

https://dspace.org/

Utilisation of the employee health and wellness services at Kimberley Hospital Complex

Mogotsi, Bulelwa Rose

2012-02-22
http://hdl.handle.net/10539/11332

Downloaded from a DSpace repository. https://dspace.org/

UTILISATION OF THE EMPLOYEE HEALTH AND WELLNESS SERVICES AT KIMBERLEY HOSPITAL COMPLEX

BULELWA ROSE MOGOTSI

A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Masters of Public Health in the field of Hospital Management

JOHANNESBURG 2011

DECLARATION

I, Bulelwa Rose Mogotsi, declare that this research report is my own work. It is being submitted for the Masters in Public Health in the field of hospital management at the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this University or any other University.

.....

May 2011

DEDICATION

This research report is dedicated to my husband, Peter Winkie Mogotsi who has been my pillar of strength throughout my education. His experience as the first coordinator of the employee assistance programme forum in the Northern Cape Provincial Administration came in handy. He burnt the midnight oil with me during the course helping me to gather the information for the assignments and doing the editing thereof. My absence at home during the contact sessions was never felt by the children as he could ably stand in for me covering all parental responsibilities. Winkie has also become my editor picking up on the mistakes normally committed by tired brains.

To my child Tsholofelo and niece Nomathamsanqa, who enjoyed times we sat together, each doing her school work as they termed it. They came to understood that I had to go to school and do assignments. Maybe they could not imagine mommy failing at school.

Bongani, my elder son, for his patience and dedication in ensuring that the younger sisters are never bored, taking them out on weekends for entertainment and outdoor eating.

ABSTRACT

Background: The Employee Health and Wellness (EHW) Centre at the Kimberley Hospital Complex (KHC) started off as a staff clinic, rendering nursing services to staff members with occupational injuries and minor ailments such as influenza, colds and headaches. Since the EHW Programme was introduced in 2004 there has been no evaluation of the services provided. There is no information about referrals and current usage of the service, which compromises further planning.

Study aim: The aim of the study was to describe the extent and patterns of utilization of the Employee Health and Wellness Services at the Kimberley Hospital Complex for the period 1 January 2008 to 31 December 2009.

Methodology: This was a cross sectional descriptive study, involving a retrospective record review at the EHW Centre. Data extraction from various data sources was recorded on data collection tools using coding instead of names to protect the identity of the employees.

The study setting was the EHW Centre at Kimberley Hospital Complex, which is the only hospital with a Centre for Employee Health and Wellness in the Northern Cape Province.

Conclusion: The utilization rate of the EHW services at KHC is generally low (6.2% and 6.4%) in 2008 and 2009 respectively. There is a need for further research to determine the reasons for low utilisation through employee and employer interviews and focus group discussions. An interesting fact is the steep increase in the number of employees with multiple visits. It would be interesting to conduct a study that will determine the reasons for multiple visits in one month. There was no significant difference between the age and utilization of EHW services but there was a significant association between gender and components of services used, (chi-square test, $p<0.001$) for both PHC and OHS components. More males used the PHC component whilst more females used the OHS component of the services. While the reasons have not been established, it may possibly be related to a larger number of female employees in the professional category in the health sector. Thus there is a need for further research to explore

the gender mismatch in utilising PHC and OHS components of the services. The Wellness programme was minimally used. There was no significant association between age and medical aid status and the usage of service components. The average length of employment for employees who visited the EHW centre was less than 10 years; there was no significant difference in usage of the service between more experienced and less experienced staff.

There is a need for further studies to explore reasons for the low utilization rate of the EHW services as well as the perceptions of service providers and employees regarding the utilisation of these services at Kimberley Hospital Complex.

ACKNOWLEDGEMENT

This research could not have seen the light of day without the contributions of a number of people who unfortunately cannot all be mentioned in the report.

I am grateful to my supervisor Dr Leegail Adonis for sharing her experience and giving candid, insightful advice. I still feel the stimulating and inspiring guidance of Dr Deb Basu and Dr Moreshnee Govender. Their interest and cheerful encouragement were evident at all times during the period leading to the completion of this research project.

I will always remain indebted to the Galeshewe Day Hospital management, Zanyiwe Mooketsi, Seadimo Sehularo, Magadi Lubidla and Aubrey Lekhoathi for holding the fort at the institution throughout my study leave period since 2008.
The support and enthusiasm of both the Chief Executive Officer and the Nursing Service Manager of the Kimberley Hospital Complex are greatly appreciated. They ensured that I get all the assistant and cooperation needed to complete my study.

The assistance, support and cooperation of the staff at the Employee Health and Wellness Unit far out passed those of their peers in the health service. They were there for me ensuring that data is ready for collection.

A special measure of thanks is extended to my employer, the Northern Cape Department of Health. I must mention that I was given plenty of freedom to pursue the entire programme and also the use of its facilities and personnel. I had dedicated travelling mates in Millie Bok and Mariana Loots.

Thank you Millie for the chats during the travelling; and Mariana for driving us to school throughout the years. Our lives were in your hands

TABLE OF CONTENTS

DECLARATION ii
DEDICATION iii
ABSTRACT iv
ACKNOWLEDGEMENT vi
TABLE OF CONTENTS vii
LIST OF FIGURES x
LIST OF TABLES xi
GLOSSARY OF TERMS xii
LIST OF ABBREVIATIONS xiv
CHAPTER 1 1
INTRODUCTION 1
1.1 BACKGROUND 1
1.2 PROBLEM STATEMENT 2
1.3 RESEARCH QUESTION 3
1.4 JUSTIFICATION FOR THE STUDY 3
1.5 STUDY OBJECTIVES 3
1.5.1 BROAD OBJECTIVE 3
1.5.2 SPECIFIC OBJECTIVES 3
1.6 SUBSEQUENT CHAPTERS 4
CHAPTER 2 5
LITERATURE REVIEW 5
2.1 BENEFITS OF THE EMPLOYEE HEALTH AND WELLNESS SERVICES 5
2.2 COMPONENTS OF THE EMPLOYEE WELLNESS AND HEALTH SERVICES 6
2.3 FACTORS INFLUENCING THE USAGE OF EHW SERVICES 7
CHAPTER 3 9
METHODOLOGY 9
3.1 STUDY DESIGN 9

3.2 STUDY SETTING 9
3.3 SCOPE OF THE STUDY 10
3.4 STUDY POPULATION 10
3.5 STUDY SAMPLE 10
3.6 MEASUREMENT AND DATA SOURCES 10
3.6.1 STUDY INSTRUMENT 10
3.6.2 VARIABLES 10
3.6.3 DATA COLLECTION 12
3.6.4 DATA MANAGEMENT 12
3.6.5 STATISTICAL ANALYSIS 13
3.7 PILOT STUDY 13
3.8 ETHICAL CONSIDERATIONS 13
CHAPTER 4 14
RESULTS 14
4.1 ATTENDANCE 14
4.2 DEMOGRAPHIC PROFILE 16
4.2.1 AGE 16
4.2.2 GENDER 16
4.2.3 OCCUPATION 177
4.2.4 MEDICAL AID 17
4.2.5 DURATION OF EMPLOYMENT 188
4.3 EHW SERVICE COMPONENTS 18
4.3.1 PRIMARY HEALTH CARE 18
4.3.2 OCCUPATIONAL HEALTH SERVICES 20
4.3.3 WELLNESS PROGRAMME 20
4.3.4 EHW SERVICE COMPONENTS AND ASSOCIATED DEMOGRAPHIC FACTORS 211
4.4 OUTCOME OF THE EHW SERVICE ATTENDANCE 22
CHAPTER 5 244
DISCUSSION 244
5.1 USAGE ..... **Error! Bookmark not defined.**4
5.2 DEMOGRAPHIC PROFILE 244

