



Exploring the influence of COVID-19 on the utilisation of the Employee assistance programme within a private medical laboratory in South Africa

Grisselda Sithembile Mavuso

Supervisor:

Dr. Tebogo Umanah

Nominated journal: Occupational Health Southern Africa

A research proposal submitted to the University of the Witwatersrand, in partial fulfillment of the requirements for a master's in Business Administration

ABSTRACT

Employee assistance programmes (EAPs) are programmes designed to support employees to handle challenges that may affect their work performance. The programmes assist them to adopt behaviors that promote health, improve quality of life, support their personal growth and effectiveness, and ultimately contribute to the organization's bottom line. Despite the availability of EAP services, the prevalence of mental health disorders remains high both in South Africa, and the rest of the world. The COVID-19 pandemic presented a novel form of stressor in many lives globally and it negatively impacted employees worldwide. Health care workers, including medical laboratory workers, were hit the most by the effects of COVID-19 as they faced infected patients or infected patient samples on a daily basis.

The aim of the study was to assess the impact of COVID-19 on the EAP usage in one of the largest private medical laboratories in South Africa. The study assessed if there were any notable changes in the use of the programme in year 2020 compared to the pre-COVID-19 period years 2018 to 2022. The study also aimed to understand the perceptions of the employees towards the programme and to find out if there are any benefits that the EAP offers to them. Many of the study's interviewed respondents reported that COVID-19 presented immense psychological pressure in their lives. However, despite the severe negative impact of COVID-19, fewer respondents utilised the EAP in that COVID-19 period. Discrepant findings were however noted between the interviews and the secondary EAP data. Secondary data showed that there was an increase in the EAP usage rates between year 2020 - 2021, up to 20.4% from 15.37 % in year 2019. The respondents who have used the EAP reported that they derived great benefits from it.

Keywords: employee wellbeing, health care workers, burn-out, essential workers, mental health.

DEDICATION

To God be the glory. I dedicate this paper to my Lord and Saviour for I could not have done this without Him. Thank You Lord for the grace to start and finish this project. I also want to dedicate this paper to my two children, Ntandoyenkosi and Amandla-enkosi Kgabu, who inspire me to be better each day.

ACKNOWLEDGEMENTS

I would like to acknowledge the following people for their contributions to my research work:

- **My supervisor:** Dr. Tebogo Umanah for her patience, guidance and support while challenging me to do well. Your passion for research and excellence is amazing.
- **My family:** My mother (Mrs. CS Mavuso), my father (Mr. DN Mavuso), my sister (Thule Mavuso), I would not have done this without your support and prayers.
- **My household helpers:** May God bless you for your endless support and love you have shown to my children and family.
- **Wits Business School:** thank you for the once-in-a-lifetime growth opportunity. My life will never be the same again.

The following professionals also supported me through their expert advice, support and guidance: Dr. Wole Olaleye, Dr. Emmanuel, Prof Sylvester Horvey, Mr. Seepedi Kganyago, Ms. Thandeka Khumalo, My company management, Mr. Jurie Lemmer, Dr. Esther Bruinette, Dr. Jana van Nierkerk, Mr. Louis du Plessis, Ms. Cortte Swart, Ms. Annemie Traut, Ms. Remelda De Jager, Ms. Aasha Sadanan, Ms. Margien Meyer, and Dr. Michel Le Grange. I appreciate you all and I am so grateful.

To all the study participants, thank you so much for making my vision come into reality. Lastly, a massive thank you to all my work colleagues who supported and encouraged me.

To God be the ultimate glory!

DECLARATION

I, Grisselda Sithembile Mavuso, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Signature: _____ GS Mavuso _____

Signed at: Boksburg

Date: 28 February 2023

TABLE OF CONTENTS

ABSTRACT	2
DEDICATION	3
ACKNOWLEDGEMENTS	4
DECLARATION	5
TABLE OF CONTENTS	6
1. INTRODUCTION	
1.1 Background	9
1.1.1 The mental health effect of COVID-19 on health care workers.	
1.1.2 The role of Employee assistance programme (EAP)	10
1.1.3 The challenge faced by EAP subscribers	12
1.2 Research problem statement	12
1.3. Research purpose statement	13
1.4 Research questions	13
1.5 Limitations and delimitations	14
1.6 Justification of the research	14
2. LITERATURE REVIEW	14
2.1 Definitions of concepts used in the project	14
2.2 Theories linked to the concepts and definitions	16
2.3 Self-determination theory	17
2.3.1 The origin of the S.D. theory	18
2.3.2 Advantages of the theory	19
2.3.3 Evaluation of the self-determination theory	20
2.3.4 Limitation of the theory	20
2.3.5 Application of the management theories to the current research proposal.	20
2.4 Prior research on the same subject	21
2.5 The burden of mental health disorders	22
2.5.1 Globally	22
2.5.2 South Africa	23
2.5.3 COVID-19 and mental disorders	23
2.5.4 COVID-19 associated mental health problems	23
2.5.4.1 Pre-existing mental health problems	23

2.5.4.2 Fear, anxiety and stress	23
2.5.4.3 Quarantine, isolation and lockdown measures	25
2.5.4.4 Uncertainty and lack of treatment and vaccines	26
2.5.4.5 Poor mental health-seeking behaviour	26
2.5.4.6 Few mental health professionals	27
2.5.4.7 The impact of social media and fake news	27
2.5.4.8 Pre-existing economic hardships	27
2.6 The effects of COVID-19 mental health problems	27
2.7 Conclusion and summary of literature review	27
3. RESEARCH METHODOLOGY	29
3.1 Research approach and design	29
3.2 Data collection	31
3.3 Sampling	31
3.4 Data analysis	33
3.5 The strength of the methodology	35
3.6 Ethical consideration	36
4. RESULTS PRESENTATION	38
4.1 What influence did COVID-19 pandemic have on the utilisation of EAP in the private medical laboratory?	39
4.1.1 EAP utilisation during COVID-19	39
4.1.1.1 Did awareness of EAP influence utilisation of EAP during COVID-19?	39
4.1.1.2 Did the knowledge and understanding of EAP influence the use of EAP during COVID-19?	40
4.1.2 Use of the EAP COVID-19 prior and after COVID-19	44
4.1.2.1 Utilisation before COVID-19	44
4.1.2.2 Utilisation after COVID-19	44
4.1.3 Work load	47
4.1.4 The positive impact of COVID-19	49
4.1.5 Did the impact of COVID-19 lead to the use of the EAP?	49
4.1.6 Secondary data analysis and results	49
4.2 Did the respondents find benefits from the programme?	52
4.2.1 Beneficial for self	52
4.2.2 Benefits for others	54
4.2.3 Indifference about the programme	54
4.2.4 Use of mental health professionals outside of work	55
4.2.5 EAP alternatives or coping mechanisms used by the employees	55

4.3 What are the thoughts and perceptions of employees regarding the employee programme?	56
4.3.1 Employees' suggestions and recommendations on EAP	56
4.3.2 EPAs reflects that a company cares about its employees	57
4.3.3 People are in great need of EAP	58
4.3.4 Some people do not have access	58
4.3.5 There is a room for it	59
4.3.6 No direct effect	59
5. DISCUSSION	61
5.1 Discrepant findings of the utilization of EAP (Qualitative vs Quantitative data)	61
5.2 Burnout	62
5.3 Delayed effects of COVID-19	62
5.4 Adequate employee awareness and knowledge of the EAP	63
5.5 Employees derive benefits from the programme	63
5.6 Employees perception towards the programme is good	64
6. CONCLUSIONS & RECOMMENDATIONS	65
6.1 Conclusion	65
6.2 Recommendations	66
6.3 Recommendations for future studies	68
6.4 The limitations of the study	69
6. BIBLIOGRAPHY	70

1. INTRODUCTION

This section addresses the main issue that is addressed by the research study. This includes the research problem, some background information, the aim and the purpose of the study, the exact research objectives and questions, the need for the study, the limitations and delimitations of the research paper as well as some literature to support the importance of this research study.

1.1 Background

1.1.1 The mental health effect of COVID-19 on health care workers

On the 31st of December 2019 in Wuhan, China, a report was released on a cluster of acute respiratory tract infections to the World Health Organization. The conditions were tested and confirmed to be caused by a novel SARS-CoV-2 virus. The notification was only the beginning of the COVID-19 global pandemic that has affected many lives in the most devastating nature (NICD, 2022). According to the WHO's COVID-19 dashboard, as of the 11th of July 2022, COVID-19 had infected more than 552 504 629 lives globally and caused 6 347 816 deaths (WHO, 2022). South Africa reported 3 997 975 cases and cumulative deaths of 101 880 in the same period (NICD, 2022). As a novel disease, COVID-19 presented with significant psychological stressor. It challenged the psychological resilience of individuals and was likely to result in mental distress and high psychiatric morbidity (Wang et al., 2020). Health care workers were more vulnerable to both the disease and its inherent associated mental health problems. They had to face fear of contagion and the fear of spreading the disease to their loved ones (Xiang et al., 2020). Another group of healthcare workers are the laboratory workers. These are forgotten healthcare heroes that are responsible for the testing of patient's samples. They were involved in sample collection and the analysis of COVID-19-infected and potentially infected samples, providing data required for diagnosis, treatment and monitoring of patients (Gohar, 2022).

Protecting health care workers became very important as they also faced social isolation, stigma, discrimination, loneliness and loss of trust in their homes and communities as

potential carriers of the disease. To some, this resulted in low social and family support. (van den Berg, 2021). This is the group of healthcare workers that this research study aimed to focus on.

1.1.2 The role of the Employee Assistance Programme (EAP)

EAPs are mental health programmes that different organizations offer to assist their employees to deal with day-to-day psychological stressors. The International Employee Assisted Programme Association (EAPA) defines EAPs as systematically designed programmes addressing factors influencing employee productivity. They help in identifying those who have personal problems, for example, health or marital problems that can affect their performance at work. Their main purpose is to increase their productivity and improve their functioning in the workplace (Manganyi, 2021).

This help can come from external or internal providers, and in some cases, it can be a mixture of the two. EAP's origin can be traced back in North America after a world war where it was used to address the problems of alcohol abuse that became so prevalent and affected individuals' performance at work (Beulah, Walker, and Fuller-Tyszkiewicz, 2018). These programs have many advantages, both at an individual level and at the organisational level. The benefits of improving employees' well-being were shown to reduce both absenteeism and presenteeism. Presenteeism refers to a situation where one is present at work but with reduced mental and physical functioning. These may be due to an employee struggling to focus, concentrate and deal with day-to-day issues at work because of the internal battles they are facing. It has been said that presenteeism is worse than absenteeism (Beulah, Walker & Fuller-Tyszkiewicz, 2018). Contrary to what many think, reseachers have demonstrated that 80% of the organisation's economic burden is associated with presenteeism whereas absenteeism is only responsible for 20% of that burden according to Hargrave et al. (2008) and Chen et al, (2021), cited in Jacobs,; van der Westhuizen , Brooke-Sumner , and Sorsdahl (2020). The projected financial risk and potential gain have led many organisations in South Africa and the rest of the world to invest in EAP. As employees are empowered to speak up, process, and work through

their personal and work problems, they develop stronger coping skills, their energy levels start improving, and they also build resilience and the ability to handle situations better. This even reduces the need for taking a day off in order to deal or to recover from life stressors that may be affecting their well-being (Joseph et al., 2020; Chen et al., 2021).

EAP have been shown to positively affect organisational profitability. One research group demonstrated an improved return on investment which was about \$5.17 to \$ 6.47 for every 1\$ dollar spent on EAP.

The other variables that researchers have studied and found to be improved are functional levels, productivity, performance, job satisfaction, commitment, social support, distress, problem improvement, client satisfaction, personal health and depression (Chen et al., 2021).

EAPs make employees feel cared for, leading to increased job satisfaction. Chen et al. (2021) found that workers employed by companies offering EAPs reported greater job sfaction than those without EAPs. They also noted higher intention-to-stay and lower intention-to-leave where EAP services were offered. The organisational commitment was associated with high devotion to work, reduction of absenteeism and talent retention in organisations. Job satisfaction is associated with low staff turnover rate, low stress level and less work-family conflict (Lu et al., 2017).

Modern EAPs have expanded and increased their offerings, moving far beyond just employee counselling. They have become preventative instead of corrective tools. The range of offerings and delivery models have evolved and broadened. The mechanisms at which these are offered now include face-to-face, telephonic, emails, and virtual platforms. These offerings continue to be reviewed and enhanced. Modern EAPs now even offer secondary and tertiary interventions. Primary interventions being all the interventions that reduce the stressors. Secondary interventions are designed to reduce the stressors as well as change the employee's perceptions and reactions to stressor. Tertiary interventions provide rehabilitation and these are usually offered outside by higher levels of care (Chen, Chu, & Wang, 2021).

1.1.3 The challenges faced by EAP subscribers

Many studies have shown low utilisation rates of EAP across different industries. Csiernik, Chaulk and Mc Quaid (2012) reported an average 5-year utilisation rate of 3% which ranged from 2.6% to 3.5 %. Mc Manus (2015) as cited by the same group reported a range of 4-8% utilisation rates . A Canadian study that analysed 154 EAP offers reported a mean utilisation rate of 9.2% with a median of 10% and the rate was ranging from 1% to 30% with a slightly higher rates reported in private organisations, unionized organisations or in organisations that have an EAP policy in place and where it was promoted (Chaulk, 2012). In South Africa, a study conducted in Lephalale police station, showed similarly low utilisation rates. Majority of the employees in the South African study did not utilise the EAP services that were offered. Only 17% of employees reported having visited the EAP service providers while the 83% admitted that they never used it (Dipela & Sithole, 2021). Studies in the health care sector are very sparse. A South African group of researchers assessed the effectiveness of the EAP in one hospital in Limpopo South Africa. They also found gross underutilization of the programme. They alluded to a need for better management of these programmes, highlighting the importance of awareness and marketing so that employees are aware of their existence (Manganyi, 2021). Given the potential benefits of EAP and the high burden of mental health illness, this is a great concern and call for evaluation. Dipela & Sithole, 2021).

