups have been studied for psychological distress. A study was conducted in the United Kingdom to examine relationships between working hours, perceived work stressors, and psychological health in a group of managers. Managers at two factories were invited to participate in an anonymous cross-sectional survey. All were asked to complete a work diary for a period of 1 week and a questionnaire comprising the 30-item General Health Questionnaire, an anxiety and depression scale, and questions identifying perceived workplace stressors. Over 60% of managers were above the threshold of caseness on at least one measure of psychological health. A large proportion of managers in a typical production environment appeared at risk of developing psychological illness. Hours of work were not directly related to psychological health, but were significantly associated with individual perception of some work stressors which, in turn, were associated with measures of psychological health. Perceived workload appeared more important in determining psychological health than actual workload (Hobson and Beach, 2001).

There was no overall significant association between having symptoms of ill-health and psychological distress among the Nigerian police officers. However, it has been reported that individuals with physical illnesses are more likely to suffer from psychiatric disorders than those who are not ill (Kumar and Clark, 2005). The relationship between psychological and physical symptoms may be understood in one of three (3) ways; psychological distress and disorders can precipitate physical diseases (e.g. anorexia nervosa causing cardiac arrhythmias, due to hypokalaemia) physical diseases and their treatments can cause psychological



symptoms of ill health (e.g. hypothyroidism, steroid treatment and brain tumour causing depressive illness; alcohol withdrawal causing anxiety disorder), physical and psychological symptoms and disorders may be independently co-morbid, particularly in the elderly (Kumar and Clark 2005).

However, only the presence of Urogenital symptoms and low back pain among the Nigerian police officers was found to be significantly associated with psychological distress. This shows that some physical illnesses were also predictors of psychological distress among Nigerian police officers. Chronic fatigue has been associated with psychological morbidity (Pawilikowska and Chalder, 1994).

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## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATIONS**

#### **CONCLUSION**

The respondents in this study can be said to represent the NPF in Ibadan.

A combination of hazards in the work of a police officer, dealing with terrible circumstances as well as working tirelessly while being exposed to physical danger, results in mental pressure. This pressure may give rise to poor health evidenced by various health symptoms as well as psychological distress. A third ( 34.3%) of the police officers in this study population had psychological distress. Psychological hazards affect Nigerian police officers' psychological response to their work, as well as to the society at large.

This study on the NPF confirms previous findings from developed countries, of organizational culture and workload as major hazards of police officers, leading to psychological distress. It was found in this study that working multiple tasks, working for more than 12 hours daily, no break periods, confused feedback, working special duties, and bureaucratic hassles were the organizational factors that predisposed Nigerian police officers to psychological distress.

This study also found that not being satisfied, and desiring a change of job was irrespective of the rank of the police officers. They were also not satisfied with the public regard for their work, and their salary which did not meet basic needs were associated with psychological distress. Organizational stressors were the main predictors of psychological distress among the police officers. Therefore the insensitivity of some police officers to Nigerian citizens they ought to protect, may be due to these psychosocial and occupational hazards, with the female sex being more predisposed to psychological distress.

## RECOMMENDATIONS

The findings from this study on the psychological hazards and health status of police officers show that urgent steps need to be instituted in order to ensure and improve the general and psychosocial health status of the Nigeria Police Force (NPF).

### Recommendations for the Federal Republic of Nigeria

- The Federal Republic of Nigeria needs to modify policies, so as to ensure adequate remuneration and motivation, especially for the NPF.
- There is the urgent need for the development and implementation of a Federal welfare scheme to adequately cater for police officers and their families, apart from prompt payment of salaries.

### Recommendations for the Nigeria Police Force

Psychological interventions include all psychological and social interventions.