5.3 TYPE OF SERVICES (EHW SERVICE COMPONENTS) 277
5.3.1 PRIMARY HEALTH CARE 277
5.3.2 OCCUPATIONAL HEALTH SERVICES 288
5.3.3 WELLNESS PROGRAMME 288
5.4 SERVICE COMPONENTS AND ASSOCIATED FACTORS 299
5.5 OUTCOME OF THE EHW SERVICE ATTENDANCE 299
CHAPTER 6 30
CONCLUSION AND RECOMMENDATIONS 30
6.1 CONCLUSIONS RELATED TO THE OBJECTIVES OF THE STUDY . 30
6.1.1 DETERMINATION OF THE UTILIZATION RATE OF THE EHW CENTRE 30
6.1.2 DESCRIPTION OF THE PROFILE OF EMPLOYEES WHO USED THE EHW SERVICES 311
6.1.3 DESCRIPTION OF THE TYPES OF SERVICES USED BY EMPLOYEES ATTENDING THE EHW CENTRE ..... **Error! Bookmark not defined.**2
6.1.4 DESCRIPTION OF THE OUTCOME OF THE VISITS 32
6.2 LIMITATIONS OF THE STUDY 32
6.3 RECOMMENDATIONS 333
6.3.1 USE OF FINDINGS OF THE STUDY 333
6.3.2 FUTURE RESEARCH 344
6.4 SUMMARY AND CONCLUSIONS 34
REFERENCES 35
APPENDICES 1
APPENDIX A: ETHICS CLEARANCE CERTIFICATE AND APPROVAL OF THE KIMBERLY HOSPITAL COMPLEX 2
APPENDIX B: DATA COLLECTION SHEET 3

LIST OF FIGURES

Figure. 3.1 Frances Baard District 9
Figure 4.1 Number of employees who attended the clinic 15
Figure 4.2 Number of visits per month 15

LIST OF TABLES

TABLE 3.1 Study Variables 11
Table 4.1 Attendance at the Employee health and wellness clinic 14
Table 4.2 Age distribution 16
Table 4.3 Gender 16
Table 4.4 Occupational category 17
Table 4.5 Distribution by Medical aid status 17
Table 4.6 Employee attendance by length of employment 18
Table 4.7 Primary Health Care sub-components 19
Table 4.8 Primary Health Care (HIV and TB) components 19
Table 4.9 Occupational Health Services 20
Table 4.10 Wellness Health clinic 20
Table 4.11 Gender distribution and EHW service components 21
Table 4.12 Occupational Category and EHW service components 22
Table 4.13 Outcome of Visit 22
Table 4.14 Outcome of Referral 23

GLOSSARY OF TERMS

Employee Health and Wellness: Refers to the promotion and maintenance of the highest degree of physical, mental, spiritual and social wellbeing in all occupations; prevention of illnesses caused by working conditions; protection of employees from risks in their work environment; placement of employees in an occupational environment adapted to optimal physiological, and psychological capabilities (WHO, 1986).

Employee health and wellness service: The three components of care offered at the Kimberley Hospital Complex (KHC) Employee Health and Wellness (EHW) Centre and these are Primary Health Care (PHC), Occupational Health Services (OHS) and the Wellness Programme.

Occupational Health Service: Refers to services aimed at improving the health and safety of employees at the workplace through promotion of a healthy, safe and satisfactory working environment. (Stanhope & Lancaster, 1992). The services include medical surveillance, occupational diseases and injury on duty management and hepatitis immunizations.

Ongoing: Refers to instances were further treatment and management is required

Primary Health Care: Refers to the provision of access to quality health care as well as preventive and promotive services for priority health needs (Schneider & Barron, 2008). It includes the management of minor ailments, acute and chronic conditions, Influenza vaccine, health education and counselling, voluntary counselling and testing (VCT), HIV and AIDS management and supervision of TB treatment.

Referred: Employee is referred to service providers outside of the Employee

Health and Wellness Centre.

Resolved: Refers to all cases where there is no further treatment required on the specific problem.

Unresolved: Refers to cases where employees did not return for further management and treatment or refused to cooperate and thus did not complete the treatment

Wellness Programme: Refers to counselling services rendered to employees who suffer from stress, trauma, loss, substance abuse and who may require debt counselling.

LIST OF ABBREVIATIONS

AA	Alcoholic Anonymous
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
CEO	Chief Executive Officer
DPSA	Department of Public Service and Administration
EAP	Employee Assistant Programme
EHW	Employee Health and Wellness
EHWP	Employee Health and Wellness Programme
HIV	Human Immunodeficiency Virus
KHC	Kimberley Hospital Complex
OHS	Occupational Health Services
PHC	Primary Health Care
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

CHAPTER 1
INTRODUCTION

The purpose of this study was to describe the extent and patterns of utilisation of the Employee Health and Wellness Services at the Kimberley Hospital Complex for the period 1 January 2008 to 31 December 2009.

1.1 BACKGROUND

Employee health and wellness (EHW) is defined by the World Health Organisation (WHO) as the promotion and maintenance of the highest degree of physical, mental, spiritual and social wellbeing in all occupations; the prevention of illnesses caused by working conditions; the protection of employees from risks in their work environment; the placement of employees in an occupational environment adapted to optimal physiological and psychological capabilities (WHO, 1986). This definition is comprehensive and suggests that EHW services should cover a variety of employee health needs, ranging from promotive, to preventive, curative and lifestyle issues.

Employees who have access to self care tools, information and health care professionals are better equipped to make informed lifestyle choices and health care decisions that will have positive results for both the employee and the employer, thereby saving costs related to health care, absenteeism, staff turnover and productivity (Department of Public Service and Administration, 2008).

Kimberley Hospital Complex (KHC) comprises four institutions, viz. Kimberley hospital, the only secondary level hospital in the Northern Cape Province, West End Psychiatric hospital, Galeshewe Day hospital, which is a Community Health Care Centre, and Harmony Home Rehabilitation, which is now an extension of the surgical discipline.

The EHW Centre at the KHC started off as a staff clinic rendering care to staff members with occupational injuries and minor ailments such as influenza, colds and headaches. In response to a directive from the Department of Public Service and Administration (DPSA) through the Employee Health and Wellness strategic framework, and the advent of HIV and AIDS, substance abuse, stress in the workplace and issues of women and child abuse, the centre was set up to render more comprehensive and psycho-social support services.

The KHC EHW Centre was opened in October 2004 and offers Primary health care (PHC) services, Occupational health services (OHS) and Wellness programme.

The centre is run by three professional nurses, and one full time psychologist and a part time medical officer who visits the centre once a week. The unit operates from Monday to Friday between 07H30 to 16H00.

New employees receive information about the centre during induction and orientation sessions. Further marketing of the centre is done during awareness campaigns that coincide with the National Health calendar.

1.2 PROBLEM STATEMENT

Since the EHW services were introduced in 2004, there has been no evaluation of the services provided. There is no information with regard to referrals and current usage of the services and this compromises planning. The total number of employees at KHC is 2010 but only around 600 employees have medical files in the EHW centre. The study therefore seeks to describe the extent and patterns of utilisation of the EHW centre at the Kimberley Hospital Complex from January 2008 to December 2009.

1.3 RESEARCH QUESTION

What is the extent and patterns of utilisation of the Employee Health and Wellness Services at the Kimberley Hospital Complex by employees for the period 1 January 2008 to 31 December 2009?

1.4 JUSTIFICATION FOR THE STUDY

There is no documented information about how the services are being utilized, aspects of the services mostly being used and who, in terms of category of staff, uses the services and the frequency thereof. There was thus a need to assess the extent and patterns of utilisation of services in order to guide management with regard to future structuring and positioning of the services.