1.2 Research problem statement

Despite the availability and the positive benefits of EAP services across various sectors. The utilisation rate was generally lower than 30%, with means ranging from as low as 1% in certain cases (Csiernik, 2003; Dipela, 2021; Manganyi, 2021). Between year 2020 and 2022, South Africa, like other countries, was affected by COVID-19 pandemic. In the health sector, laboratory workers were a group of health care workers that were mostly impacted by COVID-19 pandemic. The effect of the pandemic led to mental problems such as anxiety, depression and stress (Gohar, 2022; Montgomery, 2022; Swaray, 2021). This situation was exacerbated by the fact

that the burden of mental disorders was already high in South Africa and globally. The largest study on mental disorders in South Africa known as the South African Stress and Health Survey (SASH) reported a high prevalence of mental health illnesses in South Africa (Williams, 2008).

The COVID-19 related psychological impact highlighted the importance of EAP services in the health sector so that employees are empowered to cope effectively during the difficult season. Literature on EAP utilization rates in the health care sector and in particular, among the laboratory workers in dealing with anxiety, stress and related mental health problems associated with COVID-19 is non-existent. This is the knowledge gap that this study hoped to fill.

1.3. Research purpose statement

It is known that COVID-19 caused enormous psychological stress in many lives , especially in the lives of health care workers. The study sought to ascertain the influence that COVID-19 had on the the EAP utilisation in the private medical laboratory. This was done through a mixed method study.

1.4 Research questions

The three main research questions were as follows:

1. What influence did the COVID-19 pandemic have on the utilisation of EAPs in the private medical laboratory?
2. What benefits did the employees derive from using the EAP?

1.5 Limitations and delimitations

This research study focused on the laboratory workers who were at risk of contracting the COVID-19 in the one private medical laboratory. They were either exposed to patients or to patient's samples. This study therefore did not focus on all the laboratory workers. The study further looked at the EAP utilisation between the years 2018 and 2022. This would allow the author to divide the COVID-19 data into three different periods, namely 1). Pre-COVID-19 2). COVID-19 and 3). Post-COVID-19 periods. Data before 2018 and after August 2022 were not included in the study.

1.6 Justification of the research

COVID-19 posed a great threat to the lives of many people in South Africa and the rest of the world. It negatively impacted the mental health of many employees. Health care workers are the greatest resource the country has and it was important that employers sought and found solutions that would improve the mental health of these employees. They were at the forefront of the COVID-19 pandemic and prone to many physical and psychological problems. Not many studies have evaluated the EAP utilization rates by the health care workers. This was the first study evaluating the use of EAP services during COVID-19 pandemic in a medical laboratory in South Africa. It was not clear if EAP services were utilised by the health care workers and if they were perceived to be important and beneficial by the same. This was important as it would give the management some feedback on the programme they were offering.

2. LITERATURE REVIEW

2.1 Definitions of concepts used in the project

Work stress refers to the state of tension within an individual when they perceive threats in their work environment. They may experience these threats physiologically or psychologically experienced (Caplan & Jones, 1975). When the work stress is mild or moderate, it can be an acceptable challenge to employees and may even lead to job satisfaction. If the work stress is however excessive, it can lead to psychological and physiological discomfort, which can lead to burnout and intention to leave (Compass et

al., 1993). Work stress may be a result of emotional exhaustion, ambiguous job roles and expectations, high unpredictability and a hostile work environment (Lee, 2004). In 2012, WHO declared work stress as the most rapidly emerging health issue (Martin & Hedges, 2012) as work stress affects one's well-being.

Well-being is a passive noun, and there is no international consensus on its definition. Cambridge dictionary defines it as a state of feeling healthy and happy. In the definition of well-being, there is health, and in the description of health, there is well-being. WHO defines health as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO,1948). The lack of one definition illustrates the subjectivity in well-being. WHO argues that just because someone is not healthy does not mean they are not well. It depends on how they feel about their health. Wellbeing must be differentiated from wellness.

While well-being is a passive noun, wellness is an active noun. The responsibilities associated with each differentiate them from each other. The responsibility for one's wellness is outside or external to an individual. In contrast, the responsibility for one's well-being is internal or within the individual, i.e., measured by that individual. It is the responsibility of that individual (Bart et al., 2018).

There are ten identified determinants of well-being highlighted in one study. Being the determinants of well-being means that they can either increase or decrease a sense of well-being. The ten determinants of well-being are: 1.) Natural environment, 2.) Personal well-being, 3.) Relationships, 4.) What we do, 5). Where we live, 6.) Personal finance, 7.) The economy, 8.) Education and skills and 9. The governance in place, and lastly, 10.) Well-being (The office of the National states, 2011).

Defining well-being using its determinants assists as there is a lack of consensus on its definition; however, it creates a standardisation problem. It also tends to remove the focus from an individual to their bank account, as an example. Determinants can have a positive or a negative association with well-being. They can affect the state of well-being, and the state of well-being can affect the response to the determinants. There is a top-down and a bottom-up approach to well-being. The bottom-up approach, the bottom being the

determinants, is cumulative, e.g. repeated absence of PPE during COVID-19 and the increased death rates worsened the state of clinicians' well-being. The bottom-up approach leads to interventions required for well-being. The top-down approach, the top being well-being, is used in resilience training and many other cognitive-behavioural therapies or mindfulness sessions. Against all odds, in a top-down approach, clinicians are trained on how to change their views and interpretation of problems they encounter. The health care system owns the determinants in the bottom-up approach. In contrast, the clinician or an individual holds the determinants in a top-down approach (Baldwin, 2021).

Mental wellbeing vs mental illness

Mental illness is the term that refers to the mental disorders or conditions that affect people's moods or emotions and as a results impact their ability to function effectively.

Mental well-being refers to a person's mental health in general. It encompasses their psychological functioning, life satisfaction and ability to develop healthy relationships (Galderisi & Sartorius, 2017; Stewart-Brown, 2008).

2.2 Theories linked to the concepts and definitions

- **Well-being**

The views of well-being include, amongst others, hedonism, eudemonia and self-determination theory (Keerman, 2017). People often use happiness and life satisfaction to describe well-being; however, the concepts are not interchangeable and reflect two different philosophies, hedonism and eudaimonism. Cummins (1998) states that these concepts contain 50 to 60% of common variances.

- **Hedonism**

Hedonism comes from Greek philosopher Aristippus of Cyrene, who in the third century BCE argued that the purpose of life is to pursue sensory pleasure at every opportunity

without any regard for the consequences (Tatarkiewics, a976). According to hedonism, well-being is happiness (Ryan & Deci, 2001). Dioner et al. (1998) described the three components of well-being according to hedonism as the presence of a positive mood, absence of a negative attitude and life satisfaction. Epicurus laid a foundation for the modern hedonist definition. Epicurus placed more value on spiritual pleasure than physical pleasure. Even though Epicurus recognised health as a determinant, they argued that people can still achieve health despite the absence of goods and worldly materials. However, their followers isolated themselves from society. They lived in self-sustaining communities without any cost of living to make the lack of worldly goods less of a problem (Mautner, 2000). Jeremy Bethner, later in the 18th century, described utilitarianism, suggesting that happiness for most people is more important than happiness for a few. Their critics argued that humans do not strive only for happiness.

- **Eudemonic philosophy**

The eudemonic theory describes well-being through activities that lead to personal growth, greater purpose, competence, and self-acceptance (Ryff & Keyes, 1995). It implies that individuals must experience a sense of personal growth to reach a state of well-being. Adjectives such as thriving, flourishing, and languishing describe such conditions. Plato and his pupil Aristotle argued and believed the term eudemonia to mean a state of reaching one's full potential (Kashan et al.,). John Locke reviewed the philosophy in the 17th century and wrote that exercising virtue leads to pleasure attainment (Mantner, 2000) (Dewe & Cooper, 2021). Both Aristotle and Locke agreed that reaching one's potential or exercising one's virtue feels good; however, the good feeling is a byproduct and not the main reason (Salari, 2020; Simons, 2021). Fisher (2014) proposed that the combination of both perspectives, feeling good and functioning well, gives a better description of well-being.

2.3 Self-determination theory

Being a voluntary programme, EAP utilisation may be explained by self-determination theory.

Brenda M Ross et al. define self-determination theory as the theory that seeks to understand why some people are highly motivated and engaged while others are not. The theory includes three pillars: individual autonomy, competence and relationships as predictors of healthy behaviours and outcomes.

Autonomy, competence and relationship are the three universal psychological needs that drive people to successful engagements in their life agendas. Their research study followed a group of employees who wanted to quit smoking. They found that success was higher when people had motivation, personal choice, and enough knowledge to quit smoking and form relationships or partnerships with people with similar goals. Their findings are in agreement with the self-determination theory. Like SD theory, EAP is offered voluntarily and depends on the employees' self-will to participate. They have to be motivated enough, aware of what the programme is all about and accept the offer given by the service producers and be in contact with other employees with a similar goal (Ross & Barnes, 2018).

Although employers offer EAP services and they are known to be beneficial, it is the ultimate responsibility of the employee to see their worth and engage in them.

2.3.1 The origin of the S.D. theory

Psychologists Deci and Ryan 1995 studied the behaviour of their students towards external rewards and intrinsic motivation.

Motivation may either be autonomous or controlled. The psychologists argue that the type of motivation and not the level of explanation determines the resulting change. They propose that everyone, no matter the culture or the level of development, has the exact psychological needs, which are autonomy, competence and relatedness. The social environment determines the meeting of employees' needs, and the intersection of the needs motivates people to change (Keerman, 2017).

Autonomy refers to personal freedom or independence to make one's choices, deciding who, when, why and how. It is a variable that increases job satisfaction. In autonomous environments, people are free to make their own decisions. On the contrary, controlled environments lack the freedom to decide and provide feedback. Health care providers must provide a supportive environment without being too critical or judgmental, allowing people to engage and participate. Controlled motivation does not last and does not bring the joy of autonomous motivation (Keerman, 2017).

Competency is the ability to perform something well or successfully. Competency describes the knowledge, skills, expertise and capabilities. When one feels competent to perform their duties, one is more likely to achieve their goals. It is therefore essential to empower them, e.g. people with diabetes mellitus must be taught how to test their glucose levels at home. People have an innate desire to succeed in all they do (Keerman, 2017).

Relatedness refers to relationships that are important for people to achieve specific goals or changes. Moss & Barnes (2018) describe relatedness as genuine concern and trust in others. An example is support groups. They are essential for one's psychological well-being. They recommend that people should make efforts to communicate and connect with others. Emotional intelligence is also crucial for strengthening relationships (Keerman, 2017).

They found a positive correlation between autonomous environments and autonomous motivation, competence and relatedness. Autonomous motivation, competence and relatedness were associated with a behaviour change. A behaviour change was, in turn, related to positive health outcomes. The controlled basis was negatively associated with a positive difference in behaviour and health outcomes. (Deci & Ryan, 2000, Ryan & Deci, 2000, Ryan et al., 2002, Keerman, 2017).

2.3.2 Advantages of the theory

The SD theory applies in many settings, including health, promotion and EAP. It also applies to health promotion, chronic disease management, and rehabilitating programmes. People have used it in education, sports, religion, psychology, and health.

2.3.3 Evaluation of the self-determination theory

Walker and Avants (2011) evaluated the S.D. theory. They found it to have a logical structure, with concepts explained adequately by arrows illustrating their relationships. S.D.'s realistic theory describes associations between images in a nursing environment where evaluation occurs.

It was found to help predict outcomes and was generalisable. It applies to different fields and study populations, including different cultures and groups (Walter & Avant, 2011). Clear concepts illustrated harmonicity. They also noted good testability, meaning it was able to generate a hypothesis (Ross & Barnes, 2018).

2.3.4 Limitation of the theory

There is no agreement on the importance of relatedness in motivation. Most researchers have focused on autonomy and competence. It does not address the psychological needs of adolescents. They also argue that there is no place for autonomy in health (Perera, 2020).

2.3.5 Application of the management theories to the current research proposal.

Management theories are an important part of organisations. They are needed to ensure that the organisation achieves their goals despite the challenges that it continuously faces. The challenges faced include competitors and limited resources that need to be used and achieve maximum output. Management theories include classical, behavioural and situational management theories. Classical management theories include scientific or modern theories, administrative and bureaucratic theories.

The relevant management theory for this specific research study is Behavioural Management Theory by Elton Mayo. Mayo disproved Taylor's modern theory that science leads to the highest productivity in his experiment of lighting and productivity. There was no clear correlation between the light level and productivity and Mayo looked for other factors such as rest breaks, no rest breaks, free meals and hours at work. With each

change, productivity went up. The theory proposes that work satisfaction and performance depend on the working conditions and attitudes such as communications, positive management response and encouragement (Mahmood, 2012). This is what EAP services seek to achieve. The Behavioural Management Theory is closely related to self-determination theory which ultimately leads to a behavioral change.