- Psychological pre-employment screening should include the GHQ12, emotional intelligence tests, and detection of emotional insanity in police officers.
- The management of the NPF should institute a well balanced work system aimed at reducing multiple tasks, controlling shift duties so that they don't overlap into excessive work periods, as well as keeping factors that result in bureaucratic hassles to the barest minimum.
- Peer-support groups should be instituted through out all the divisions and area commands in all states, with the aim of: (1) ensuring a sense of belonging and support for junior police officers; and (2) ensuring police officers overseeing one another, with respect to recognizing and reporting symptoms of ill health and psychological distress, for the purpose of adequate treatment.
- Active collaboration with state ministries of health, with the aim of improving the knowledge and awareness of HIV status, and with P.E.P.F.A.R (Presidents emergency plan for AIDS relief), to ensure the adequate management of police officers who might be affected.
- The management of the NPF should ensure that all police officers have a compulsory full medical check up yearly.

- Police accommodation and living conditions should be improved, with more police barracks constructed and equipped with basic amenities such as pipe borne water.

**Recommendations for the Nigerian Police Officers.**

- Nigerian police officers should not hesitate to obtain proper treatment whenever they have symptoms of ill-health. They should also go for medical check-ups so that there can be early detection and prompt management of any disease(s).
- Nigerian police officers ought to participate in peer support groups and health education programmes which may be organized by the NPF.

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## REFERENCES

- Adebajo S.B, Mafeni J, Moreland S, et al. Knowledge, Attitudes and Sexual behaviour Among Nigerian Military Concerning HIV/AIDS and STD. Final Technical Report. Abuja, Nigeria: POLICY Project, 2002.
- Adebayo D.O, Gender and Attitudes towards Professional ethics; A Nigerian Police Perspective. *African Security Review* 2005; 14 (2).
- Akerstedt T. Psychosocial stress and impaired sleep. *Scand. J. Work Environ. Health* 2006; 493-501.
- Alastair F.W, Anthony F.P. Hidden psychiatric illness: use of the general health questionnaire in general practice. *Journal of the Royal College of General Practitioners* 1987; 37:164-167.
- Aremu O.A. The effect of two psychological intervention programmes on the improvement of interpersonal relationships of police officers in Osogbo, Nigeria. *Criminal Justice Studies* 2006; 19(2):139-52.
- Aremu A.O, Tejumola T.O. Assessment of Emotional intelligence among Nigerian Police. *J.Soc.Sci* 2008, 16(3):221- 226.
- Aaron JDK. Stress and Coping in Police Officers. *Aaron Police Quarterly*.2000; 3: 438-450.
- Asuzu MC. Occupational Health; A summary introduction and outline of principles. Afrika-Link Books, 1994; 3.
- Attia.M, Mustafa MKY, Khogali M., Mahmoud N.A, and Arar E.I. Optimization of night and shift work plans among policemen in Kuwait: A field experiment. *International Archives of Occupational and Environmental health* August 1985;56(2): 81-90.

- Awe B. 'Conflict and Divergence: Government and Society in Nigeria'. African Studies Review 1999; 42(3):1-20.
- Berg A.M, Hem.E, Lau. B, Haseth. K, Ekeberge. O. Stress in the Norwegian police service. Occupational Medicine 2005; 55(2):113-20.
- Black H.C, Black's Law Dictionary. St Paul, Minn. West Publishing Co.1990; 6:524.
- Burke RJ. Stress in police. Encyclopedia of stress 2000; 3:175-8.
- Caruso D, Mayer J, Salovey.P. Emotional intelligence and emotional leadership, in Riggio R and Murphy S. (eds.), Multiple Intelligences and leadership. Mahwah NJ: Lawrence Erlbaum Associates, Inc. 2002; 55-74.
- CLEEN (Centre for Law Enforcement Education) Foundation. 9 July 2008.
- Collins P.A., Gibbs A.C.C. Stress in police officers: A study of the origins, prevalence and severity of stress related symptoms within a county police force. Occup. Medicine 2003, 53:256-264. D01:10, 1093/occmmed/kqg061.
- Coomber S, Todd C, Park G, Baxter P, Firth Cozens J and Shore S. Stress in U.K intensive care unit doctors. BJA, 2002; 89(6):873-881.
- Constitution of the Federal Republic of Nigeria 1999.
- Ekore. J.O. Policy on psychosocial hazards contributing to work related stress: awareness and implementation in Nigeria. The Global Occupational Health Network GOHNET July, 2007.
- Evans BJ, Coman GJ. General versus specific measures of occupational stress: An Australian police survey. Stress Medicine 1993; 9:11-20.
- Fyvie. C, Moreton G, Gray M, Law. R, Freeman. C, Police Occupational health: support for