The study also evaluated the extent of referrals to other service providers with a view to advice management on whether such services could be rendered at the EHW Centre.

1.5 STUDY OBJECTIVES

1.5.1 BROAD OBJECTIVE

The aim of the study was to describe the extent and patterns of utilisation of the Employee Health and Wellness Services at the Kimberley Hospital Complex by employees for the period 1 January 2008 to 31 December 2009.

1.5.2 SPECIFIC OBJECTIVES

1. To describe the utilisation rate of the EHW Centre from 1 January 2008 to the 31 December 2009.
2. To describe the profile of employees who used the EHW services during the study period.

3. To describe the types of services used by employees attending the EHW Centre
4. To describe the demographic factors associated with the utilisation of the different services at the EHW centre.
5. To describe the outcomes of the visits (resolved, unresolved, on-going, referred) in-order to assess the effectiveness of the intervention programs offered.

1.6 SUBSEQUENT CHAPTERS

Chapter one provided an overview of the study, defined the aim and objectives. The subsequent chapters will cover following areas:

Chapter Two: Literature Review: This chapter deals with relevant literature and studies related to the study and seeks to establish what current practices are in similar settings nationally and internationally.

Chapter Three: Research Methodology: In this chapter the research methodology, methods and techniques utilised are explained.

Chapter Four: Presentation of Results: The findings of the study pertaining to aims and objectives are analysed in this chapter.

Chapter Five: Discussion: This chapter focuses on the drawing parallels from the literature and results of the study in an effort to explain the aims and objectives.

Chapter Six: Conclusions and Recommendations: In this chapter conclusions emanating from the study are cited, recommendations are made with regards to future studies in the area of employees wellness programme.

CHAPTER 2
LITERATURE REVIEW

In this chapter, relevant published literature and articles and unpublished reports related to employees wellness programme were reviewed.

2.1 BENEFITS OF THE EMPLOYEE HEALTH AND WELLNESS SERVICES

Organizations have always been concerned with creating a match between the individual employee and the workplace with the aim of making the individual more productive. This is done by balancing the employee's social, economic and psychological characteristics as these characteristics link with both physiological and psychological ill-health of an employee (Bagraim, Cunningham, Potgieter, et al., 2007).

Fall (2001) in Healthy Workforce 2010 sees health promotion as the investment in human capital. This is also highlighted in the Strategic framework for the Employee Health and Wellness for the public service vision which states that "the total well-being of employees in the workplace is imperative for delivery of quality services and to ensure a healthy work-life balance" (DPSA, 2008).

The current causes of morbidity and mortality, which stem from avoidable and controllable factors like workplace injuries, unmanaged psycho-social problems, chronic diseases of lifestyle and certain cancers, demand that employers and hospital managers invest in employee wellness services with health promotion at the workplace as a major initiative. This approach ensures healthy working communities, reducing absenteeism, increasing productivity and improving morale and job satisfaction, which are of benefit to both employer and employee (Carter, Gaskins & Shaw, 2005).

It is therefore necessary for organisations to develop EHW services for managing and preventing work related health risks. It is important that managers view employees, not only as resources for the delivery of services, but also as valuable commodities that must be taken care of (Powers, 1977).

2.2 COMPONENTS OF THE EMPLOYEE WELLNESS AND HEALTH SERVICES

Bagraim et al (2007: 321) explain that stress in one's personal life can affect work experience, leading to future physiological problems, resulting from negative significant life events. Causes of stress range from work related problems, health conditions, individual problems, and social or family experiences. These necessitate the provision of stress related services aimed at assisting employees cope better with stressful situations and not resort to alcohol and substance abuse for coping mechanism. Further literature has revealed that most workplaces are lacking in the provision of programmes aimed at drug and substance abuse including alcohol. Deitz and colleagues (2005) have found that the omission of these programmes is linked to the stigma associated with substance and alcohol abuse (Deitz, Cook & Hersch, 2005).

Other studies have recommended the inclusion of strategies such as biometric screening for cardiovascular disease and diabetes, and gender-specific cancer screening as part of the EHW services. More importantly, counselling and behaviour change communication strategies should be provided, not only for health promotion but also for preparing employees for retirement. It was found that the prevalence of depression among workers was associated with negative thoughts of retirement by those in lower wage brackets and those with no adequate provisions for retirement (Musich, McDonald & Chapman, 2009).

Eaton et al (2007) estimated that about two thirds of deaths among adults aged 25 years and older are attributed to preventable risk factors such as smoking, bad eating habits, inadequate physical activity and alcohol use, necessitating

organisations to develop multi component EHW services. For example, many schools have already invested in facilities such as gymnasiums, swimming pools, athletic fields and fitness centres. This suggests that EHW services should offer vigorous health promotion strategies because improving the health of workers, who are parents and members of communities, will also improve the health of families and communities as workers may take these good practices home.

2.3 FACTORS INFLUENCING THE USAGE OF EHW SERVICES

Makary and colleagues (2007) have found that familiarity with a health care provider may reinforce patient's health seeking behaviour. This emerged in the study of needle prick injuries among surgeons in training where 53% of the injuries were not reported to the Employee Health Services. It was found that the respondents prefer to report the incident to their physicians or confiding in their colleagues.

In the study by Hahn and colleagues (2007), it was found that confidentiality and trust were important for health care users in general. Their study on 'changing employee behaviour" revealed that signing a simple confidentiality form increased the number of employees who participated in the health risk assessment programmes. Clients will therefore always open up to a health care provider if they trust that their problems will not be divulged without their consent.

Other factors influencing participation in EHW services as discussed by Haynes and colleagues (1999) are demographic characteristics of employees. For example, elderly employees were found to participate more in curative health programmes and multi-component programmes dealing with chronic conditions like diabetes, high cholesterol levels and hypertension related risks.

Aldana and colleagues (2005) revealed that female employees participated mostly in programmes that offered counselling and education, while men and overweight employees, in general, as well as those with health risks, like high cholesterol, hypertension or diabetes, participated more in fitness activities. High

participation in multi-component programmes was evident when there were incentives for participation. Hahn et al (2007) further revealed that giving a $10 gift card as an incentive to participate in health promotion activities increased not only the number of participants but also their commitment as was evident in the constant weight loss and improvement in diabetes control (HbA1 reduced to below the baseline of 9).

The escalating health costs make it difficult for employees to access health care services and this affects their health seeking behaviour. Robroek and colleagues (2009) assert that employees who cannot afford to pay for health care services, either because they do not have a medical aid or their earnings are low, find workplace health care services valuable and are likely to take more advantage of the free services than those with higher earnings or medical aid (Robroek, Van Lenthe, Van Empelen, et al., 2009).

According to Haynes and colleagues (1999), workplace policies on EHW services also influence participation patterns. In this study, employees who were referred for Employee Assistance Programmes (EAPs) by managers viewed it as a form of punishment by management and were therefore not willing to cooperate (Haynes, Dunnagan & Smith, 1999).

In summary, the participation of employees and patients in general, in health care services and EHW services in particular, is influenced by elements such as demographic characteristics, type of services offered, and financial affordability and workplace policies. The issues of trust and confidentiality are also important.

CHAPTER 3

METHODOLOGY

The methodology used for the study was determined by the study aims and objectives. In this chapter, the following are discussed: setting, scope, study design and data management.

3.1 STUDY DESIGN

This was a cross sectional descriptive study involving a retrospective record review at the KHC EHW Centre.