2.4 Prior research on the same subject

A group of researchers in China studied the effects of EAP on the mental health of a group of medical workers during the COVID-19 pandemic. It was a quantitative study using regression analysis to analyse the data. They utilised a symptom checklist questionnaire (SCL-90) to evaluate the symptoms and signs of mental distress in the health care workers before and after the EAP intervention. SCL-90 assesses nine aspects of psychological well-being: somatization, interpersonal sensitivity, obsessive-compulsive symptoms, anxiety, depression, hostility, paranoia, terror and psychosis. Exciting findings included better mental health in men than in women. Overall, mental health improved after EAP, as shown by the significant decline of individuals with an SCL-90 score of more than 160. (Xu et al., 2021)

This study did not look at the South African context. It did not capture the employees' perception using the programme, a research gap that the current proposal seeks to address (Xu & Zhang, 2021).

Another study conducted in a South African insurance company studied the impact of COVID-19 on their EAP. The paper's focus was to better understand the reasons for EAP utilisation and the utilisation of EAP and assess if COVID-19 changed the logic for utilisation. The authors used a qualitative study method to apply a thematic analysis before and after COVID-19. Their findings were that utilisation increased even though the reasons for using the programme remained consistent before and after COVID-19. The study duration was nine months (January 2020 to September 2020, divided into three timelines T1-T3) T1, January-31 March 2020, was considered a pre-COVID period, T2 was 1 April 2020-30 June, and the last period, T3, 1 July 2020, to 30 September 2020 were considered post-COVID-19. They found that throughout the three periods, the

predominant themes were family, work-related stress and psychological well-being. There was a 93% increase in cases in period T3 (Veldsman & van Aarde, 2021).

Even though the study focused on a South African company, it was not in a healthcare sector. The proposed research will focus on the health care sector, specifically the laboratory professionals. The study duration was only nine months. This is short and does not include any data after 2020 and as the country experienced many different COVID-19 waves. The study is also qualitative but it does not capture the thoughts and perceptions of the employees on the EAP services. The proposed research will look at laboratory professionals and will be looking at an extended period of 3-4 years. It will use both the secondary data and interviews (Veldsman & van Aarde, 2021).

2.5 The burden of mental health disorders

2.5.1 Globally

According to WHO, almost a billion people globally have mental disorders. WHO also claims one in every eight people has a mental illness. These mental disorders are of mild to moderate intensity; unfortunately, not all of them are aware of their problems. Even after mental health professionals have successfully identified them, not everyone seeks help. Globally, the World Health Organisation recognises the challenge of mental health illnesses as one of the barriers to achieving global development goals. Depression is one of the causes of disability. Suicide is the fourth leading cause of mortality in the age 15-29 group. People with severe mental conditions die prematurely, at least two decades earlier. Mental health experts can treat many neglected diseases at a meager cost, but there are many barriers to treatment (WHO, 2022).

2.5.2 South Africa

Even before COVID-19, there was a high prevalence of mental health problems in South Africa. Professional burnouts are common in South Africa amongst the health care workers with devastating results.

2.5.3 COVID-19 and mental disorders

COVID-19 affected the mental state of many individuals globally, South Africa included. As a newly emerged infection, COVID-19 caused massive trauma to people worldwide, especially health care workers. WHO reported that COVID-19 triggered a 25% increase in the prevalence of anxiety and depression globally, and these figures are just the tip of the iceberg. The projections are that many more cases are still to follow (WHO, 2022)

2.5.4 COVID-19 associated mental health problems

2.5.4.1 Pre-existing mental health problems

There is a high burden of mental problems at the international and national levels, and COVID-19 worsened them (WHO, 2022). Studies have shown that South Africa already had a high prevalence of mental disorders even before the COVID-19 pandemic. Stein et al. (2008) and (Jacobs, 2021) quoted and found a lifetime prevalence of 30.3%. Anxiety was the predominant mental disorder at 15.8%, alcohol abuse at 11.4%, and mood disorders (at 9.8%). However, it is a significant concern that of all the cases that met the diagnostic criteria, only 25% received treatment, as Seedat et al. (2008) reported in (Jacobs, 2021). Demyttenaere et al. (2004) echoed similar findings when looking at other low and middle-income countries (LMICs) (Demyttenaere, 2004; Jacobs, 2021).

2.5.4.2 Fear, anxiety and stress

At a physiological level, COVID-19 emerged affects the respiratory systems with a greater propensity to spread and even severe enough to cause death. The nature of the disease,

the high rate of spread and the high mortality rates in many parts of the world caused a global impact psychologically (Salari, 2020).

Psychologically, as a newly emerged virus, its onset was met with great uncertainty, leading to great fear and anxiety among the general public and health care workers. Many lives were lost, and scientists and experts have been learning more about the disease as it unfolds and enters different waves of infectious strains. There was great panic which in its places one in a vulnerable state as the immune system weakens due to overwhelming stress. Even though most people had mild infections, a subset of the population succumbed to the disease, leaving many fearing for their own lives and their loved ones. Frontline health care workers were concerned about being infected in the line of their duties and transmitting the disease to their loved ones at home, as elaborated by Xu et al. (2021) and Hughes and Fairley (2021). It has led to prolonged COVID-19 infections in a proportion of people. Long-COVID is a condition where individuals suffer from the disease for an extended period, i.e. more than 12 weeks by definition, which has affected the quality of people's lives (Di Toro, 2021; Organization, 2022).

At the individual level, fear of becoming sick or loved ones getting sick and losing their lives, hopelessness and stigma and discrimination were experienced by many. Other people experienced overt psychiatric symptoms, panic attacks and even suicidal ideations in addition to the above-mentioned problems (Hughes & Fairley, 2021). 30 to 50% of the workforce ended up working from home. This change affected many as they worked long hours without a clear boundary between work and life, causing many to feel overwhelmed. Technostress was another contribution, as they needed to revert to technology platforms to keep the work going. It was also associated with the pressure to perform or always be available online.

Inadequate supplies such as food, water, clothes, and medical care were another significant stressor. Post quarantine, stressors included finances after loss or disruption of work, and stigma from others, including family members in the same household (Ganesan, 2021).

Health care workers' concerns were not that different from the public. They included lack of control, fear for their family's health, social distancing, testing capacity, and access to personal protective equipment (Hughes & Fairley, 2021). 74% of HCWs reported that they were worried about transmitting the disease to their loved ones at home. According to WHO, health care worker exhaustion has been a significant cause of suicidal ideation (WHO, 2022).

2.5.4.3 Quarantine, isolation and lockdown measures

To prevent the spread of COVID-19 in communities, leaders introduced quarantine, isolation and strict lockdown measures. They, unfortunately, contributed to heightened psychological stress as people were now living in isolation, away from others for support—quarantine for exposed people and isolation for infected individuals. Humans are social beings depending on others for support (Ganesan, 2021).

At the onset of the pandemic, infection control measures included social distancing, restrictions on travelling, closure of schools and other activities that were considered non-essential. Businesses had to close down, affecting the working class. Loss of jobs was associated with significant distress as people felt alone and isolated (Huy et al., 2021). In addition, many lost their jobs as many companies could not keep going as a concern. Many suicides emerged as people could not cope.

Alcohol withdrawal symptoms were experienced by many as a result of restrictions that included the banning of alcohol. The impact was significant as many people sought other harmful alternatives to alleviate the painful cravings and withdrawal symptoms. There were even reports of people who committed suicide because of this problem. Physical inactivity and related health problems result from many feeling stuck at home (Ganesan, 2021). Between March and May 2020, universities, schools, nurseries, day cares, and all businesses considered non-essential were locked down. Restrictions on regular physical activities were necessary to contain the virus. During this same period, industrial and organisational psychologists observed increased work-related worries, fear of losing jobs, work-family conflicts and discrimination as the sources of stressors. In their survey, Sibley

et al. (2020) noted high levels of mental distress during the lockdown period compared with the pre-lockdown period (Evans, Alkan, Bhangoo, Tenenbaum, & Ng-Knight, 2021).

One study showed that at least 34% of individuals in quarantine or isolation suffered from at least one of the mental health problems, namely acute stress, depression, anxiety or sleep disorders. The mental health effects, including suicide, were higher in health care workers and those with underlying medical and psychological conditions. These statistics are essential in South Africa, where many people work around untreated mental disorders. One modelling study predicted suicide rates to range from 1 to 145% (Ganesan, 2021). These high suicide rates are not new. With the emergence of SARS in 2003, there were high suicide rates in Hong Kong, about 18.6 per 100 000 population and most of them were adults above the age of 37. The duration of a quarantine period was another variable noted. Longer durations were associated with higher stress levels. (Brooks, 2020; Huy et al., 2021)

2.5.4.4 Uncertainty and lack of treatment and vaccines

As a new infection, experts in the field of infectious disease did not have all the answers. The uncertainty contributed to public fear as there were too many unanswered questions. The conspiracy theories opened the door to many unfounded and false ideas that further contributed to people's fear and mistrust. Some people believed this was a manufactured disease targeted to bring harm, and they thought the government knew about these ill intentions. Fear of the unknown was enough to cause mental disorders in another cohort studied. From the onset of the pandemic until 2021, there was no specific treatment or vaccine, worsening many fears and despair. Over time, COVID-19 control has been improving, incidence rates also decreasing, and health care workers have gained experience dealing with the disease (Hughes & Fairley, 2021).

2.5.4.5 Poor mental health-seeking behaviour

During the current pandemic, many health care workers were unwilling to face their psychological illnesses; they were too embarrassed. They have alluded to many factors,

including high illiteracy towards mental health and the stigma associated with those who seek help leading to a less perceived need for therapy (WHO, 2022).

2.6 The effects of COVID-19 mental health problems

Table 1: The effects of COVID

Individual-level	Community-level	International -level
Relapses of prior mental conditions Suicide Decreased level of functioning affecting productivity Fear, stress, anxiety, loneliness, anger Physical inactivity and poor nutrition	• Stigma • Job losses • Substance/alcohol abuse • Domestic violence & crime • Poor business performance	• Global economic downfall

Reference: (Brooks, 2020; Salari, 2020; Brooks, 2020)

2.7 Conclusion and summary of literature review

The benefits of EAP have been studied and have been found to be tripartite in nature, involving work, health and life in general. These included improved level of functioning at work, reduced stress, improved job performance, satisfaction, and intention to stay, reduced absenteeism and presenteeism, productivity, problem handling improvement, improved health including both physical and mental health, reduced depression, anxiety and general life satisfaction. This theoretically seems to be a solution to manage employee's mental health issues in a workplace. However, they require a certain level of motivation, awareness, and mental health literacy from the employee side so that they

can engage in them. This is explained better by the self-determination theory and eudaimonic theory. In line with the behavioural management approach, managers and leaders in organisation need to motivate the employees to utilize the programme. They need to enhance the mental health literacy of the employees so they are competent to make good decisions regarding their mental health. This must be offered in an autonomous environment where employees can freely choose what they need. The perceptions of employees regarding the offer are very important in order for employers to know if their offer is worth a while.

The burden of mental health problems is high and COVID-19 came added fuel to the fire. Health care workers, including laboratory workers, were at the front line of the pandemic and faced significant challenges that were posing a risk to their mental health. EAP remained a solution offered by the organisations to assist their employees with these unprecedented stressors as long as the employees recognised the potential harm and the potential value of using the EAP services. However despite all the potential benefits and the need for EAP, utilisation rates remain low. The proposed study sought to evaluate the relationship between COVID-19, EAP utilisation rates and the perceptions of the laboratory workers on EAP.

3. RESEARCH METHODOLOGY

This section of the research paper focuses on the methodology that was used to resolve the research problem. The term research methodology is defined by many authors in different ways. It is referred to as the tools and techniques that are used to answer the research questions (Walliman., 2011). Some define it as the strategy used for conducting research (Bryman, 2012). Atieno (2009) calls it a paradigm and others refers to it as simply an approach to research (Atieno, 2009; Creswell, 2009). Methodology includes the study approach or strategy, research design, study population, sampling method, data collection methods, tools, and data management. These will all be explained in the next sections.

Section 3.1 highlights the overall research approach or strategy that was used. Section 3.2 contains research design, section 3.3 deals with data collection techniques that were applied to derive the data required to achieve the purpose of the research. Section 3.4 is about the sampling method that was used to select the cases or people that are relevant to the research questions. Section 3.5 describes the methods that were used to manage, analyse and interpret the data collected from the study population chosen. Section 3.6 explains the quality checks that were selected to ensure validity and reliability of the data and finally section 3.7 is about the ethical considerations applied in the study.

3.1 Research approach or strategy

Research approach can also be classified either as qualitative, quantitative or mixed methods. Qualitative methods seek to understand the deeper meaning that individuals or groups of individuals ascribe to the problem at hand. Quantitative methods seek to objectively study the relationship between two or more variables using statistical procedures. Mixed methods use a combination of these two methods to answer research questions (Creswell, 2009). This research study employed a mixed approach in order to meet the study objectives. Qualitative method was used to delve deeper into the laboratory employees' understanding and perceptions towards EAP. This would help understand their reaction towards to programme. The qualitative method was also used

to understand the impact that COVID-19 and other life stressors generally have on them and to assess how the weight of the impact affected their decisions to participate in the programme. A quantitative approach was however used to calculate the rates of EAP utilisation. Even though this information could be obtained from the interviews, it would not be sufficient to get reliable statistics because interviews were limited to a minimum of twelve participants. The formula used to calculate EAP utilisation rates is on its own quantitative in nature. The mixture of the two data sources was used to get more reliable data.

3.2 Research design

Research design is a logical sequence that connects empiric data to the proposed research questions and then ultimately leading to study conclusions (Yin, 2018). Different types of research designs exist in literature and each is appropriate for the nature of the research problems that the researcher intends to answer (Walliman, 2011). Examples of research designs from the literature include cross-sectional study, longitudinal study, case study, comparative study, and experimental studies (Bryman, 2012). Some researchers include a case study as one of the qualitative research while others see it as an independent research design. (Yin, 2018).