specialist post holders, where there is constant specific repetitive exposure and staff involved in prolonged incidents/ enquiries 2005-2006. Social research. Crime and criminal justice; Research findings No.83/2006.

Goldberg DP. The Detection of Psychiatric Illness by Questionnaire, Oxford University Press. (1972)

Goldfarb DA, Aumiller GS. 10 reasons law enforcement officers are different. (<http://www.heavybadge.com/efstress.htm>, retrieved 2008).

Golembiewski RT, Lloyd M, Scherb K, Munzenrider RF. Burnout and Mental Health Among Police Officers. Journal of Public Administration Research and Theory ;1992 :2(4):424-439.

Gyi DE, Porter JM. Musculoskeletal Problems and Driving in Police officers. Occupational Medicine (London) 1998 April: 48(3):153-160.

Hazen JM, Horner Jonas. Small Arms, Armed Violence and Insecurity in Nigeria: The Niger Delta in Perspective. Small Arms Survey (SAS). December 2007.

Hobson J, Beach JR, An investigation of the relationship between psychological health and work load among managers. Occup. Med (London) 2001:50: 518-522.

Hodgins G A, Creamer M, Bell R. Risk Factors for Post trauma Reactions in Police Officers: a Longitudinal Study. The Journal of Nervous and Mental Disease: 2001 August: 189(8): 541-547.

Horta.L. Guinea Bissau: Africa's first narcostate, African Studies Center - University of Pennsylvania, 2007.

Kompier M. The psychosocial work environment and health- What do we know and where

should we go? *Scand. J. Work Env. Health* 2002;28(1):1-4

Kortum. E. Work related Stress and psychosocial risks: trends in developing and newly industrialized countries. The Global Occupational Health network GOHNET, July 2007.

Louw Q.A, Morris LD, Grimmer-Somers K. The prevalence of low back pain in Africa: a systematic review. *BMC Musculoskeletal Disorders* 2007, 8:105. doi: 10.1186/1471-2474-8-105.

MAC tool; Health and Safety Executive/Commission

Maia. D, Marmar C, Metzler T, Nobrega A, Berger. W, Mendlowiez. M, Coutinho. E, Figueira. I. Post- traumatic stress symptoms in an elite unit of Brazilian police officers; Prevalence and impact on psychosocial functioning and on physical and mental health. *Journal of Affective disorders*.97 (1-3): 241-245.

Maitre. A, Soulat J.M, Masclet P, Stoklov M, Marques M, de Gaudemaris. Exposure to carcinogenic air pollutants among policemen working close to traffic in an urban area. *Scand. J Work Environ. Health* 2002; 28(6): 402-410.

Manila Bulletin, June 2 2006.

Mayer JD, Salovey.P. What is emotional intelligence? In Salovey.P and Sluyter DJ (Eds). *Emotional Development and emotional intelligence: Implications for educators*. Basic books. New York.1997.

Michie S & Williams S. Reducing work related psychological ill health and sickness absence: A systematic literature review. *Occup. Environ. Med*, 2003, 60; 3-9. doi:10.1136/oem.60.1.3.

Neylan TC, Metzler TJ, Best S.R, Wess D.S, Fagan J.A, Liberman A, Rogers C, Vedantham K, Brunet A, Lipsey T.L, Marmar C.R. Critical incident exposure and sleep



quality in police officers. *Psychosomatic Medicine* 2002; 64(2):345-52.