3.2 STUDY SETTING

The study setting is the EHW Centre at Kimberley Hospital Complex in Northern Cape Province. The Hospital is situated in the Frances Baard district with a catchment population of 345 821. It is the only regional hospital in the Province with the total population of about 1 million (Figure 3.1).

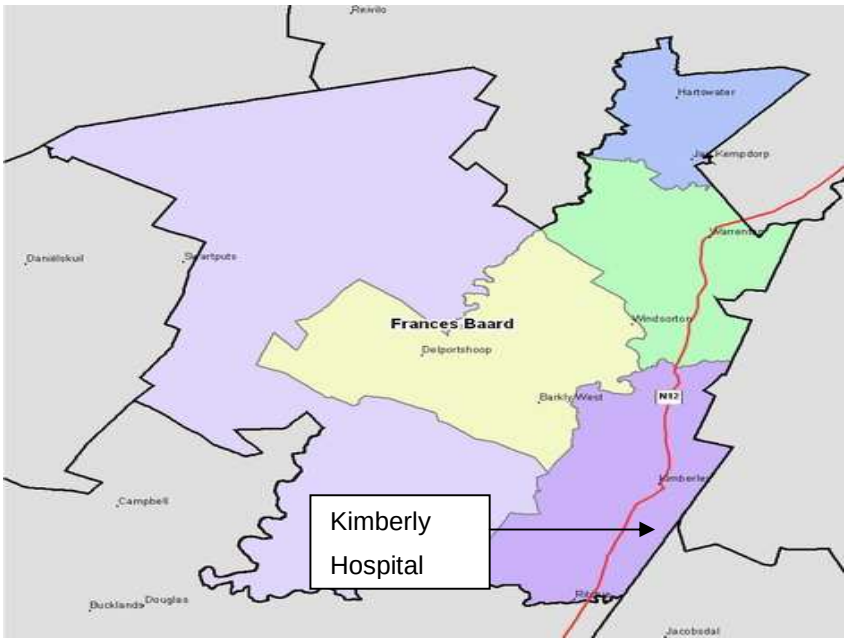


Figure. 3.1 Frances Baard District

3.3 SCOPE OF THE STUDY

The medical records of the various categories of employees who have visited the EHW Centre during the study period, the daily visit registers, and Persal documents as well as any supporting documents that were available, were reviewed. A coding system was used to maintain employee confidentiality.

3.4 STUDY POPULATION

The study population comprised of all employees of KHC who used the EHW Centre during the study period. There is a total of 600 files at the EHW centre. All registers, medical as well as Persal records of employees who used the EHW Centre from January 2008 to December 2009 were reviewed.

3.5 STUDY SAMPLE

A random selection of medical records of employees who visited the Wellness Centre during the study period was done. The sample size was 337. There were 144 records for July 2008 and 156 records for July 2009. All the visits including repeat visits during were captured and were 164 and 173 visits for 2008 and 2009 respectively.

3.6 MEASUREMENT AND DATA SOURCES

3.6.1 STUDY INSTRUMENT

The attached data collection tools (appendix B) were used to extract data from the employee medical records, the daily visit registers, Persal and other documents at the EHW Centre.

3.6.2 VARIABLES

The following table indicates the variables and the indicators that were used and measured for each objective.

TABLE 3.1 Study Variables

Objective	Variables	
1	Usage	Number of employees who visited the Wellness services, expressed as a proportion of all employees.
2	-Age group - in years -Gender (male/female) -Occupation/Category (professional staff; administration staff; service staff) -Medical aid (yes/no) -Duration of employment in years (0-5; >5-10; >10yrs) -Medical history, e.g. diabetes, hypertension, asthma, TB, epilepsy, HIV	Number of employees within a particular age group who visited the EHW services Number of males/females who visited the EHW services Number of professional/administrative/services staff who visited the EHW services Number of employees with/without medical aid who visited the EHW services Number of employees in terms of experience at KHC who visited the EHW services Number of employees with chronic medical condition who visited the EHW services
3	**Primary health care, e.g.** minor ailments and chronic conditions, Hepatitis and influenza immunization, VCT, TB, HIV and AIDS management **Occupational health services, e.g.** medical surveillance, occupational diseases, injury on duty **Wellness Programme. e.g.** workplace stress, trauma and loss, substance abuse, financial management and counselling, **Referrals** to services outside of the EHW Centre	Number of employees who were managed for Primary health care conditions Number of employees who received occupational health care services Number of employees who were managed for Wellness programme Type of services and number of employees referred to other service providers
4	Age group in years Gender (male/female) Occupation category (professional staff; administration staff; service staff) Medical aid (yes/no)	Type of services used by employees in a certain age group; Type of services used by males/females Types of services utilised by occupational category Type of services utilised by employees with/without medical aid
5	Outcome of the Visit	Resolved, Unresolved, On-going Referred

3.6.3 DATA COLLECTION

Data for this study was routinely collected as part of record-keeping as well as the reporting system for the hospital services. No primary data was collected for this study. All the data was extracted from various data sources.

Objective 1: Information from the daily visit registers was extracted to determine the number of employees who visited the EHW Centre during the study period and this was captured on Tool 1.

Objective 2: Data to describe the profile of all employees who used the Wellness centre at KHC during the study period was collected (including age, gender, occupational category, medical aid membership, length of employment and medical history). The data was extracted from the employees' medical records, daily visit registers and Persal system and captured on Tool 2.

Objective 3: Tool 3 was used to capture data for describing the type of services and components of the EHW programme used by employees during the study period.

Objective 4: The data captured on Tools 2 and 3 was used for describing factors associated with the utilisation of different services using age, gender; occupational category, medical aid affiliation and type of services used.

Objective 5: Tool 4 was used to capture data for describing the outcome of the visits (whether the problem was resolved, unresolved, ongoing, referred).

3.6.4 DATA MANAGEMENT

Data was collected on excel spread sheet and NCSS software package (NCSS 2007) for cleaning and analysis.

3.6.5 STATISTICAL ANALYSIS

Descriptive statistics were used to analyse data using NCSS software package (NCSS, 2007). Counts and proportions were used to describe categorical variables (age group, gender, occupational category; medical aid affiliation types and category of services). Means and standard deviations were also used to describe continuous variables (number of employees, and employment period).

Chi-square tests were used to determine significant association or relationship between two categorical variables such as types of services used and age groups, gender, occupational category and medical aid affiliation.

3.7 PILOT STUDY

The pilot study was done at KHC EHW centre using 10 employee records to test the tools. The pilot study was done at KHC EHW centre as it is currently the only Institution which provides the EHW services in the Northern Cape Province.

3.8 ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the KHC Chief Executive Officer and ethical clearance from Wits University Human Ethics Research Committee, clearance certificate number: M10740

All the information collected on the data collection sheets was kept confidential. Study numbers were used and entered on the data collection sheet instead of employees' names and file numbers to protect the identity of employees. No patient records were removed from the centre. Reporting was done by groups.

CHAPTER 4
RESULTS

The findings of the study were presented in this chapter. The results were presented in the form of table and graphs and key findings of the study were highlighted.

4.1 ATTENDANCE

The total number of staff in the Hospital was 2010 employees. The attendance to the Employee Health and Wellness Centre during the study period (2008 and 2009) is described in Table 4.1

In 2008, an average of 124 (6.2%) employees attended the clinic. 108 visited only once, whereas 16 had multiple visits. In 2009, average of 129 (6.4%) employees visited the clinic, 84 visited once and 45 had multiple visits.