This research design was chosen in order to generate an in-depth understanding, multi-faceted exploration of the influence of COVID-19 on utilisation of EAP in this particular laboratory, to understand the benefits and thoughts that employees have towards the EAP and the benefits that they derive from it. (Creswell, 2009; Crowe, 2011). This research study met the three conditions that favour the case study research design. The conditions are 1. The study sought to answer the “how” and the “why” questions. For example how did COVID-19 affect the EAP utilisation? Why are some employees using the programme while others do not? Case study design research is able to work with a variety of data sources in this research study, and in this particular study, the researcher used the interviews, and secondary data from different EAP providers that serviced the company from 2018 to 2023. (Yin, 2018) Yin argues that case study research like any

other research design, may be exploratory, explanatory or descriptive. The nature of this research was both exploratory and descriptive.

3.3 Data collection

Data collection outlines the methods used to collect the necessary data from the sample for the answering of the research questions. Literature describes different types of collection techniques such as questionnaires or interviews. This research applied two data collection methods to meet the study objectives. These are key informant semi-structured interviews and the review of secondary data from the company's EAP providers. Semi structured Interviews were chosen in order to allow understanding of the employees' thoughts about the EAP programme and to keep the researcher open-minded about the information and concepts that they need to gather from the interviews (Bryman, 2012). The interview guide contained questions used to guide the discussion. Audio-recordings were generated from the interviews. Secondary data, which contained the numbers of EAP files or cases that were opened during the study period as well as other supplementary data, allowed for the calculation of the EAP utilisation rates from the year 2018 to 2022. This was used to uncover trends and to confirm if there was any increase in EAP utilisation during the horrific period of COVID-19.

Face-to-face, telephonic or virtual meetings were the acceptable meeting formats and these were audio-recorded to allow for transcription and data analysis. The duration of the meetings were thirty to forty-five (30-45) minutes, and the data collected included demographics and open-ended questions as guided by the interview guide.

3.4 Sampling

Sampling refers to the selection of study participants or the cases that will be appropriate and relevant in order to generate the required answers to the research questions. There are many different sampling methods described in literature, these including convenience, purposive, consecutive or snowballing. Purposive sampling method was chosen in this study to ensure that many of the affected group of employees were represented in the cases chosen.

The purposive sampling method targeted a minimum of at least four (4) technologists, technicians or scientists, four (4) nurses or phlebotomists, and four (4) pathologists. These are the group of employees that are directly and/or indirectly patient-facing. The first group is directly facing the patients and would have dealt directly with COVID-19 infected patients. The second group is processing potentially infected samples from the samples and the last group works both in the laboratory and in the patient's environments. These groups were invited using the company email that reached all the business units in the country. Cases were then chosen in order to meet the required group of participants. A total of seventeen (17) participants agreed to participate in the study. This group included other staff members in supportive departments who are also part of the EAP users. Every employee in the company can access the EAP programme. Twelve has been said to be an acceptable number of respondents by Creswell (Creswell, 2009).

Table 2: Proposed Categories of key informant interview

The group of respondents	Salient characteristics	Number of respondents required
Phlebotomists or nurses	Patient facing employees	4
Technologists or technicians or scientists or students/interns	COVID-19 infected sample processing and analysis.	4
Pathologists	Both patient-facing and sample processing.	4
Total		12

For the secondary data, all new EAP files that were opened by the EAP service providers were included in the study.

Table 2: Research study participant demographics

Groups	Number of participants	Gender	Age category	Race	Business Units	Management	Length of service (years)
Technologists/ Technicians/ Scientists (Sample processing and analysis)	5	Females	40-49	Black	Northern	Yes	10+
		Female	60+	White	Central	Yes	10+
		Female	20-29	White	Southern	No	4-6
		Female	30-39	Black	Northern	No	1-3
		Female	30-39	White	Southern	No	4-6
Enrolled or registered nurse Phlebotomists	5	Male	30-39	Black	Southern	No	1-3
		Female	50-59	White	Southern	No	10+
		Female	40-49	Black	Central	No	10+
		Female	30-39	Black	Central	Yes	10+
		Female	50-59	White	Southern	No	10+
Pathologists	4	Male	30-39	White	Central	No	<1
		Female	30-39	White	Southern	Yes	4-6
		Female	50-59	White	NRL	Yes	10+
		Female	30-39	White	Northern	No	4-6
Other laboratory support functions	3	Male	20-29	White	NRL	Yes	4-6
		Female	30-39	Black	NRL	No	<1
		Female	50-59	White	NRL	Yes	10+
TOTAL	17						

3.5 Data analysis

This is the stage that combines several elements in the research process. It refers to the management, analysis and interpretation of the data extracted during the study. For quantitative research, it refers to the application of statistical techniques. For qualitative research, it may refer for example to the thematic analysis of the interview transcripts

(Bryman, 2012). Analysis of a case study research can be achieved through a combination of many procedures such as examining, categorising, tabulating, testing or simply combining the narrative and numeric evidence. That makes a case research to be free from restrictive rules because its analysis is one of the least developed in the area of research. A researcher has freedom to play with the collected data searching for patterns, concepts or insights. Reliance on theoretical propositions, working with data from ground up, development of case description and examination of rival explanation are some of the strategies that were considered in order to analyse data collected in this research study. (Yin, 2018)

For this study, face-to-face, telephonic or virtual meetings were the acceptable meeting formats and audio-recorded to allow for transcription and data analysis. The duration of the meetings was thirty to forty-five (30-45) minutes, and the data collected included demographics, and answers to open-ended questions as guided by the interview guide. The interview guide was used to collect voice recordings and then those recordings were transcribed.

The first raw data generated from the transcripts was then checked for obvious flaws. Audio recordings were repeatedly listened to along with the review of written notes that were taken during the interviews in order to correct the mistakes and to generate meaningful data. The mistakes that could change the meaning of the respondents were corrected. Themes were generated using Braun and Clarke's six steps of analysis. These are: familiarization of data, generation of the codes, search for the themes, review of potential themes, definition and naming of the themes and study report (Clarke, 2014) .

Coding is a process where data is broken down into its constituent components. Those components are then given labels which are then linked by the analysts to generate themes. Data analysis is the process where the analysts make sense of the data in conjunction with the research questions, literature reviewed and related theories (Bryman, 2012). It involves data reduction, where the researcher reduces a large amount of data gathered into smaller components such as tables in quantitative research and grouping texts into themes in qualitative research (Bryman, 2012).

The secondary data from the organisation was used to calculate the utilisation rates of the EAP from 2018 to 2022. All files opened during the study period were analysed. To ensure reliability, only the new files were included in the calculation excluding all ongoing files. Utilisation rates was calculated in Excel using the formula:

"Utilisation rates = number of employees enrolled/total employees in the organisation X 100" will be used to calculate the utilisation rates (Csiernik, 2003).

3.6 The strength of the methodology

There are measures that were put in place to ensure quality of the research study. These quality assurance measures apply in both the qualitative and quantitative research methods with different connotations.

3.6.1 Validity

Validity is divided into content validity, predictive or concurrent validity and construct validity. Content validity evaluates if the measured items measured what was intended to measure. Concurrent validity checks if the scores predict the criterion measured and ensures that the results correlate with other results, Construct validity checks if the items measure hypothetical concepts or constructs. Validity in qualitative research checks for the accuracy of the findings and the researcher achieves this by using certain procedures (Creswell, 2009). . Internal validity applies mainly on explanatory or causal studies and not for descriptive or exploratory studies. External validity is there to show whether the case study results can be generalised and how they can be generalized (Yin, 2018). In qualitative research method, internal validity and external validity are commonly referred to as credibility and transferability respectively. In this research study mixed methods were used allowing more study participants with different characteristics in a quantitative research to be part of the study. Adding the quantitative arm of the study allowed for some level of generalisability which a qualitative study on itself cannot give (Creswell, 2009).

Triangulation and purposive sampling are the other validity strategies that were used in this study (Creswell, 2009). Triangulation refers to using multiple methods or data sources

to understand the subject better (Farmer, 2006). Data triangulation where secondary data and interviews were used to answer the study questions collectively. Methodological triangulation was also used in the study as it used both qualitative and quantitative methods to answer the research questions. Triangulation in a study may be used to enhance credibility, dependability, and confirmability (Creswell, 2009).

Purposive sampling in a qualitative study increases efficiency and transferability as the researcher identifies and chooses the respondents with the information needed for the study (Horwitz, 2015).

3.6.2 Reliability

Reliability of the study demonstrates repeatability of the findings in different times or by different researchers. These are all put in place to minimise the errors and bias. (Yin, 2018). It measures internal consistency. In qualitative study, reliability checks if the items responses consistent across the different constructs. It also measures test-retest correlations i.e. it checks if the scores are stable all the times when the research instrument is administered again. In qualitative research, reliability means the researcher's approach is consistent across different researchers and projects (Creswell, 2009). This is also referred to as dependability in a qualitative study method.

In this research study, reliability procedures included the use of interview guides with research questions in a consistent manner, ensuring there is no drift or shift in the meaning when codes were generated, transcripts were consistently checked against the written notes that were taken during each interview processes and one formula was used to calculate the utilisation rate from many different EAP providers with data reported in different styles.

3.7 Ethical consideration

Informed consent was obtained from all the study respondents before the interviews were conducted. Permission was requested and granted by the company. The University of Witwatersrand ethics committee granted ethics clearance before data could be collected.

The study information was sent to all participants along with informed consent forms. Confidentiality was promised to the participants. Even though anonymity could not be guaranteed due to the nature of the study (interviews), no personal identifiers were used on the study materials, such as the raw data, interview guides, transcripts and the study report. In order to protect the participants' identity, the researcher randomly allocated codes in the form of alphabets to every respondent.

4. RESULTS PRESENTATION

This section presents the results of the study. This is the accurate, comprehensive and unbiased results from the individual interviews as well as the EAP secondary data that was provided by the company from the EAP providers. All the evidence gathered was analysed in order to answer the three main research questions:

1. What influence did the COVID-19 pandemic have on the utilisation of EAPs in the private medical laboratory?
1. 2. What benefits did the employees derive from using the EAP?

The research questions were answered using an interview guide that contained secondary questions that are represented in the following subsections. The interview guide included questions such as how and when did they become aware of the EAP, what they know about it, have they used it before, when and why. The questions also included employees' thoughts about the programme as well as suggestions they may have to improve it. Thematic analysis was used to generate meaningful themes and findings that are discussed in this section.

Results were also derived from the existing secondary data from the EAP providers spanning the time periods of between 2018 and 2022. For the purpose of the study, 2018-2019 represents the pre-COVID-19 period, 2020 is the COVID-19 period, and 2021-2022 is the post COVID-19 period. The secondary data provided contained enough information to answer the study questions without compromising employees' confidentiality. The secondary data included the total number of cases, including new and existing files, services rendered monthly and annually, problems managed as well the participation of different business units as far as the EAP is concerned. This quantitative data was then used to calculate the utilisation rate using only the new cases or new files opened annually during the past five (5) years, i.e., 2018-2022.

4.1 What influence did COVID-19 pandemic have on the utilisation of EAP in the private medical laboratory?

4.1.1 EAP utilisation during COVID-19

4.1.1.1 Did awareness of EAP influence utilisation of EAP during COVID-19?

Induction or orientation period

Many reported the company's induction process as the primary tool that was used to introduce the EAP to them. Those employees who attended formal induction sessions knew about the programme earlier, immediately after starting in the company. Most of the pathologists interviewed learned about the programme either through the word of mouth or via emails sent by the human resources department. One of the pathologists specified that this EAP is important and needs to be formally introduced to all staff members. Retrospectively, she thinks she would have considered the EAP during the emergence of COVID-19 when considering the amount of stress that she had, should she have known about it.

Night duty staff lagging behind

A concern was raised by one of the respondents, respondent GL who works mainly at night. She mentioned that those who work at night tend to miss many company events or meetings that happen while they are either resting after night duty or while they are busy working at night. *"I think it's probably because I work the night shift and I'm not so in tune with everybody else. Because night staff are like creatures of their own"*. Even though she knew that the EAP exists and what it is about, she felt she did not know enough. She would like to have some 'crash course' on it so that she can be well aligned with everyone else. She is one of the respondents who never used the EAP during COVID-19.

EAP after stressful situations

Some respondents knew about the EAP when they were going through stressful periods prior to the COVID-19 pandemic. Respondent OD got to know about the programme when she was going through a family crisis and her laboratory manager referred her for the EAP. She is still singing praises of the programme and encourages others to use it as well. Respondent FMknew about the EAP after a tragic loss of a colleague in her previous job and they were all offered grief counselling because they had difficulty dealing with the death of this colleague. loss. She has since understood the benefits and she would be willing to use the EAP should she again face a difficult situation.

4.1.1.1.4 Change of service providers

One of the Respondent, respondent QBonly got to find out about the programme during the transition period where service providers were being changed. He mentioned that the email to this effect that was being sent at the time caught his attention and made him aware of the existence of the programme. He thinks he would have not been aware of the programme because it was not formally introduced to him. He however does not think that would have compelled him to use the EAP around the time of COVID-19 because he was coping very well.

4.1.1.2 Did the knowledge and understanding of EAP influence the use of EAP during COVID-19?

When asked about what they know about EAP, most of the respondents knew what the programme is mainly about. All their combined responses would give a beautiful picture of what EAP is and what it offers. `

Employee wellbeing

“Basically, it's a programme where the employer cares about the wellbeing of the employees because when they are well, they'll be able to perform their duties better.” This

was one respondent RA highlighting the main purpose of the programme, which is to assist the employees to function better at work by helping them to deal with negative issues that can potentially affect their level of function at work. *“We don’t just come to work and leave our problems at the gate...”* Another respondent DO noted, further elaborating on the value of the EAP on employees’ wellbeing.