Niedhammer I, Goldberg M, Leclerc A, Bugel I, David S. Psychosocial factors at work and subsequent depressive symptoms in the Gazel cohort. *Scand. Work Environ. Health* 1998; 24(3):197-205.

Nigeria. November 2007. "State of the Nigeria Police Force as at November 2007." The Nigeria Police Force (Official website).

Odejide OA, Ohaeri JU, Adelekan ML, Ikuesan BA. Drinking behaviour and social change among youths in Nigeria- a study of two cities. *Drug Alcohol Depend.* 1987 Nov 30; 20 (3):227-33.

Oladele BM, Oladimeji BH. Dynamics of urban land use changes with remote sensing: Case of Ibadan, Nigeria. *Journal of Geography and Regional Planning* 2011; 4(11):632-643.

Ologbondiyan K, Police to Senate: We collect bribes to augment salary, *ThisDay News*, 29 August 1996.

Omokhodion F.O, Umar U.S, Ogunnowo B.E. Prevalence of low-back pain among staff in a rural hospital in Nigeria. *Occup. Med.* 2000; 50(2):107-110.

O'Toole SK, Vitello CJ, Palmer.S. Stress and law enforcement. *LEO Articles*, 2003. <http://www.virginiacops.org/Articles/Stress/Leostress.htm>.

Ovuga E, Madrama.C, Burden of alcohol use in the Uganda Police in Kampala District. *African Health Sciences* 2006 March; 6(1):14-20.

Parsons JRL, Occupational health and safety issues of Police officers in Canada, the United States and Europe: A Review Essay. June,2004

Patterson G.T. Examining the effects of coping and social support on work and life stress among police officers. *Journal of Criminal Justice* 31, 215-226.

Penalba V, McGuire H, Leite J.R. Psychosocial interventions for prevention of psychological disorders in law enforcement officers. Cochrane Data base of systematic Reviews 2008, Issue3, Art No; CD005601. Doi:10;1002/14651858.CD005601.pub

Physicians for Human Rights 2006 'Nigeria: Access to Health care for people living with HIV and AIDS'.

Richmond RL, Wodak A, Kehoe L, Heather N. How healthy are the police? A survey of life-style factors. *Addiction*. 1998 Nov;93 (11):1729-37.

Saathoff GB & Buckman J. Diagnostic results of psychiatric evaluations of state police officers. *Hospital and Community Psychiatry* 1990; 41(4):429-32.

Tuchsen F, Anderson O, Costa G, Filakti H, Marmot MG. Occupation and Ischemic heart disease in the European Community: A Comparative study of occupations at Potential high risk. *American journal of Industrial Medicine* 1996 Oct; 30.(4):407-414.

UNGASS (2010) 'UNGASS Country Progress Report: Nigeria'

Van Hooff M.L.M, Geurts S.A.E, Taris T.W, Kompier M.A.J, Dijkers J.S.E, Houtman I.L.D,

Van den Heuvel F.M.M. Disentangling the relationships between work-home interference and employee health. *Scand J Work Environ. Health* 2005; 31(1): 15-29.

Violanti JM, Marshall J.R, Howe B. Stress, coping and alcohol use: the police connection. *Journal of Police Science and Administration* 1985; 31(2):106-10.

Violanti JM. "Suicide and the Police Role: a Psychosocial Model." *Policing: An International Journal of Police Strategies and Management*, 1997; 20(4) :698-715.

WHO Commission on Social Determinants of Health, 2006.

WHO, UNAIDS & UNICEF (2008) 'towards universal access: scaling up priority HIV/AIDS interventions in the health sector'.

WHO, UNAIDS & UNICEF (2010) 'towards universal access: scaling up priority HIV/AIDS interventions in the health sector'.

Wikipedia-the free encyclopedia. Wikipedia.org.

World Encyclopedia of Police Forces and Correctional Systems. 2006; 2nd Edition: 697-700.