Table 4.1 Attendance at the Employee health and wellness clinic

MONTH	2008		2009	
	NO OF EMPLOYEES	NO OF VISITS	NO OF EMPLOYEES	NO OF VISITS
Jan	87	91	121	134
Feb	105	115	117	125
Mar	149	157	131	139
Apr	139	152	92	98
May	125	132	124	129
Jun	131	140	129	136
Jul	144	164	156	173
Aug	127	132	118	122
Sep	159	178	143	149
Oct	96	105	155	174
Nov	138	149	151	176
Dec	86	93	113	119

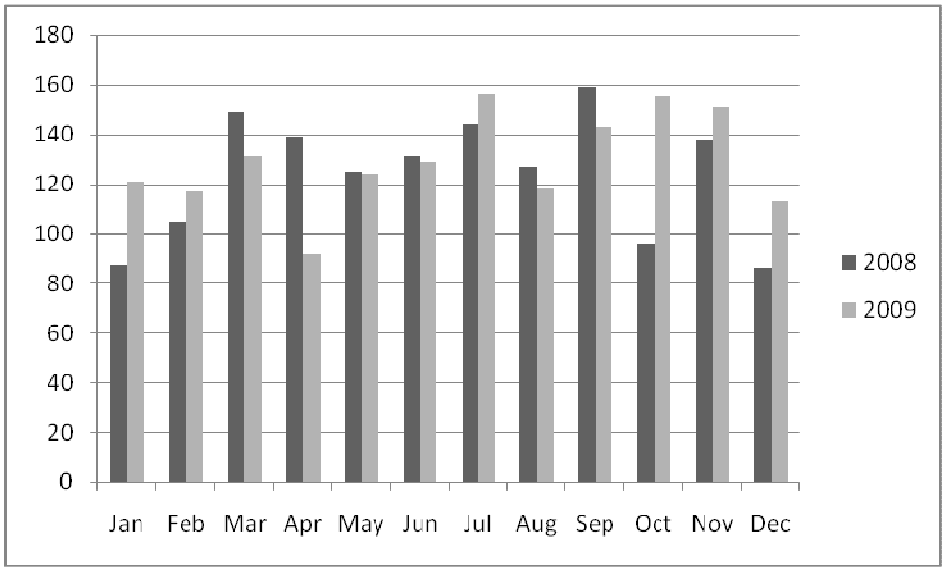


Figure 4.1 Number of employees who attended the clinic

The mean number of users during 2008 and 2009 was 124 (± 25) and 129 (± 19) respectively (Figure 4.1). There was no significant differences in number of users during this period (unpaired t-test, p = 0.56).

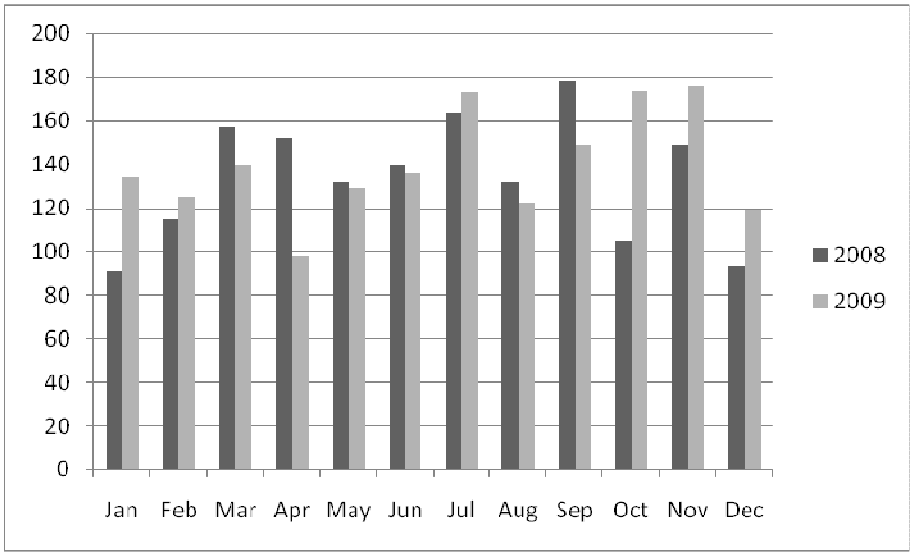


Figure 4.2 Number of visits per month

The mean number of visits during 2008 and 2009 was 134 (±28) and 140 (± 24) respectively (Figure 4.2). There was no significant differences in number of visits during this period (unpaired t-test, p = 0.61).

4.2 DEMOGRAPHIC PROFILE

4.2.1 AGE

The age of the employees is described in Table 4.2. The mean age of the study sample was 44 ± 10 years. There was no significant difference in age between the two groups (Unpaired t test, p = 0.15).

Table 4.2 Age distribution

Age (years)	Total (n=337)	2008 (n=164)	2009 (n=173)
Mean ± SD	44 ± 10	43 ± 10	44 ± 9
Range (min-max)	20-64	20-63	21-64

4.2.2 GENDER

The gender of the employees is described in Table 4.3. Although there was no significant difference in gender between the 2008 and the 2009 cohorts, group (chi-square test, p = 0.39), more female users attended the EHW Centre for both years. The utilisation rate for KHC employees was 8.15% for 2008 and 8.6% for 2009. Female workers accounted for 8% and 9.8% utilisation rate for 2008 and 2009 respectively, while 7.5% and 7% of total male workers utilised the EHW centre in the same study period.

Table 4.3 Gender

Gender	Number (%)	2008 (%)	2009 (%)
Male	140 (41.5%)	72 (43.9%)	68 (39.3%)
Female	197 (58.5%)	92 (56.1%)	105 (60.7%)
Total	**337 (100%)**	**164 (100%)**	**173 (100%)**

4.2.3 OCCUPATION

The occupation of the employees is described in Table 4.4. There was no significant difference in occupational category between the two groups (chi-square test, p = 0.21). More than 50% of clinic users were from the service category followed by the professional category (35%).

Table 4.4 Occupational category

Occupation category	Number (%)	2008 (%)	2009 (%)
Administration	25 (7.4%)	12 (7.3%)	13 (7.5%)
Service	192 (57.6%)	102 (62.2%)	92 (53.2%)
Professional	120 (35%)	50 (30.5%)	68 ((39.3%)
Total	**337 (100%)**	**164 (100%)**	**173 (100%)**

4.2.4 MEDICAL AID

More than 50% of employees who utilised the EHW centre had medical aid cover (Table 4.5). Although there was a 10% drop in utilisation by employees with medical aid cover from 2008 (58.6%) to 2009 (48.6%), and a 10% increase from 2008 (41.5%) to 2009 (51.4%) in the utilisation by those not affiliated to a medical aid there was no significant difference in medical aid status overall between the two groups (chi-square test, p = 0.07).

Table 4.5 Distribution by Medical aid status

Medical aid	Number (%)	2008 (%)	2009 (%)
Yes	180 (53.4%)	96 (58.5%)	84 (48.6%)
No	157 (46.6%)	68 (41.5%)	89 (51.4%)
Total	**337 (100%)**	**164 (100%)**	**173 (100%)**

4.2.5 DURATION OF EMPLOYMENT

The duration of employment is not normally distributed. The median duration of employment is described in Table 4.6

Table 4.6 Employee attendance by length of employment

Duration of employment (years)	Number (yrs.)	2008	2009
Median (Inter-quartile range)	11 (5-23)	12 (5-23)	10 (5-20)
Range (Minimum to maximum)	0.41-39	0.66-39	0.41-39

There was no significant difference in duration of employment between the two groups (Mann Whitney's U test, p = 0.55). Majority of the users have worked in the hospital less than 10 years.

4.3 EHW SERVICE COMPONENTS

4.3.1 PRIMARY HEALTH CARE

There were 265 types of problems managed including TB and HIV management during the study period, with no difference in sub-component usage for both years (Tables 4.7 and 4.8). PHC services were mostly used by the majority of 71% of total service usage of all three main components. There were more disorders associated with muscular-skeletal system attended to than the other components (n=48) followed by chronic conditions (n=38) There were no differences in age between the staff who attended the PHC component (n= 245) and those who did not attend (n= 92) (Mann Whitney's U test, p = 0.27).