Respondent HK ne of them mentioned that people on the ground must be taken care of and protected by the company because people on the ground are the key people who are tilling the ground and turning the wheels in the company. “The company is as good as its employees”. She further mentioned that mentioned that happy employees can take the company to the higher level while unhappy employees can actually crush it.

Counselling services

Several respondents knew that the EAP provides counselling for a wide range of issues. Respondent LG explained that *“The services they provide include financial, health and wellness and psychological counselling and support. That is what I know at this time. And then we can contact them for counselling for any of those aspects”*.

One respondent described it as a helpline where you can call and get connected to many different service providers such as medical, mental, financial, and legal experts. Others added grief counselling, family problems such as divorce, personal trauma, drafting of a will, and drug abuse to the list of services they knew were offered. .

COVID-19

This counselling became important during the COVID-19 emergence. Respondent CP was working on the COVID-19 sample collection site during the first wave and he got to learn about the EAP services during that period as he was constantly exposed to infected patients and would worry about contracting the virus. He however, never got infected but was well aware of the benefits of EAP. He further used the programme a year later after he was diagnosed with a mental health disorder.

Financial wellbeing

Most of the respondents know that one of the services included financial assistance. Respondent QP felt that EAP providers could do more in this area. She believed that the programme is not comprehensive enough. She is advocating for more in this area of financial assistance. She said there should be a way to help people who are struggling with debt or struggling to manage their finances and help for people who are dealing with gaming and gambling challenges, ensuring that the focus is not only on drugs and alcohol. RespondentDO gave a compliment to one of the service providers who assisted a group of employees in a particular year when there was a global financial crises that affected many staff members.

Family assistance

Some of the respondents are aware of the EAP benefits that are available for their immediate family members and those that are financially dependent on them. However, none of them have reported that their family members have used the programme before. Respondent RA felt her family is well equipped on how to use the EAP even though she is not sure if they have ever used the benefits. She told her family about the benefits and has the EAP provider contact information hung on their family fridge so that her family may be able to use it anytime they have a need. She said they may have used it without her knowledge because of the existing confidentiality clauses. Some respondents knew with certainty that their families have never used the programme because they have never told them about it or because they do not consider it as an option for them. For example, RespondentQB does not see her family using the EAP because they have a bad history with these kind of programmes. They would rather opt for alternatives, specifically they, preferred a life coach. Respondent HK and few respondents, however, appreciated that people under her roof including her domestic worker could access the programme anytime.

Some respondents did not have dependents anymore as their children were now older. Some have members of family who have access to similar programme at their own workplaces.

Helping the disadvantaged

Respondent HK mentioned that one of the great benefits that she appreciated about EAP is their availability to assist those who are disadvantaged in the company for example those who do not have access to computers or internet at home can be assisted whenever they had a need to assist their children with school projects or anything requiring a computer or an internet service. Many respondents thought that the programme was more important for those who have no financial access, e.g., those who have no medical aid or adequate finances to approach the EAP service providers at their own costs, those who are vulnerable such as in abusive relationships and/or those without any family support. This was a sentiment shared by many respondents including those who have never used the programme themselves and those who are not even intending to use it in the future.

Legal advice

Many respondents knew about the legal benefits of the EAP. Respondent KH for example, had always been aware that she could draft a will with them however she says she was however discouraged by realizing that she had not accumulated enough assets to justify her interest in drafting a will. She, like some respondents, had never had a situation compelling her to use it, including the stress of the emergence of COVID-19. She was well aware of the EAP and would be willing to use it should there be a need.

The limitations of the programme

Few respondents highlighted the fact that EAP may not be as comprehensive as there are services that it does not offer and that there is a limited number of sessions that one employee can have in a certain period of time. *“I know very little and as far as I know, it is primarily for psychological support. And it is for a limited period. It is, I think, the counsellors, social workers and psychologists who see them but not a psychiatrist, not a medical professional. That is, as far as I know, it extends. I don't know whether it's more comprehensive than that”*, said Respondent QB. She mentioned that it is one of the reasons why she has not used the programme herself. Respondent PC who is in the same professional field as Respondent QB, thought that pathologists should have a different access to the EAP so that everyone can benefit from it. As it is currently, some pathologists may feel that it would not be able to assist them.

In summary, despite the awareness and the knowledge of the EAP services, many of the respondents did not use EAP during the COVID-19 period.

4.1.2 Use of the EAP prior to and after COVID-19

4.1.2.1 Utilisation before COVID-19

Very few respondents utilised the EAP before the COVID-19 period. Respondent OD consulted because of a stressful family crisis. Respondent MF used it for a mental health problem prior to COVID-19. Others like Respondents QB, JI, HK QNE DO, did not use the EAP themselves but they referred many struggling employees to the programme to receive the assistance that their circumstances required.

Respondents NE, LG, and FM have used the EAP once in their previous workplaces. It was for work-life imbalance, needle stick injury, and grief counselling respectively.

4.1.2.2 Utilisation during the COVID-19 period.

What was the impact of COVID-19 on the employees?

The negative impact of COVID-19

- **The economic impact:** *"It was tough, we were in the red."* This was Respondent RA highlighting the economic impact of COVID-19 in her family. Respondent KH mentioned that the effects of brief salary cuts were buffered by the fact that she was still staying at home with her parents.
- **The daunting experience:** *"It was just horrible, horrible, horrible, horrible!"* Respondent QB was reliving the horrific experience of COVID-19. Even though COVID-19 was not a direct cause of the traumatic experience she faced, it significantly contributed to them. She had to be admitted for a major surgical

operation. Even though she had no COVID-19, she experienced the social isolation that COVID-19 infected people experienced. Having to be dropped off at the hospital foyer, no visitation and family support she had always known. A few days after her hospital discharge, she lost a parent. He passed away in her hands, trying to resuscitate him in her condition. This was a horrific time that left her children shaken and depressed.

- **Fear:** Fear of being infected was reported by many respondents. They feared for their own lives as well as their loved ones. This was reported by many patient-facing employees and contributed to fear, anxiety, social isolation and feelings of guilt associated with COVID-19. Respondents LG and JI mentioned that they were scared because their parents had comorbidities that placed them at high risk of contracting severe disease and that made them avoid them
- **Mental health disorders**

Respondent CP was working on a COVID-19 testing site and had an underlying chronic and undiagnosed anxiety and depression, which was further exacerbated by the thoughts of COVID-19. In addition to that, they were working very hard, the shifts were strenuous with no time to rest. He however needed a job; they had just been retrenched from another company. He had to work. He considered quitting but decided to soldier on, and this was causing so much distress and after a year he was formally diagnosed with depression by his doctor.

Respondent MF consulted because she needed help dealing with the second diagnosis of the COVID-19 infection. She was concerned for her health because she had underlying medical and/or mental health conditions and she felt that the second bout of COVID-19 infection was worse than the first infection. Respondent IJ consulted because of the delayed effects of COVID-19 on her mental health. She had worked very hard and had reached her breaking point. She fortunately had enough self-awareness to recognise that she needed help.

Severe infection

Another front-line worker, respondent IJ used to be in charge of one of the laboratories and she had it very bad. She was among the first nurses to be severely infected by COVID-19 during the first wave. She survived the infection but some symptoms persisted and lasted more than a year. At some point she felt guilty of being away from work and decided to go back however she collapsed at the laboratory where she was working.

The breaking point: long term effects of COVID-19 related stress

Respondent IJ She struggled a lot but kept going. It was not just the first wave that affected her but the subsequent waves made her realise that COVID-19 was not coming to an end. She had endured so much and had stretched herself very thin, sacrificing so much for the wellbeing of her subordinates to her detriment. *“The captain of the ship is the last to leave the ship”,* she said. She always put her staff first, trying so hard to mend them while she herself was falling apart. It was the gloomy environment that they were suddenly working under. It was the constant bad news about people passing away that patients and their families would share with her. It was the treating doctors she would hear willing to accept patients and help out but with no resources like ventilators which were not always adequate. She was tired of seeing dead bodies being carried away from the hospital wards. It was not easy to perform her duties as well. The personal protective equipment they needed to wear was very uncomfortable and limiting to them. *“The fact that you are on PPE all day, you are cooking hot. You are covered, you are exhausted, and your hands are double-gloved. I’m wearing glasses. You’ve got a mask on. You’re wearing a shield of your eyes. Your eyesight is now compromised. Your finger touch is compromised. And drawing blood in that situation is quite difficult.”* The workload had significantly increased. Some days she would start her duties at 3 am and finish at 7-8 pm. There were no breaks, no time to rest and no time to eat. They were operating on half the number of staff according to her and they were servicing five to six times more

patients than they had before. She also lost a parent she had not seen in a long time because of COVID-19. She was initially consoled by the fact that one day it would be over. When the third wave started, she lost it. She started, becoming angry and before she knew it, she was having suicidal thoughts. That is when she realised she needed help. She had reached her breaking point.

Increased workload

Frontline workers were overwhelmed and helpless. It was the most difficult time of their lives. Just like Respondents IJ and OD alluded to having seen more than hundred patients in a day alone. This was too excessive. After a long day at work, at home she would feel guilty and scared of infecting her loved ones. They were scared to infect them and it did not matter if they had COVID-19 symptoms or not.

Other respondents who were not on the front lines also reported an increased workload where they were working. This was however dependent on the department and the place of work, it seems. Respondent EN for example was overwhelmed with work as she was part of the staff who were reviewing COVID-19 results amongst other things. She said it was really difficult and they were already short-staffed before COVID-19. They would work every day until around 2 am at times. It was quite intense.

Reduced workload

Lockdown reduced a demand for some of the laboratory departments because they were not considered an area of priority at that time. This was a situation that affected Respondent LG. Her workload was significantly reduced and that threatened her job security. This was all however temporary.

Loss of lives

Many respondents lost their loved ones. Some like respondent IJ were just tired of seeing and hearing of many people die in the workplace and outside their workplace. *"I think all*

of us were in between terrible experiences. I mean, you see colleagues die, you see hospital staff die. I mean patients just come into the trauma unit, you hardly swab them and they pass away. Oh, no. I think all of us, me specifically. I just couldn't handle it at one point. I just wanted to quit 24/7. “That was Respondent 12 GL reliving the experience.

Respondent DO lost her mother and her granddaughter even though she says the cause of death was not COVID-19, it did contribute the negative experiences that she was going through. Respondent QB also lost a father.

No time to consider EAP

This is one of the reasons cited by many respondents when asked about why they did not utilise EAP. Many of them said there was no time. They were too busy and did not have time to think about other things other than working and going through each day. Respondent IJ explained the experience so well. The little free time she got was for the use of a bathroom. There was no time to rest, let alone to think about how they were feeling and about the EAP.

Negative impact on work performance

Many employees were sick and had to take leave, leaving their colleagues with an overwhelming amount of work. The day to day processes were disturbed during COVID-19 because of the increased workload they experienced. Respondent JI mentioned that they are still in the process of going back to the pre-COVID-19 routines. During the COVID-19 time, they were prioritising patients' interactions and quality and rapid results that some of the important bureaucratic processes were intentionally skipped because there were fewer staff.

“It was affected, not the physical work where there is physical interaction with a patient-that was all fine. The only problem was, doing your checks, your error logs, and all the administrative work that they will do as extras apart from interacting with patients that

were affected because that needs more manpower". Respondent reported that her work performance was negatively affected because they were already operating on skeleton staff when COVID-19 hit them. She was concerned that the number of days taken may affect her future prospects in the company e.g. when she applies for salary increase or an opportunity for promotion arises.

Respondent KH was still doing her internship when COVID-19 and her training was suddenly changed to online type of training. *"I think also we could have had much more exposure to the work because now for the intern students. We were sent home and we had to study on our own by watching videos. There wasn't that interaction of asking questions and, you know, learning from the instrument as much as it should have been and I think that would have been beneficial. And then I think it was level four or level three when we actually came back and it was difficult, keeping or maintaining that social distance and then feeling safe, obviously because we are in a place where we are working with people's blood and there's COVID everywhere."*

Working with underlying medical or mental problems posed a challenge for employees such as respondent CP. *"Yes, it does get affected. Because on other days I'm not fine and I don't feel like going to work especially when we get scared like now because of like right now a variant in Stellenbosch and it's like okay, but this is close to where I work..."*

Despite the severe negative impact that COVID-19 had on the respondents, many of them did not consider using EAP as a tool to deal with the stress.

4.1.6 Secondary data analysis and results

The secondary company data was obtained from three EAP-providing companies that served the company from 2018 to September 2022. This was meant to cover the pre-COVID-19, COVID-19 and post-COVID-19 periods. For the purposes of the study, the period between 2018 and 2019 represented the pre-COVID-19 time, and 2020 was the COVID-19 period because it represents the period when the stress levels were still at the

peak with the advent of a novel disease and high level of uncertainty. Year 2021-2022 were post COVID-19 periods.

Table 3: EAP Providers over the years

Year	EAP Providers	Notes
2018	Company 1	
2019	Company 1	
2020 (January to March)	Company 1	
2020 (April to October)	Company 2	Between April 2020 and June 2020, Company 1 continued offering service crises on a crises-only contract.
2020 (November to December)	Company 3	
2021	Company 3	
2022	Company 3	

The following were the new cases that were opened by employees during the period of 2018 and 2022.