World Police Encyclopedia. 2006 ;(2):622.

Wrightsman L.S, Greene E, Nietzel M.T, Fortune W.H. The Police and the Criminal Justice system. Psychology and the legal system, 5<sup>th</sup> edition, pp. 138-167.

Yu Tak-sun I. Musculoskeletal Problems at work (1)-Classification and Occupational Health Hazards. Hong Kong Practitioner 1992; 14(10).

## **QUESTIONNAIRE ON PSYCHOSOCIAL HAZARDS AND HEALTH STATUS OF**

## POLICE OFFICERS IN IBADAN

Dear Sir/Ma,

I'm a Master of Public Health (MPH) student of the Department of Community Medicine Faculty of Public Health, College of Medicine, University of Ibadan.

I'm carrying out this study among police officers in Ibadan to determine the psychosocial hazards they are exposed to, their general health problems and psychological well being, all related to their working environment.

Your honest response is very highly valued, as information obtained will ultimately lead to the promotion of psychosocial health and prevention of psychological distress among police officers.

Do not write your name on the questionnaire. Confidentiality of all information supplied is assured.

If you consent to this study, please sign below.

.....

Thank you.

Signed .....

**Dr. J.O Olufemi**

Serial Number -----

*Instructions: Please tick the correct answer(s) in the boxes provided. Thank you*

**A. Socio – demographic data**

1. Age at last birthday -----
2. Sex
  - (a) Male
  - (b) Female
3. Marital status
  - (a) Single
  - (b) Married
  - (c) Separated
  - (d) Divorced
  - (e) Widowed
  - (f) Others (please specify) -----
4. Highest educational level attained
  - (a) Primary
  - (b) Secondary
  - (c) Technical college
  - (d) Polytechnic
  - (e) College of education
  - (f) University
5. Religion
  - (a) Christianity
  - (b) Islam
  - (c) African traditional religion
  - (d) Others (please specify) -----
6. Ethnicity
  - (a) Yoruba
  - (b) Hausa
  - (c) Igbo
  - (d) Other (please specify) -----

**B. Occupational Data**

7. History of job since leaving school
  - (1) ----- (3) -----
  - (2) ----- (4) -----
8. What rank did you enter the police force?  
(Please specify)-----
9. What is your present rank?

(Please specify)-----  
 10. Number of years in present rank  
 (Please specify) -----

11. What is your duty post?
- (a) General duty (GD) [ ]
  - (b) Charge room officer (CRO) [ ]
  - (c) Divisional traffic officer (DTO) [ ]
  - (d) Divisional crime officer (DCO) [ ]
  - (e) Divisional police officer (DPO) [ ]
  - (f) Patrol and guard officer (P & G) [ ]
  - (g) Other (please specify) -----

12. Number of years in police service  
 (Please specify) -----

13. Job description (what type of work are you doing presently?)

(a)	Patrol	
(b)	Guard	
(c)	Escort	
(d)	Settlement of cases/court	
(e)	Recorder	
(f)	Special duty	
(g)	Supervision	
(h)	Commanding	
(i)	Other(Please specify).....	

14. (a) Have you been promoted since joining Nigeria Police?  
 No [ ] Yes [ ]
- (b) If Yes, what were your last 3 promotions (please specify)

Promotion from Rank	Promotion to Rank	No. of years before promotion to Rank
(1)		
(2)		
(3)		

15. (a) Have you ever been demoted?  
 No [ ]  
 Yes [ ]

(b) If Yes, what was the reason for your demotion?  
 -----  
 -----

16. How many days do you work in a week?  
 (a) Every day [ ]

- (b) Every 2 days
- (c) Other (please specify) -----

17. How many hours a day do you work?
- (a) < 8 hrs
- (b) 8 – 12hrs
- (c) >12 hrs
- (d) Other -----

18. How many hours break in a day do you have?
- (a) 0hrs
- (b) 1/2 hr (30 minutes)
- (c) 1hr
- (f) Other (please specify) -----
- (g) No break