Table 4.7 Primary Health Care sub-components

SUB-COMPONENT	Total	2008	2009
OPHTHALMOLOGY	12	5	7
ENT	30	21	9
RESPIRATORY	30	18	12
CARDIO-VASCULAR	26	15	11
HEPATO-BILLIARY	1	1	0
DIGESTIVE	16	10	6
MENTAL	18	9	9
ENDOCRINOLOGY	6	3	3
MUSCULO-SKELETAL	48	21	27
GENITO-URINARY	9	5	4
GYNAECOLOGY	3	1	2
DERMATOLOGY	8	5	3
OTHERS	17	10	7
TOTAL	**224**	**124**	**100**

The clinic attendance for TB and HIV component is described in Table 4.8.

Table 4.8 Primary Health Care (HIV and TB) components

SUB-COMPONENTS	Number	2008	2009
TB treatment	12	6	6
TB screening	7	6	1
HIV management	18	12	6
VCT	4	3	1
TOTAL	**41**	**21**	**20**

4.3.2 OCCUPATIONAL HEALTH SERVICES

The component of occupational health usage was at 26 % of the overall usage (Table 4.9). Occupational health services mostly used were injury on duty reporting and management (n=33) followed by periodic assessments (n=30). More than half of injury on duty were needle prick injuries (n= 23).

Table 4.9 Occupational Health Services

SUB-COMPONENT	Number	2008	2009
Initial assessment	1	1	0
Periodic assessment	30	17	13
Placement evaluation	1	1	0
Sputum results	10	3	7
Injury on duty	33	13	20
Hepatitis B	22	12	10
TOTAL	97	47	50

4.3.3 WELLNESS PROGRAMME

There was very fewer attendances to Wellness programme (n= 10) as shown in (Table 4.10). The attendance rate for this component was only 2.7%.

Table 4.10 Wellness Health clinic

SUB-COMPONENT	Number (%)	2008 (%)	2009 (%)
Counselling for absenteeism	3 (30%)	2 (40%)	1 (20%)
Counselling for alcoholism	1 (10%)	0	1 (20%)
Psychological counselling	6(60%)	3 (60%)	3 (60%)
TOTAL	10 (100%)	5 (100%)	5 (100%)

4.3.4 EHW SERVICE COMPONENTS AND ASSOCIATED DEMOGRAPHIC FACTORS

AGE

There was no significant association between age and component of clinic use (One way analysis of variance, p=0.11)

GENDER

There was a significant association between gender and components of services used (chi-square test, p<0.001). Male employees had mainly attended the PHC component. More female attended the OHS component.

Table 4.11 Gender distribution and EHW service components

Component attended	Number (%)	Male: Number (%)	Female: Number (%)
PHC	233 (69.1%)	120 (85.7%)	113 (57.4%)
OHS	92 (27.3%)	17 (12.1%)	75 (38.1%)
PHC and OHS	7 (2.1%)	2 (1.4%)	5 (2.5%)
PHC and Wellness	5 (1.5%)	1 (0.7%)	4 (2.0%)
Total	**337 (100%)**	**140 (100%)**	**197 (100%)**

EHW SERVICE COMPONENTS

The association between Occupational category and EHW service components is presented in Table 4.12. There were significant association between the occupational categories and EHW service components (chi-square test, p<0.001). The majority of staff who attended the PHC component belonged to service category whereas more than 50% of the professional category staff used the OHS.

Table 4.12 Occupational Category and EHW service components

Component attended	Number (%)	Administration Number (%)	Professional Number (%)	Service Number (%)
PHC	233 (69.1%)	20 (80%)	47 (39.8%)	166 (85.6%)
OHS	92 (27.3%)	2 (8%)	65 (55.1%)	25 (12.9%)
PHC and OHS	7 (2.1%)	0 (0%)	5 (4.2%)	2 (1%)
PHC and Wellness	5 (1.5%)	3 (12%)	1 (0.8%)	1 (0.5%
Total	**337 (100%)**	**25 (100%)**	**118 (100%)**	**194 (100%)**

4.4 OUTCOME OF THE EHW SERVICE ATTENDANCE

There was no difference in outcome of visit between the two groups (Table 4.13 (chi-square test, p = 0.67). The outcomes for more than a third of the visits were classified as ongoing, followed by the categories resolved and referred at 30%. Less than 1% of the outcome was in the unresolved category.

Table 4.13 Outcome of Visit

Outcome	Number (%)	2008 (%)	2009 (%)
Resolved	99 (29.4%)	49 (29.9%)	50 (28.9%)
Referred	103 (30.6%)	52 (31.7%)	51 (29.5%)
Ongoing	134 (39.8%)	62 (37.8%)	72 (41.6%)
Unresolved	1 (0.3%)	1(0.6%)	0 (0%)
Total	**337 (100%)**	**164 (100%)**	**173 (100%)**

There were 103 referrals out of the EWP clinic during the entire study period (Table 4.14). Overall, there were an equal number of referrals when comparing the 2008 and 2009 period. More than half the referrals were made to the casualty department.

Table 4.14 Outcome of Referral

Outcome	Number (%)	2008 (%)	2009 (%)
Private consulting rooms	5 (4.9%)	2 (3.8%)	3 (5.9%)
AA	1 (1.0%)	0 (0%)	1 (2.0%)
Specialised clinics	15(14.6%)	8 (15.4%)	7(13.7%)
Casualty	67 (65.0%)	31 (59.6%)	46 (90.2%)
Admission	1 (1.0%)	1 (1.9%)	0 (0%)
Health and allied section	14 (13.6%)	10 (19.2%)	4 (7.8%)
Total	**103**	**52**	**51**

CHAPTER 5
DISCUSSION

In this chapter the results obtained from the analysis of the data are discussed and compared with those from other published studies

5.1 INTRODUCTION

In 2008, an average of 124 (6.2%) employees attended the clinic. One hundred and eight (108) visited only once, whereas sixteen (16) had multiple visits. In 2009, an average of 129 (6.4%) employees visited the clinic, eighty four (84) visited once and forty five (45) had multiple visits. There was no significant difference in the number of users during the study period (unpaired t-test, $p = 0.56$). There was also no significant difference in the number of visits during 2008 and 2009 (unpaired t-test, $p = 0.61$). This implies there was no increase in use of the service as envisioned by the Hospital management and the reasons for that should be investigated. A study by Robroek et al (2009) found that total participation in a wellness programme that was designed for managing overweight and health risk factors for cardiovascular problems varied between 10% and 64% depending on the type of programme introduced. Further findings were that short term programmes designed to yield immediate results drew more participation than long-term programmes. In comparison with Robroek's study, the participation rate in this study is low.

5.2 DEMOGRAPHIC PROFILE

AGE

The mean age of the study population who utilized the EHW Centre was 44 years, 43 (±10) and 44 (±9) in 2008 and 2009 respectively. The mean age of the staff of the Hospital is not known. Therefore, it is difficult to comment about usage

pattern. A study by Deitz et al (2005) on Employee Assistant Programmes, found that the mean age for female participants was 40 and 39 for males, and that there was no significant difference in participation by age group. Their finding coincides with the results of this study. (Unpaired t test, p = 0.15).

GENDER

The study found that although there was no significant difference between male and female users (chi-square test, p = 0.39) more females used the EHW services in both study years comprising more than 50% of the study cohort, compared to 40% of males. The utilisation rate for female workers during the study period increased from 8% in 2008 to 9.8% in 2009 study cohort. There was a 0.5% decrease in male utilisation rate in 2009 study year cohort. The findings by Robroek et al (2009) showed that there were more females participating in employee wellness programmes than males.