Table 4: New cases opened by employees during 2018-2022

Year	Number of new EAP cases registered	% of utilisation rate of EAP for new cases	Overall number of case inclusive of follow ups	% of utilisation rate of EAP for overall cases
2018	815	14.95	1253	22.99
2019	853	15.38	1366	24.63
2020	1130	20.44	2285	41.34
2021	1143	20.39	5889	105.05
2022	529	9.45	2877	51.40
Total	4470		13670	
Mean	894	16.12	2734	49.08

The table shows that the number of new cases did increase in 2020 and in 2021, from 853 to 1130 in 2020 and from 1130 to 1143 in 2021. Using the average number of employees provided by the company's human resources department, this translates to an increase from utilisation rate of 15.4% to 20.4% from 2019 to 2020. The same utilisation rate was observed in year 2021. In the year 2022, the new cases started decreasing even to below the pre-COVID-19 levels. The total number of cases were highest in 2021 and these are reflecting the high number of follow up cases that EAP needed to deal with after COVID-19 in addition to the new cases in the same year. On average, the utilization rate of EAP in the study period was 16.12%.

4.2 Did the respondents find benefits from the programme?

4.2.1 Beneficial for self

The few respondents who utilised the programme found great benefit from it. One of the respondents who utilised it reported that it was not the sole source of help but she used it in addition to other coping mechanisms such as family support and medical professionals. The other respondent who used it reported that there is nothing new that the EAP providers told her. She knew what needed to happen however she needed that other person to talk to, share her concerns and help her do what she already knew was the right thing for her to do. For that she thinks highly of the EAP and encourages people to use it.

Others realised the benefit of the programme retrospectively during the interview and wished that they had known about it or reminded or offered the programme while they were going through the hardship of Covid19. They thought that even just a debriefing at that point would have been of benefit so they can deal with the stress of working in a high-risk environment. For the few employees that have consulted via EAP or who referred other employees, the outcome was variable. Some were happy that their cases were solved and their expectations met. There is an employee who referred many staff members for EAP, she reported that the programme may not be comprehensive enough, may not change the outcome and may need to be escalated further. This is because some who were stressed by impending divorce eventually divorced, those who were considering leaving the company eventually left, there is an employee who ended up being full blown psychotic and needed to be referred to a higher level of care.

One employee reported that even though the divorce was finalized and the process very painful, the EAP assisted her to handle the situation better and was empowered to raise her children the way she wanted to. She had a couple of telephonic sessions with the EAP providers that left her in a very good space and did not need to be referred further. Another employee reported that even though she eventually left the company whose environment was stressful for her, she mentioned that EAP taught her how to communicate better with her boss and to raise her concerns in a better way, avoiding being perceived as complaining. One participant had many follow ups and ended up with regular psychologists or psychiatrists' visits. She is however stable and her recent session

ended in a resolved case after just one session. One employee had an EAP consultation in her previous job which started well but ended up disappointed because she was left with the bills to pay. The same employee has never used the programme in her recent job. One of the employees, with a management role, has never received feedback about the staff she referred for EAP.

One of the managers mentioned that overall, the outcome was good for all the cases that she referred for EAP. Only a few employees needed to be referred further. This was based on the feedback that she received from her staff and the EAP providers. Another employee who suffered from COVID-19 and its indirect work-related effects appreciated the EAP session. She mentioned that she was empowered to take a decision she knew she needed to take. She stepped down from the management position to allow herself to heal and function better without an added stressor at work. Another employee who was referred for EAP's grief counselling in another company appreciated the programme and was encouraged to use it in the future.

4.2.2 Benefits for others

Others did not require it at all with no compelling reason to consult. However, they all saw the importance of the programme for other people, such as those who are vulnerable, those without any financial access to the services provided, those who are in abusive relationships, those who have no support, those who are going through difficulty. Many respondents said they would consider the programme if the need arises except for the few respondents who do not see themselves using it even in the future.

4.2.3 Indifference about the programme

One of the respondents however does not consider EAP as an option for her. She is just not used to it. It is a foreign concept to her. Some never felt they needed it, they were doing well using other alternative coping mechanisms. Few would still like to know more about the programme.

4.2.4 Use of mental health professionals outside of work

Majority of the respondents have consulted mental health professionals outside of work. This includes those respondents who have never utilised EAP at work, those in management and some of the pathologists. The reasons for consultation included stress of exams, anxiety disorder, depression, personal trauma, divorce, regular checkups, some are on chronic medications and therapy. This speaks to a good mental health seeking behavior in these respondents. Majority of those who have never consulted cited lack of compelling reasons to consult even though there are those who don't consider EAP as a solution at all.

4.2.5 EAP alternatives or coping mechanisms used by the employees

Many respondents relied on family and loved ones for support, others found distraction in reading, and some rely on their faith which includes prayer. One of the employees expressed the importance of being practical in the management of one's life in order to find the sweet spot of work-life balance and to create boundaries that are important to deal with painful issues of life. Relaxation and resting were mentioned by some respondents. Taking time off work is an important method used by Respondent GL. Others just keep going. Some have their own private psychologists and psychiatrists who help them to deal with life challenges regularly by different coping mechanisms including medication. One respondent exercises with her partner and she found that very helpful and seemed to place her at a better position to effectively deal with stress. Another respondent reported finding relief from gardening and cleaning her house.

On the other hand, some employees have mentors who help them deal with life stressors and help them to create healthy or beneficial solutions for their lives. Life coaches are preferred by one of the respondents and their family. They find them less intrusive and more practical than psychologists and they also never leave them with labels.

4.3 What are the thoughts and perceptions of employees regarding the employee programme?

4.3.1 Employees' suggestions and recommendations on EAP

Many employees recommended better communication and more awareness strategies for the EAP. Once-off communication during the orientation period or induction programme is not enough but communication and reminders must be continuous. One of the respondents noted, *“Every now and then, staff needs to be reminded about the programme. It is important not to lose that personal touch”*. Another said, *“I think it’s a programme that they tell you about when you start working. But after that it sort of fades into the background.”*

More awareness workshops were also suggested where EAP providers come in person to address the employees about the services they offer. When asked about their preferred meeting format almost all employees preferred face to face meeting even though they think telephonic or virtual meetings have a place especially in cases that do not need intense counselling. They prefer actual face to face visits to workplaces instead of emails which can easily be missed or ignored when too busy. Other employees do not even have access to computers and emails and may benefit from other forms of awareness initiatives. Another employee thinks that mandatory meetings should be considered. One of the night duty employees suggested that a special attention be given to them as they tend to miss out a lot. She suggested a crash course be offered to them.

Another employee suggested that pathologists could be handled differently so that all staff benefit from the programme. There is a concern that they are unlikely to consult as the programme is and may need to have different kinds of programs that will be appealing to them and encourage them to use the programme. One of the pathologists who participated in the study also mentioned that one of the reasons she did not consult is because she is a doctor herself. Pathologists may be viewing and understanding the EAP offering from a completely different perspective.

Another employer suggested that the EAP could be more comprehensive than it is right now and she gave examples of helping people with debt and financial struggles and other forms of addictions such as gaming and gambling. Another employee suggested they do family counselling so that the family do not get behind in the healing process and again family may be the ones causing or precipitating the stressors. The respondent noted, *“The programme is fine but it must be coupled with mental health education. People must be empowered to know when they need the programme”*. This was a view of another employee who raised the importance of breaking the stigma associated with mental health issues. One employee suggested that staff who have used the programme before should come out and share their experiences with other employees in order to encourage them and to break the stigma.

More continuous visibility was stressed by many employees. Instead of distributing branded items, EAP providers or company management could spend five minutes speaking through the same items. They mention that sometimes they receive these items and put them away without even looking at them because they are busy but more dedicated time could be of great benefit. Refresher sessions could be of great benefit. Additionally, if there is any way to increase a sense of security and privacy to the staff, they should add it. This was a suggestion from one of the employees who noticed that there is hesitancy amongst people to use these kinds of resources but adding a layer of security may encourage them to use them and increase engagement rates.

Another employee who is also a manager suggested that feedback is important. It is not enough to refer an employee but the manager themselves should request feedback and monitor the employee’s progress after the sessions.

4.3.2 EPAs reflects that a company cares about its employees

Many respondents appreciate that the company offers EAP. Respondent RA for example is happy to know that she works in the company that cares about their employees. She said she would not work in the company that does not provide it. She

said, *“I would think that the company does not care about the employees. The company is as good as the employees. The happy employee and the wellbeing of an employee can take the company to the next level. Unhappy employee can actually crash it”*. She continued, *“It would be so sad. Not everyone has access to these services e.g. medical, health, legal, financial and mental health services. Even if you have them they are accessible for free, free phone calls and available 24/7 “*.

4.3.3 People are in great need of EAP

Almost all respondents think that the programme is really important. People are struggling with different issues such as a buse, divorce, financial struggles and the most vulnerable people do not have access to help. These programmes are very expensive. One respondent suggested that if the company does not offer it, the organisation would have to offer some guarantee that should one needs something similar, they would be able to have funds available to assist the employees at that time of need. The respondent noted, *“I think it is critically important for the company to supply, there are a lot of people that are really with mental health problems and they are struggling. Life is so tough and it's got an impact on everybody. You don't come to work and leave all your problems at the gate as people sometimes request you to do. It is not possible and work performance and employee wellness go hand to hand. And so, I've always been a big supporter of the programme. And if I was asked, I would say yes, we need to continue with the programme.”*

4.3.4 Some people do not have access

Some people do not have access to the services that the EAP provides because of financial constraints. One respondent noted, *“It is of good benefit, people don't need to do much to partake on the programme. Obviously, the company would not offer it if it was not of benefit to them.”* Another said, *“I think there's a lot of our staff members who can't afford or, you know, maybe don't want the stigma of seeing a psychologist or because it's mental health, as we know, is still much stigmatized. So I think people like to have an anonymous type of platform that people can use should they need it? So I think it would be bad if it would be bad for our employers if they didn't offer it”*

4.3.5 There is a room for it

A common consensus amongst the respondents was that the EPA is a good programme. One noted, *“People heal differently, some prefer to talk, and some prefer to distract themselves with stuff like exercises. It is great to talk to strangers. They don’t know you, who cares what they get to hear about you”*. He continued to say, *“I would be disappointed especially for the front-line workers like nursing and those receiving COVID-19 patients. There are many other people without good support systems.”*

Another employee who experienced grief counselling after a colleague passed away thinks it is really important especially for negative occurrences that affect many staff members at once, changing the working environment in a negative way especially because not everyone can afford the services that are offered. Another said, *“Admittedly, if this was before I had become aware of these services it would not have affected me because I didn’t know that big companies internally would provide something like this offer. I became aware of it and I can definitely see the use of this. I can definitely see the benefit that it would have for people especially for something like a pandemic because a lot more is happening...”* He continued, *“I definitely think it’s beneficial. Yes, definitely. Absolutely. But like I said, I’m one of those abnormal people that are very private and I’m struggling to trust that that’s my own issue but yes. I’ve heard a lot of colleagues that made use of it”*

4.3.6 No direct effect

One of the respondents noted, *“I would not be affected much by it but it is an add on that is important and reassuring to employees to know that their employer has invested in their wellbeing.”* Another said, *“It is an absolutely important programme. Even if you don’t use it, it is important to know that it is available should you ever need it.”* They continued, *“I would not have been impacted personally because I never used the programme so I would not have realised the missed opportunity. However, I think it’s of great benefit as many people struggle with mental health”*.

One employee who is also in the management did not think the absence of EAP would affect her. She has only referred three cases on to the programme and she has never heard anyone talking about the use of the programme where she is based.

Respondent BQ said, *“Well the thing is it changed the work performance which in itself is an impact on us to argue it like that. It changed because the emphasis in the way we dealt with business changed. I think it also forced people to actually approach the situations in which we work in an entirely different manner. Like I said, the biggest thing is that entire idea of digital, and then conferences we went to, those also changed to a more digital format. So, the idea of going in person to meet other people was much lessened, but I'd say the contact between people. We did it via teams. whatever it became virtual and because of that the impact if you realize I'd say your interactions with people changed as a result.”*

5. DISCUSSION

The results showed that COVID-19 had a negative impact on the employees in the private laboratory during the period of review. The front-line workers were affected the most as they had to face sick patients and distressed loved ones and helpless healthcare providers directly on a daily basis. Their workload increased as many of the colleagues were getting sick because of the COVID-19 pandemic. The working conditions were hard as they had to work with PPE which was on itself uncomfortable but mandatory. Those who were not sick were faced with the constant fear of contracting the disease and transmitting it on to their loved ones. This further perpetuated the social isolation they were subjected to. The increase in the workload was also dependent on the type of employment and the place of work they were in. Some employees experienced a reduction in the workload as a result of lockdown and the closure of some of the hospital procedures. This led to a fear of job loss for some during the early phases of the pandemic.

5.1 Discrepant findings of the utilization of EAP (Qualitative vs Quantitative data)

Despite the high stress levels that were reported by most respondents, very few reported to have utilised the EAP during the pandemic when interviewed. Many were too focused on their work that they did not consider the EAP as a necessary tool to assist them during that difficult time. Their goals were to make ends meet regardless of the circumstances. The other respondents who were negatively impacted in an overwhelming manner did not consult EAP because it is generally not their preferred method of dealing with stress.

Contrary to the interview findings, secondary data showed there was an increase in EAP utilisation in 2020, which is the year that represented COVID-19 period in the study. The utilisation rates increased from 15.4% in 2019 to 20.4% in 2020. The increase was persistent in 2021, at a similar rate of 20.4%. In 2022, there was a reduction in the utilisation rates from 20.4% in 2021 to 9.5% in 2022, which will be continuously monitored.