19. Does your work require rotating shift?
- (a) Yes
- (b) No

20. *Organizational stressors (job context)*  
**Which of these have you experienced in the last 1 year?**

		Yes	No
(a)	Transfer		
(b)	Multiple tasks		
(c)	Working overtime		
(d)	Poor support from superiors		
(e)	Job responsibility not clear		
(f)	Confused feedback from supervisors		
(g)	Poor leadership from administrators		
(h)	Poor job performance by fellow police		
(i)	Bureaucratic hassles (clashes with authority)		
(j)	Failure of promotional course		

- (k) Other stress (please specify) -----

- (l) None

21. *Operational stressors (job content)*

**Have you experienced any of these in the last one year? if yes, how stressful?**

		Yes	No	Not stressful	Moderately stressful	Very stressful
(a)	Witnessing the death of a partner					
(b)	Confrontation and use of force					
(c)	Being attacked					
(d)	Having to kill when necessary					
(e)	Participating in an act of corruption					

(f) Other (please specify) -----

(g) None

22(a). Are you satisfied with your job as a police officer?

(a) Not at all

(b) Moderately so

(c) Very much so

(b) If not satisfied, are you seeking to change your job?

No

Yes

**C Psychosocial Data**

23. Does your salary / income meet your basic needs?

(a) Not at all

(b) Moderately so

(c) Very much so

24. (a). Do you have any other job?

(a) No  (b) Yes

(b). If yes please specify -----

25. (a). Do you have other sources of income?

(a) No  (b) Yes

(b). If yes please specify -----

26. Have you any savings in the bank presently?

(a) No  (b) Yes

27. Do you have any development project? (e.g. building a house, owning a arm, starting a business) (a) No  (b) Yes

28. Where do you live?



- (a) Police barracks
- (b) Rented 1 room
- (c) Rented room and palour
- (d) Rented Flat
- (e) My own house (Pls. specify type) -----
- (f) Other (Pls. specify) -----

29. How many people live with you?

- (a) Self
- (b) 1. Wife/wives (how many?)   
Please specify-----
- 2. Child /children (how many?) Please specify-----
- 3. Extended family (how many?) Please specify-----
- 4. Total number of people please specify-----

30. What type of water do you use where you live?

- (a) Pipe borne water
- (b) Well water
- (c) Rain water
- (d) River water
- (e) Spring
- (f) Bore hole

31. What toilet facility do you use where you live?

- (a) Water closet
- (b) Pit latrine
- (c) Bush
- (d) Other (please specify) -----

32. Which of these amenities do you own?

- (a) Refrigerator
- (b) Television
- (c) Telephone (GSM)
- (d) Motorcycle
- (e) Car
- (f) Computer
- (g) None
- (h) Other amenity -----

33. Are you satisfied with your living environment?

- (a) No
- (b) Yes

**How satisfied are you with the following.**

		Unsatisfied	Satisfied on average	Very Satisfied
34.	The opportunity to help other people.			
35.	The regard received from my work from the public			
36.	The opportunity for personal growth and development in my job			
37.	The good pay for my work			
38.	The workload that I have			
39.	The support from my seniors			
40.	The opportunity to give suggestions apart from obeying orders			

**D. General Health**

41. How frequent have you been absent from duty due to sickness in the last 1 month.

- (a) Once
- (b) Twice
- (c) More than twice
- (d) Never been sick
- (e) Other (Pls. specify) -----

42. Where do you go when you are ill?

- (a) Police clinic
- (b) General hospital
- (c) Private clinic
- (d) Other (Pls. specify) -----

43. Do you use sleeping drugs?

- (a) Every time
- (b) Some times
- (c) Not at all

44. Do you take alcoholic drinks such as beer or gin?

- (a) Frequently
- (b) Occasionally
- (c) Rarely
- (d) Never

45. Which of the following substances do you use, and how frequently do you use them?

		Rarely	Occasionally	Frequently
(a)	Tobacco snuff			
(b)	Cigarettes			
(c)	Marijuana			
(d)	Indian hemp			
(e)	Glue			
(f)	Other (please specify)			
(g)	None [ ]			