Other similar studies also find that although female participation in wellness programmes was found to be more than that of males, there was no significant difference related to age and gender (Pietras and Ballard, 1995).

OCCUPATIONAL CATEGORY

There was no significant difference in occupation category between the two groups (chi- square test, p = 0.21). More than 50% of clinic users were from the service category followed by the professional category (35%). The study findings by Robroek and colleagues (2009) also concluded that there was no consistent effect in participation by employees with regard to health and work related demographic characteristics.

MEDICAL AID STATUS

More than 50% of employees who attended the EHW services during the study period had medical aid cover. Although there was a 10% drop in utilisation of services by those with medical aid membership from 2008 (58.6%) to 2009 (48.6%), with a simultaneous increase in utilisation by non-medical aid members from 2008 (41.5%) to 2009 (51.4%), there was no significant difference between users with medical aid and those without between the two groups (chi-square test, $p = 0.07$). This differs from the findings of study conducted by Robroek and colleagues (2009). They concluded that employees who cannot afford to pay for health care services, because either they did not have medical aid or their earnings were low, found workplace health care services valuable and were likely to take more advantage of the free services than those with higher earnings or medical aid (Robroek et al, 2009).

LENGTH OF EMPLOYMENT

There was no significant difference in duration of employment between users in 2008 and 2009 (Mann Whitney's U test, $p = 0.55$). The majority of the users have worked in the hospital less than 10 years. The study on needle prick injuries by Makary et al (2007) revealed that young surgeons on training not only had more needle prick injuries, but that they did not report these injuries. In this study, injury on duty accounted for 34% of the overall attendance for OHS and years of experience had no bearing on the injuries.

MEDICAL HISTORY

The results on the usage of PHC component showed that there were only 38 cases related to chronic conditions. It is not known how many staff members had chronic diseases neither are their preference for the management of chronic diseases. Haynes and colleagues (1999) asserted that demographic characteristics of employees for example, elderly employees were found to

participate more in curative health programmes and multi-component programmes dealing with chronic conditions like diabetes, high cholesterol levels and hypertension related risks, which is not the case in this study.

5.3 TYPE OF SERVICES (EHW SERVICE COMPONENTS)

There were 372 visits for PHC services including TB and HIV management, OHS and Wellness programme for the study period with no difference in component usage for both years. In 2008, visits per subcomponent were 124 (62.9%) for PHC; 21 (10.6%) for TB and HIV management; 47 (23.8%) for OHS; 5 (2.5%) for Wellness programme whereas in 2009 visits for the same components were 100 (57.1%) for PHC; 20 (11.4%) for TB and HIV management; 50 (28.6%) for OHS; 5 (2.85%) for Wellness programme.

5.3.1 PRIMARY HEALTH CARE

Of the total service usage, PHC services were mostly attended (n=265). There were more problems of musculo-skeletal attended to than the other sub-components followed by TB and HIV management. With the advent of HIV and AIDS in our country, especially in the Northern Cape, expectations were that more TB and HIV management services would be used, but this sub-component only accounted for 11% of the total service usage and 15% of the PHC component. There was also a 50% decrease in HIV management and VCT in 2009. This could be because of the resignation of the doctor who was responsible for HIV programme in the EHW centre or employees' preference to use services outside their workplace. In case this was true, it would be in line with the findings by Makary et al (2007) that familiarity with the health care provider increases employee health seeking behaviours.

5.3.2 OCCUPATIONAL HEALTH SERVICES

The component of OHS usage was 26% during the study period. The majority of the cases involved injuries on duty reporting and management (34%), followed by periodic assessments (30.9%). More than half (69.6%) of the injuries were needle prick injuries. Needle prick injuries increased from 27.6% in 2008 to 40% in 2009. The reason for the increase may be associated with either improved reporting or an increase in absolute number of needle prick injuries. Makary and colleagues (2007) found that 53% of needle prick injuries were not reported to work site wellness centres especially by newly trained surgeons. The study found that familiarity with health care providers increased the health seeking behaviours of employees.

5.3.3 WELLNESS PROGRAMME

The utilisation of this component in the KHC EHW centre was very low at 2.7% during the study period. Literature has revealed that most workplaces are lacking in the provision of programmes aimed at drug and substance abuse including alcohol as well as general psycho- social care for employees (Deitz, et al, 2005). They found that the omission of these programmes is linked to the stigma associated with substance and alcohol abuse. This may be the reason for the low utilisation rate in this study. Further research may be needed to determine the real reasons. According to Haynes and colleagues (1999), workplace policies on EHW services also influence participation patterns. The research that the lower utilisation of wellness programme was because of the non referral of employees to Employee Assistance Programme (EAP) by managers or the poor understanding of the policy by both employees and managers. Haynes et al, 1999) found that employees viewed referral for EAP programme as a form of punishment by management and were therefore not willing to cooperate.

5.4 SERVICE COMPONENTS AND ASSOCIATED FACTORS

There was a significant association between gender and component of service used (chi-square test, $p < 0.001$). Male employees mainly attended the PHC component while more female employees attended the OHS component. The majority of employees who used the PHC component were from the service category whilst more than 50% of those who attended the OHS component were from the professional category. The reasons for this require further exploration to improve utilisation. A qualitative study that involve interview of user and non-user would provide some insight.

5.5 OUTCOME OF THE EHW SERVICE ATTENDANCE

There was no difference in outcome of visits between 2008 and 2009 study groups (chi-square test, $p = 0.67$). The outcomes for more than a third of the visits were classified as ongoing, followed by the categories resolved and referred at 30%. Less than 1% of the outcome was in the unresolved category.

There were 103 referrals out of the EWP clinic during the entire study period. Overall, there were an equal number of referrals in both 2008 and 2009. More than half the referrals were made to the casualty department. This might be associated with the fact that there was no fulltime doctor allocated for this unit. The HIV programme was accessible daily for these patients, while the doctor only visited the unit once a week for general patients. The study showed the hospital management should allocate a doctor to visit the clinic daily to improve utilisation of the Unit.

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

This chapter provides the researcher an opportunity to comment on the findings and make recommendations that target the findings.

6.1 CONCLUSIONS RELATED TO THE OBJECTIVES OF THE STUDY

6.1.1 DETERMINATION OF THE UTILISATION RATE OF THE EHW CENTRE

There was a low utilisation rate of 6.2% and 6.4% in 2008 and 2009 respectively with the mean attendance of 124 and 129 for both study years. There is a need for further research to determine the reasons for low utilisation through employee and employer interviews or focus group discussions. It was possible that the low utilisation rate may result from perception of service accessibility. The service operational hours are 07h00 to 16h00, Monday to Friday excluding public holidays. Employees may find this arrangement limiting access to the EHW centre especially for shift workers. It was also possible that employees might find the services not relevant to their actual or perceived health needs. The perceived mismatch of services provided and requirement of employees might be a result of available services not well marketed or communicated to employees.

Other areas that linked to low utilisation rate might be directly related to EHW centre personnel such as negative attitude, lack of trust and confidentiality, and poor or inadequate communication. Staff attitude had been identified as one of the main causes of inaccessibility within the public health care institutions.

One interesting fact is that the number of employees who visited the EHW services for multiple visits, increased from 16 in 2008 to 45 in 2009. This represents a 181% increase. This might be due to more ill employees who

needed more than one visit or that the service might be unable to assist them adequately and they had to return more than is needed. This steep increase in multiple visits would require further investigation.