Based on the interview results, the utilisation rates are probably just a tip of the iceberg and they are most likely not the true representation of the COVID-19 stress burden experienced by the staff in the laboratory. This is because as much as they reported that

they were going through a real difficult time with immense psychological pressure, many of them did not consult the EAP. The few front line workers who consulted the EAP did so later when they became aware of the imminent mental health problems related to the pandemic. In a company that was reported by the human resource department to have approximately 23% of the total staff being in the front line, that means a substantial number of workers were under severe psychological pressure and yet a few of them consulted.

The cause of the discrepancy is not clear from the study. It may be due to sampling. The interviews focused on high employees while secondary data was from all employees in the company. Maybe the categories of staff selected for interviews are not the main users of the EAP. It may be due to the number of staff interviewed. A future study with many respondents such as a survey may be needed to understand this discrepancy. Many of the respondents are in managerial positions and there were pathologists as well who may not be considering EAP as a primary tool offered to them as well. It is also an inherent limitation of qualitative studies that generalisations cannot really be made from them.

5.2 Burnout

Professional burnout is not a new concept in South African health care workers. However, the COVID-19 pandemic hit the health care sector the hardest. They were stretched to beyond their breaking point. They worked long hours under challenging conditions, and they were constantly vulnerable to the disease. The level of stress, anxiety and fatigue impacts the mental health of many, which may have compromised performance and increased errors, burn out and make them prone to more burnout out and serious mental disorders (van den Berg, 2021).

5.3 Delayed effects of COVID-19

Delayed onset of COVID-19 related mental stress was reported by one respondent who was initially coping fairly well during the initial phases of the pandemic. She had endured severe COVID-19 related illnesses as well as the heavy workload in a stressful

environment created by the pandemic. She lost her loved ones. After the second wave, she reached a breaking point. According to her, she realised that COVID-19 was not going anywhere and it was continuously affecting her life. She started becoming angry and then started having suicidal ideation.

The other respondent was also coping very well during the peak of the pandemic, constantly focusing on the positive side of things. She however started suffering from severe exhaustion after several months and she realized that the stress she had endured was starting to catch up with her.

5.4 Adequate employee awareness and knowledge of the EAP

Almost all the employees are aware of the EAP in the company. The induction program was mentioned as the effective tool that is used by the company to introduce the programme to them. Few respondents only got to know about the programme later through the emails sent by the human resource department. One of the respondents who works at night, however, raised a concern that the staff at night may be missing some of the knowledge of the programme and she suggested that the staff at night should be given special attention as far as the EAP is concerned.

Many respondents know the services offered by the EAP. This included ensuring employee wellbeing by various counselling services including mental, financial, legal advice, financial, trauma, grief, supporting the disadvantaged and vulnerable employees and some knew the limitations of the services offered. Even though many respondents know about the programme, many of them recommended that more is done to increase their awareness of the programme and its benefits. They suggested that company and/or EAP providers send them more reminders of the programme. They suggested more face-to-face awareness strategies because emails may be missed or dismissed when it is busy. However dedicated face to face workshops may be of assistance.

5.5 Employees derive benefits from the programme

Many who have used the programme reported positive benefits from using it either before COVID-19 or during COVID-19. The benefits included assistance as they dealt with

difficult circumstances such as dealing with a mental health disorder, divorce, needle stick injury, COVID-19 diagnosis, loss of loved ones and work-related stress. One respondent mentioned that people don't leave their problems at the company gates but they take them in with them. Therefore, EAP assisted them to handle these problems better. One respondent who has used the EAP mentioned that even though the negative situations may not change, employees have been shown to be empowered to communicate, process and deal with the difficult situations better.

Some employees have never used the programme themselves but they are aware of the benefits and they have previously and continue to refer or encourage the EAP even though they themselves have never used the programme.

5.6 Employees perception towards the programme is good

Most of the respondents have positive thoughts about the programme. Even though some may not be using it themselves, they still see the benefits and the room for the programme in the workplace and society at large. This was demonstrated by many respondents who have referred many employees for EAP when they themselves have never used it.

Few are still skeptical about it, questioning the true motives of the employer regarding the programme. There is uncertainty about the confidentiality that is claimed by the employer. Many are happy to work in the company that offers the programme and that translates to working for the company that cares. Even though they don't use it, they would like to have the programme. Some are willing to use it in the future if and when there is a compelling reason. Few respondents simply do not see this as an option for them. They do not see themselves utilising the programme in the future.

6. CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusion

The aim of the study was to assess the impact of COVID-19 on the EAP usage in one of the largest private medical laboratories in South Africa. Being a medical laboratory, these were employees who directly and indirectly faced suspected, probable and proven COVID-19 patients on a daily basis. The study assessed if there were any notable changes in the use of the programme in 2020, being compared to the pre-COVID-19 period 2018 to 2022. The study also aimed to understand the perceptions of the employees towards the programme and to find out if there are any benefits that the EAP offers to them.

A case study design was chosen to answer the research questions. This consisted mainly of qualitative data collection in the form of individual interviews of seventeen (17) employees from different work categories. The case study design also analysed secondary data on new EAP cases or files opened between the year 2018 and 2022. Secondary data was used to calculate the utilisation rates in the same study period to allow monitoring of trends. Thematic analysis and utilization rates were calculated using the formula: $\text{New EAP cases (excluding follow up cases)} / \text{Average number of employees in the study during that study period} \times 100$ from the qualitative data and quantitative data respectively.

Many of the study's respondents reported that COVID-19 presented immense psychological pressure in their lives. However, despite the severe negative impact of COVID-19, fewer respondents utilised the EAP in that period. Discrepant findings were however noted from the secondary EAP data. Secondary data showed that there was an increase in the usage rates between 2020 - 2021, up to 20.4% from 15.37 % in 2019. The respondents who have used the EAP reported that they derived great benefits from it. Many respondents, including those who have never used it on a personal basis, think that the EAP is a good programme and has a great role to play in the organisation.

6.2 Recommendations

- Self-awareness is important. The respondent who started becoming angry and suicidal had high self-awareness and was able to reach out for help earlier. Employees must invest in their mental health by learning more about it.
- There is always more room for the employers to assist their employees by offering them more opportunities to learn about the mental health problems and to create an environment that creates a safe and healthy workplace.
- The self-determination theory explains why some people are highly motivated and more engaging than others. It explains that there are three important components in motivated behavior and these are autonomy, competence_and relationships (World, 2022). In the case of EAP, self-awareness and company initiated mental health awareness programs may help increase staff competence so they know how to identify problems earlier and deal with them in a correct manner because some of them may be subtle, leading to delay in treatment or other adverse effects (Fung, 2021).
- Companies can also provide a platform or an environment that can enhance work relationships that support people to deal with mental health issues better. This can help break the stigmas that are associated with mental health problems. These platforms may be in the form of support groups, regular meetings, debriefing sessions and workshops with EAP providers. This goes beyond offering EAP services but it speaks to a culture that embraces employee wellbeing. Often the focus is on an individual level but the limitation may be that the presenting mental issue has its basis in work and therefore that renders the individual approach of limited value. Psychological corporate climate is important for the employees' psychological health and it is known to moderate the efficacy of EAPs (Bouzikos, 2022).
- The employer must, however, find a good balance between promoting EAP services and maintaining employees' autonomy. These remain voluntary services. Studies have shown employees in companies with EAP feel cared for and that increases job satisfaction (Chen, 2021).

- The employer should consider offering EAP services to all staff or the vulnerable employees during the states of disaster such as the COVID-19 pandemic. This is some form of psychological first aid. They should not wait for the employees to initiate the consultation because they may be prioritising their work during those times while their mental wellbeing is compromised which may ultimately lead to detrimental effects at both the individual and company level.
- In a country like South Africa with a high prevalence of mental health disorders (Williams, 2008), employees should discuss the benefits of EAP with their immediate family and financial dependents. Few respondents in the study discussed the EAP benefits with their family members. This may assist their family members in difficult times when they may be finding it hard to discuss with them. This way, many problems may be dealt with earlier and prevent more harm.
- Few other forms of EAP offers should be considered by the employer to assist employee groups such as pathologists and those in management who may not be viewing EAP as the tool appropriate for them as well. Few of those in management and pathologists have used the programme despite the psychological stressors they face. Many are even referring employees for EAP but they are not using it themselves. One of the pathologists mentioned that they have never used it because they are doctors themselves. Another pathologist mentioned that pathologists may need different access to the programme. This is where the concept of needs assessment becomes important. These groups of employees may benefit from a different type of EAP, where they are allowed to consult the mental health provider of their choice and the employer subsidises the consultation. It is important that all employees benefit from the EAP irrespective of who they are.
- Special attention must also be given to the employees working at night who may be in need of more information about the programme. Night staff and night supervisors may benefit from training. Supervisory training has been shown to play a role in increasing the rates of utilization of the programme as they are a conduit to employee assistance. It will also help them to identify troubled employees at work. The good thing is that the services are available all day long and every single day of the week.

- More transparency and reassurance are needed from the employer to the employees regarding the EAP confidentiality because few of the employees are still skeptical about using the programme as they fear that their privacy and confidentiality may be compromised. Some of the respondents thought that as long as the employer is the main client of the EAP providers, there is no guarantee that their issues will be handled in a confidential manner. Another respondent mentioned that if this EAP would not be offered for free, it was of no benefit for the employee and this statement was uttered in a suspicious manner. Therefore, employers need to convince the employees that confidentiality is never compromised. That uncertainty is a threat to the utilization of the programme. Written policy including a statement of confidentiality, professional standards as well the ethics and legal requirements which regulate the management of employee information should be shared with employees.

6.3 Recommendations for future studies

- More groups of employees may need to be studied further in order to understand the cause of discrepancy between the interview results and the secondary data. This may also include other sampling methods in order to target a greater number of employees.
- Future studies may also focus on absenteeism from COVID-19 and assess this in line with the company's bottom line within the same period.
- Future studies may also assess if the increase in the number of EAP cases on secondary data was due to the direct or indirect effects of COVID-19. It was noted from the interviews that sometimes COVID-19 was not the main cause of stressors but its presence contributed to the problem.
- Other studies may look into the relationship between the business unit's EAP rates, monthly utilisation rates and the COVID-19 waves in order to assess if there was a relationship between COVID-19 waves and EAP usage. It is already known that the COVID-19 wave hit between week 24 and week 34 of 2020, corresponding to dates 7 June and 22 August (76 days). The second wave lasted between week 47 of 2020 and week 5 of 2021 (83 days), which corresponds to 15 November 2020

and 06 February 2021. The third wave lasted for 132 days, between week 19 and week 37 of 2021, corresponding to dates 9 May and 18 September of 2021, and the fourth wave lasted for 62 days between week 47 of 2021 and week 3 of 2022 (corresponding to November 2021 and January 2022). The fifth wave lasted between 15 April and 24 June 2022. It is also known that COVID-19 waves hit different provinces in waves, e.g. the first case of COVID-19 in South Africa was detected on the 5th of March 2020 and the first province to enter the first wave was the Western Cape (in week 19 of 2020. The last province to enter the first wave was Limpopo (Communiqué, 2021). It would be great to assess if there was a relationship between the increases in EAP around those COVID-19 waves in different business units which are scattered all over the country.

6.4 The limitations of the study

Seventeen (17) respondents may not be enough to gather the thoughts and perspectives of all employees in a big laboratory with many employees in different work categories. Few of the respondents were new employees and were not present during the emergence of COVID-19. The study was limited by the change of EAP programmes during the study period. There is no standardization in their reporting styles. The changeover also affected access to data, for example, the monthly utilisation rates could not be assessed in line with the COVID-19 waves. The EAP rates in different business units in different waves and timelines could not be presented because of the inconsistency of data provided.

6. BIBLIOGRAPHY

- Agyapong, V.I., Osei A., Mcloughlin, D. M. , & McAuliffe, E. (2016). Task shifting-perception of stake holders about adequacy of training and supervision for community mental health workers in Ghana. *Health Policy Plan*, 31(5), 645-55.
- Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13, 13-18.
- Balasankar Ganesan, A. A.-J., Kenneth N.K. Fong, Palak Prasad, Surendra Kumar Meena & Raymond Kai-Yu Tong. (2021). Impact of Coronavirus Disease 2019 (COVID-19) Outbreak Quarantine, Isolation, and Lockdown Policies on Mental Health and Suicide. *Frontiers in Psychiatry*, 12.
- Bhui, K. D., S; Galant-Miecznikowska, M, de Jongh, B and Stansfeld S,S. (2016). Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study. *BJPsych Bulletin*, 40, 318-325. doi:doi: 10.1192/pb.bp.115.050823
- Bouzikos, S., Ali Afsharian, A., Dollard, M, and Brecht, O. (2022). Contextualising the Effectiveness of an Employee Assistance Program Intervention on Psychological Health: The Role of Corporate Climate. *International Journal of Environmental Research and Public Health* 19(5067). Retrieved from <https://doi.org/10.3390/ijerph19095067>
- Brooks, S. K., , Webster, R.K., Smith, L.E., Woodland,L., Wessely,S., Greenberg, N., and Gideon James, G.R. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, 395, 912-920.
- Bryman, A. (2012). *Social research methods* Oxford.
- Burvill, P. W. (1992) Looking beyond the 1-10,000 ratio of psychiatrists to population. *Australian and New Zealand Journal of Psychiatry*, 26(2), 265-269 doi:10.3109/00048679209072037
- Chaulk, P., and McQuaid, S,. (2012). A Process Evaluation of a Canadian Public Sector Employee Assistance Programme. *Journal of Workplace Behavioral Health*, 27, 160-180. Retrieved from <https://www.researchgate.net/publication/254372138>

Chen, Y. C., Chu, H. C., & Wang, P. T. (2021). Employee Assistance Programmes: A Meta-Analysis. *Journal of Employment Counseling*, 58(4), 144-166. doi:10.1002/joec.12170

Clarke, V., and Braun, V. . (2014). *Thematic analysis* Cook, L. J. H., T; Laher, S; Variava, T; and Schutte, E. (2021). Mental health experiences of healthcare professionals during COVID-19. *South African Journal of Industrial Psychology*, 47. doi:<https://doi.org/10.4102/sajip.v47i0.1865>

Commission, N. P. (2012) National Development Plan 2030, Our Future make it work- Executive summary.