46. Are you involved in recreational activities e.g. games, sports  
 (a) No [ ] (b) Yes [ ]

47. When last did you have a medical check up  
 (a) Last month [ ]  
 (b) Last week [ ]  
 (c) Yesterday [ ]  
 (d) Other (specify pls.) -----

48(a). Do you know your HIV status?  
 (a) No [ ]  
 (b) Yes [ ]

(b). If No, why?  
 (a) I don't want to know it [ ]  
 (b) I have no time to go for a check [ ]  
 (c) Other (please specify)-----

49. Which of the following have you experienced at work in the last 3 months?  
 (a) Fracture [ ]  
 (b) Ankle sprain [ ]  
 (c) Any injury (please specify) -----

Which of these symptoms are you presently experiencing?

50. *Respiratory system*  
 (a) Cough [ ]  
 (b) Catarrh [ ]  
 (c) Chest pain [ ]  
 (d) Sore throat [ ]  
 (e) Difficulty in breathing [ ]  
 (f) Coughing out blood [ ]

51. *Cardiovascular system*

- (a) Palpitations(hearing my heart beat)
- (b) Breathlessness after climbing up a stair case
- (c) Breathlessness after walking a short distance

52. *Gastro-intestinal system*

- (a) Pain in my abdomen
- (b) Burning sensation in my stomach
- (c) Diarrhoea (frequent stooling)
- (d) Constipation
- (e) Vomiting blood

53. *Central nervous system*

- (a)Headaches
- (b)Blurring of vision
- (c)Hearing difficulty

54. *Urogenital system*

- (a) Vaginal discharge
- (b) Urethral discharge (discharge from penis)
- (c) Pelvic pain (pain in lower abdomen)
- (d) Frequent urination
- (e) Wounds/boils in my private part

55. *Musculoskeletal system*

- (a) Low-back pain
- (b) Pain in my joints (please specify which joints) -----

56. Fever
- No  Yes

## General Health Questionnaire

Please read the questions below and each of the four possible answers. Tick the response that best applies to you. Thank you for answering all the questions.

Have you recently:

1. Been able to concentrate on what you're doing?  
1. Better than usual 2. Same as usual 3. Less than usual 4. Much less than usual.
2. Lost much sleep over worry?  
1. Not at all 2. No more than usual 3. Rather more than usual 4. Much more than usual.
3. Felt that you are playing a useful part in things?  
1. More so than usual 2. Same as usual 3. Less so than usual 4. Much less than usual.
4. Felt capable of making decisions about things?  
1. More so than usual 2. Same as usual 3. Less so than usual 4. Much less than usual.
5. Felt constantly under strain?  
1. Not at all 2. No more than usual 3. Rather more than usual. 4. Much more than usual.
6. Felt you couldn't overcome your difficulties?  
1. Not at all 2. No more than usual 3. Rather more than usual 4. Much more than usual.
7. Been able to enjoy your normal day-to-day activities?  
1. More so than usual 2. Same as usual 3. Less so than usual 4. Much more than usual.
8. Been able to face up to your problems?  
1. More so than usual 2. Same as usual 3. Less than usual 4. Much less than usual.
9. Been feeling unhappy or depressed?  
1. Not at all 2. No more than usual. 3. Rather more than usual 4. much more than usual.
10. Been losing confidence in yourself?  
1. Not at all 2. No more than usual 3. Rather more than usual 4. Much more than usual.
11. Been thinking of yourself as a worthless person?  
1. Not at all 2. No more than usual. 3. Rather more than usual. 4. much more than usual.
12. Been feeling reasonably happy, all things considered?  
1. More so than usual. 2. Same as usual. 3. Less so than usual. 4. Much less than usual.