There was also a very low utilisation rate of people with chronic diseases of lifestyle. This might be because of very little services offered to staff in terms of screening and management of chronic diseases or that those with these diseases preferred to seek medical care elsewhere. There is a need to further investigate the reason for low utilisation rate by determining employees' perceptions of the EHW staff and available services.

6.1.2 DESCRIPTION OF THE PROFILE OF EMPLOYEES WHO USED THE EHW SERVICES

There was no significant difference between age and medical aid status regarding utilisation patterns. More employees who used the services in 2008 had medical aid insurance, although there was a decrease in their utilisation in 2009. Findings in the outcome of visits had shown that employees with medical aid were referred to the private consulting rooms of the hospital where clients had to pay for services. This might have changed the employees' perception of the EHW Centre and might have led to the employees deciding thereafter to go directly to the private consulting rooms of the hospital for their health problems.

There was a significant association between gender and the EHW service components. Males mainly attended the PHC component whilst more females attended the OHS component. The reason had not been established, but it might be related to larger numbers of female employees in the professional category in the health sector. Thus, there was a need for further research to explore the gender mismatch in utilising PHC and OHS components of the services.

There was a significant association between the occupational categories and clinic component attended. The majority of employees who attended the PHC

component belonged to the service category, whereas more than 50% of the professional category used the OHS. It was also evident that more females visited the OHS services, especially for needle-stick injuries. This might be because of more female employed in the professional category and in the health sector, thus a higher probability that more females would require services. The works of these professional staff place them at an increased risk thereby necessitating that they use OHS component regularly.

The PHC component was mostly used (71% usage) followed by OHS at 26%. The least used component was the Wellness programme with 2.7% usage during the study period. There is therefore a need to market and strengthen the Wellness and the OHS components as these are preventive services.

6.1.3 DESCRIPTION OF THE OUTCOME OF THE VISITS

Most referrals were made to the casualty department, which means they were curative in nature. There might be the need for a fulltime doctor at the EHW centre. It might be necessary to also look into the skills and competencies of the professional staff at the EHW centre to ensure appropriate or deserving referrals. Further studies may be necessary to determine appropriateness of referrals.

6.2 LIMITATIONS OF THE STUDY

Incomplete records and inconsistency in recording by staff at the EHW centre impact negatively on the quality of data. This was managed by using various sources to obtain correct data.

The study was a retrospective, cross-sectional record review and all limitations that are inherent to that type of study design apply hereto.

6.3 RECOMMENDATIONS

6.3.1 USE OF FINDINGS OF THE STUDY

The findings of this study can be used to plan for future services and to develop strategies to improve and strengthen current services.

It is therefore recommended that following services, plans and programmes be included or implemented in the EHW centre:

- Specific men health related programmes or the provision of a service environment that is not threatening or offensive to men in particular
- The marketing and communication of the wellness programmes available to staff should be intensified.
- The functioning of the EHW centre should be a standing item on the agenda of the management forums.
- Greater emphasis should be placed on the identification and management of chronic diseases of lifestyle, including lifestyle modification programmes focusing on diet, exercise and healthy living
- Management should investigate the high number of occupational related injuries. Perhaps work practices should be reviewed and amended.
- There is currently low numbers of HIV and AIDS counselling and testing done. In line with the new HIV and AIDS Counselling and Testing (HCT) programme, the workplace wellness programme should become proactive and opportunistic in providing HIV and AIDS counselling and testing every time an employee visits the facility.
- Focussed group discussions with various groups of employees to determine the type of services deemed necessary by employees.

6.3.2 FUTURE RESEARCH

Further research is needed to determine reasons for the following:

- The low utilisation rate of the EHW services by employees especially the component wellness.
- The increases in number of multiple visits to the EHW centre.
- Gender imbalances in utilisation of the PHC and OHS component of the services.

6.4 SUMMARY AND CONCLUSIONS

It is important to assess the impact of all health services provided and understand the relationship between utilisation and client satisfaction.

This was the first study conducted at the KHC EHW centre and therefore the results of the study will hopefully be utilised by the hospital management and the Department of Health in the province for future planning and improving current EHW services. The department may use these findings together with findings from the recommended future studies to roll out EHW services to other hospitals in the province.

REFERENCES

Aldana, S.G., Merrill, R.M., Price, K., et al. 2005. Financial impact of a comprehensive multisite workplace health promotion program. *Journal of preventive medicine,* 40: 131-137.

Bagraim, J., Cunningham, P., Potgieter, T. et al. 2007. *Organisational Behaviour: A contemporary South African perspective.* South Africa. Van Schaik Publishers.

Carter, M., Gaskins, S. & Shaw, L. 2005. *Employee Wellness Program in a Small Rural Industry: Employee Evaluation.* AAOHN Journal, 53(6): 244-248.

Deitz, D. Cook, R. & Hersch, R. 2005. Workplace Health Promotion and Utilization of Health Services*. Journal of Behavioural Health Services & Research,* 32(3): 306-319.

Eaton, D**.**K., Marx, E. & Bowie, S.E. 2007. Faculty and Staff Health Promotion: Results from the School Health Policies and Programs Study 2006*. Journal of School Health*, 77(8): 557-566.

Haynes, G. Dunnagan, T. & Smith, V. 1999. Do employees participating in voluntary health promotion programs incur lower health care costs? *Health promotion international,* 14(1): 43-51.

Healthy Workforce 2010: An essential Health Promotion Source Book for Employers, Large and Small. 2001. Fall. Washington, D.C. <http:www.health.gov/healthy people. (Accessed 08.05.2009)

Makary, M.A. Al-Attar, A., Holzmueller, C.G., et al. 2007. Needle sticks Injuries among Surgeons in Training. *The New England Journal of Medicine*, 356(26).

Musich, S., McDonald, T. & Chapman, L.S. January/February 2009. Health

Promotion Strategies for the “Boomer” Generation: Wellness for the Mature Worker. *Available from the American Journal of Health Promotion*: Cleaverland. (Accessed 11.05.2009)

Hahn, N. B., Hollingsworth, P. & McKenzie, J.F. 2007. Changing Employee Health Behaviour: Making it happen. *American Journal of Health Studies,* vol. 22(4): 248-257.

Pietras, R.J. & Ballard, D.J. 1995. Impacting the Health of a School through Staff attendance at a Summer Health Promotion: *Wellness perspectives, summer 95,* 11(6)

Powers, M.E. 1977. Top Management in Boston Area Banking Industry: Career Paths, Promotion Practices and Socialization. In Schein, E.H. 1977. Career Dynamics: *Matching individual and Organizational Needs*. USA. Addison Wesley Publishing Company).

Robroek, S.J.W. Van Lenthe, F.J., Van Empelen, P., et al. 2009. Determinants of participation in worksite health promotion programs: A systemic review. *International Journal of Behaviour, Nutrition and Physical ac*tivity, 6(26).

Schneider, H. & Barron, P. 2008. Achieving the Millennium Development Goals in South Africa through the Revitalisation of Primary Health Care and a Strengthened District Health System: policy position paper, First Draft.

South Africa (Republic). Department of Public Service Commission and Administration. 2008. *Employee Health and Wellness Strategic Framework for the Public Service.* Pretoria: Government Printer.

Stanhope, M. & Lancaster, J. 1992. Community Health Nursing. Process and Practice for Promoting Health. Mosby: Year Book

World Health Organization. 1986. *Concepts of Health Behaviour Research:* Regional health Paper No. 13, SEARO, New Delhi.

APPENDICES

APPENDIX A: ETHICS CLEARANCE CERTIFICATE AND APPROVAL OF THE KIMBERLY HOSPITAL COMPLEX

APPENDIX B: DATA COLLECTION SHEET