Communiqué, C. D. (2021). Proposed definition of COVID-19 wave in South Africa. *Community Mental Health Journal*, 57, 1082–1093. doi:<https://doi.org/10.1007/s10597020-00734-0>

Creswell, J. W. (2009). Research design: Qualitative, Quantitative and Mixed Methods Approaches: SAGE Publications India Pvt. Ltd.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Anthony Avery, A., and Sheikh, A (2011). The case study approach. *BMC Medical Research Methodology*, 11(100).

Csiernik, R. (2003). Employee Assistance Programme Utilization: Developing a Comprehensive Scorecard. *Employee Assistance Quarterly*, 18(3), 45- 60. Retrieved from <https://www.researchgate.net/publication/256082524>

Csiernik, R. (2011). The Glass is filling: an examination of employee assistance program evaluations in the first decade of the new millennium. *Journal of Workplace Behavioral Health*, 26(4), 334-355.

Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., Lepine, J. P., & Chatterji, S. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA*, 291, 2581–2590. doi:<https://doi.org/10.1001/jama.291.21.2581>

Di Toro A, B. A., Tavazzi G, Urtis M, Giuliani L, Pizzoccheri R, Aliberti F, Fergani V, Arbustini E, et al. (2021). Long COVID-19: Long term effects? *European heart Journal Supplements*, 23.

Dipela, M. P. a., & Sithole, S. (2021). Underutilisation of internal employee assistance programmeme (EAP) services by the South African Police Service in Lephalale, Limpopo Province. *Social work-maatskaplike werk*, 57(4), 484-497. doi:10.15270/52-2-972

Evans, S., Alkan, E., Bhangoo, J. K., Tenenbaum, H., & Ng-Knight, T. (2021). Effects of the COVID-19 lockdown on mental health, wellbeing, sleep, and alcohol use in a UK student sample. *Psychiatry Research*, 298. doi:10.1016/j.psychres.2021.113819

Farmer, T., Robinson, K., Elliott, S.J., and Eyles, J. (2006). Developing and implementing a triangulation protocol for qualitative health research. *Qualitative Health Research*, 16(3), 377-394.

Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2017). A proposed new definition of mental health. *Psychiatria Polska*, 51(3), 407-411. doi:10.12740/PP/74145

Ganesan, B., Al-Jumaily, A., Kenneth N.K. Fong, K.N.K., Prasad, P., Meena, S.K., and Tong, R.K. (2021). Impact of Coronavirus Disease 2019 (COVID-19) Outbreak Quarantine, Isolation, and Lockdown Policies on Mental Health and Suicide. *Frontiers in Psychiatry*, 12.

Gohar, B., and Nowrouzi-Kia, B. (2022). The Forgotten (Invisible) Healthcare Heroes: Experiences of Canadian Medical Laboratory Employees Working During the Pandemic. *Frontiers in Psychiatry*, 13. doi:10.3389/fpsyt.2022.85450

Horwitz, S. M., Carla A., Green, C.A., Wisdom, J.P., Duan, P.N., and Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Ment Health*, 42(5).

Hughes, D., & Fairley, A. (2021). The COVID chronicles an employee assistance programme's observations and responses to the pandemic. *Journal of Workplace Behavioral Health*, 36(3), 177-196. doi:10.1080/15555240.2020.1844569

Huy, N. T., Duc, N. T. M., Alhady, S. T. M., Mai, L. N., Hassan, A. K., Giang, T. V., . . . Collaborative, T. M.-G. C.. (2021). Perceived Stress of Quarantine and Isolation During COVID-19 Pandemic: A Global Survey. *Frontiers in Psychiatry*, 12. doi:10.3389/fpsyt.2021.656664

Jacobs Y, M. B., van der Westhuizen C, Brooke-Sumner C, Sorsdahl K. (2021). Task Sharing or Task Dumping: Counsellors Experiences of Delivering a Psychosocial Intervention for Mental Health Problems in South Africa. *Community Mental Health Journal*, 57, 1082–1093. doi:<https://doi.org/10.1007/s10597-020-00734-0>

Jafri, L., Ahmed, S., and Siddiqui, I. (2020). Impact of COVID-19 on laboratory professionals-A descriptive cross sectional survey at a clinical chemistry laboratory in a

developing country. *Ann Med Surg (Lond)*, 57, 70-75. doi:DOI: 10.1016/j.amsu.2020.07.022

Joseph, B. W., Arlene; Fuller-Tyszkiewicz, Matthew. (2018) Evaluating the effectiveness of employee assistance programmes: a systematic review. *European Journal of work and Organisational Psychology*, 27, 1-15 doi:10.1080/1359432X.2017.1374245

Keerman, A., Naswall, K., Malinen, S. and Kuntz, J. (2017). Employee well-being: Evaluating a Wellbeing Intervention in Two Settings. *Frontiers in Psychology*, 8, 505

Kruger, E. C., Banderker, R., Erasmus, R.T., and Zemlin, A.E. (2020). The impact of COVID-19 on routine patient care from a laboratory perspective
South African Medical Journal 110(12), 1201-1205.

Lu, Y. H., X; Huang, X; Zhuang, X; Guo, P; Feng, L; Hu, W; Chen, L; Zou, H and Hao, Y. (2017). The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a cross-sectional study.

Mahmood, Z. a. B., M. (2012). Review of Classical Management Theories *International Journal of Social Sciences and Education*, 2(1).

Manganyi, P. S. (2021). The utilisation of employee assistance programme: the case of a tertiary hospital in Limpopo province, South Africa
Gender & Behaviour, 19(1).

MCQUAID, P. C. (2012). A Process Evaluation of a Canadian Public Sector Employee Assistance Programme. *Journal of Workplace Behavioral Health*, 27, 160-180. Retrieved from <https://www.researchgate.net/publication/254372138>

Montgomery, S. (2022). The Impact of Coronavirus Pandemic on Laboratory Workforce: What's Next?

Nader Salari, A. H.-F., Rostam Jalali, Aliakbar Vaisi-Raygani, Shima Rasoulpoor, Masoud Mohammadi, Shabnam Rasoulpoor & Behnam Khaledi-Paveh. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and Health*, 16. Retrieved from <https://doi.org/10.1186/s12992-020-00589-w>

NICD (2022). *Latest confirmed cases of Covid-19 in South Africa*. Retrieved from <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/national-covid-19-daily-report/>

Oades, L. G., Jarden, A., Hou, H. C., Ozturk, C., Williams, P., Slemp, G. R., & Huang, L. X. (2021) Well-being Literacy: A Capability Model for Wellbeing Science and Practice. *International Journal of Environmental Research and Public Health*, 18(2) doi:10.3390/ijerph18020719 Perera, K. D. R. L. J. (2020). Alternatives and Limitations of Self-Determination Theory: Perspectives of Different Literature. *Proceeding of the Open University Research Sessions*, 1.

Ross, B. M., & Barnes, D. M. (2018). Self-Determination Theory With Application to Employee Health Settings. *Workplace Health & Safety*, 66(8), 367-372. doi:10.1177/2165079917749863

Salari, N., Hosseini-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S. and Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the Covid-19 pandemic: a systematic review and meta-analysis. *Globalization and Health*, 16. Retrieved from <https://doi.org/10.1186/s12992-020-00589-w>

Samantha K Brooks, R. K. W., Louise E Smith, Lisa Woodland, Simon Wessely, Neil Greenberg, Gideon James Rubin. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, 395, 912-920. doi:<https://doi.org/10.1016/>

Seedat S, S. D. J., Herman A., Kessler R, Sonnega J, Heeringa S & Williams D. (2008). Twelve-month treatment of psychiatric disorders in the South African Stress and Health Study (World Mental Health Survey Initiative). *Social Psychiatry and Psychiatric Epidemiology*. S *Social Psychiatry and Psychiatric Epidemiology*., 43, 889-897. doi: <https://doi.org/10.1007/s00127-008-0399-9>

Simons, G. a. B., S. (2021). A critical review of the definition of 'wellbeing' for doctors and their patients in a post Covid-19 era. *International Journal of Social Psychiatry*, 67 (8),

984-991 Simons, S. and Baldwin, S. (2021), Vol. 67(8) 984–991, A critical review of the definition of 'well-being' for doctors and their patients in a post-COVID-19 era, *International Sociological Journal of Social Psychiatry*, 67 (8), 984-991.

van den Berg, A. (2021). The prevalence of burnout among the South African medical professionals. Retrieved from <https://gildes.solidariteit.co.za/en/the-prevalence-of-burnout-among-south-african-medical-professionals/>

Veldsman, D. a., & van Aarde, N. (2021). The impact of Covid-19 on an employee assistance programme in a multinational insurance organisation: Considerations for the future. *South African Journal of Industrial Psychology*, 47. doi:10.4102/sajip.v47i0.1863

Walliman, N. (2011). *Research Methods the basics*. Taylor & Francis e-Library: Routledge.

Wang, C. P., R Wan, X; Tan,Y; Xu,L; Ho, C.S; and Ho,R.C. (2020). Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China

Wassenaar, S. N. a. D. (2021). Mental health and COVID-19 in South Africa. *South African Journal of Psychology* 51, 304–313. doi:DOI: 10.1177/00812463211001543

WHO. (2022). *World mental health report: Transforming mental health for all*. WHO Retrieved from <https://www.who.int/publications/i/item/9789240049338>

Williams, D., Herman, A., Stein, D., Heeringa, S., Jackson, P., Moomal, H., and Kessler, R. (2008). Twelve-month mental disorders in South Africa: prevalence, service use and demographic correlates in the population-based South African Stress and Health Study. *Psychological Medicine*, 38, 211-220.

world, B. (2022). Entrepreneurship Is A Way Of Thinking. Retrieved from <https://www.businessworld.in/article/Entrepreneurship-Is-A-Way-Of-Thinking-/30-04-2018-147771/>

Swaray, S. M., Tetteh, J., Ekem-Ferguson, G., Awinibuno, I.A.N., Adu-Gyasi, D., Acheampong, F. and Yawson, A.E. (2021). Psychological Distress Amongst Medical Laboratory Professionals Involved in COVID-19-Related Duties. *Inquiry: The Journal of Health Care Organization, Provision, and Financing*, 58, 1-12. doi:DOI: 10.1177/00469580211067479 Xu, J., Liu, X., Xiao, Y. D., Fang, X. H., Cheng, Y. S., &

Zhang, J. P. (2021) Effect of EAP Psychological Intervention on Improving the Mental Health of Medical Workers Under the Novel Coronavirus Epidemic in China. *Frontiers in Public Health*, nine doi:10.3389/fpubh.2021.649157

Yin, R. K. (2018). *Case Study Research and Applications* (6th ed.): SAGE

Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13, 13-18.

Bryman, A. (2012). *Social research methods* Oxford.

Clarke, V., and Braun, V. . (2014). *Thematic analysis*

Creswell, J. W. (2009). *Research design: Qualitative, Quantitative and Mixed Methods Approaches*: SAGE Publications India Pvt. Ltd.

Csiernik, R. (2003). Employee Assistance Program Utilization: Developing a Comprehensive Scorecard. *Employee Assistance Quarterly*, 18(3), 45-60. Retrieved from http://dx.doi.org/10.1300/J022v18n03_04

Dipela, M. P. a. S., S. (2021). Under-utilisation of internal employee assistance programme (EAP) services by the south african police service in lephalale, limpopo province *Social Work/Maatskaplike Werk* 57(7). doi:doi:<http://dx.doi.org/10.15270/52-2-972931>

- Gohar, B., and Nowrouzi-Kia, B. (2022). The Forgotten (Invisible) Healthcare Heroes: Experiences of Canadian Medical Laboratory Employees Working During the Pandemic. *FRONTIERS IN PSYCHIATRY*, 13. doi:10.3389/fpsyt.2022.85450
- Manganyi, P. S. (2021). THE UTILISATION OF EMPLOYEE ASSISTANCE PROGRAMME: THE CASE OF A TERTIARY HOSPITAL IN LIMPOPO PROVINCE, SOUTH AFRICA
Gender & Behaviour, 19(1).
- Montgomery, S. (2022). The Impact of Coronavirus Pandemic on Laboratory Workforce: What's Next?
- Swaray, S. M., Tetteh, J., Ekem-Ferguson, G., Awonibuno, I.A.N., Adu-Gyasi, D., Acheampong, F. and Yawson, A.E. (2021). Psychological Distress Amongst Medical Laboratory Professionals Involved in COVID-19-Related Duties. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 58, 1-12. doi:DOI: 10.1177/00469580211067479
- Veldsman, D. a., & van Aarde, N. (2021). The impact of Covid-19 on an employee assistance programme in a multinational insurance organisation: Considerations for the future. *South African Journal of Industrial Psychology*, 47. doi:10.4102/sajip.v47i0.1863
- Walliman., N. (2011). *Research Methods the basics*. Taylor & Francis e-Library: Routledge.
- Williams, D., Herman, A., Stein, D., Heeringa, S., Jackson, P., Moomal, H., and Kessler, R. (2008). Twelve-month mental disorders in South Africa: prevalence, service use and demographic correlates in the population-based South African Stress and Health Study. *Psychological Medicine*, 38, 211-220.
- Yin, R. K. (2018). *Case Study Research and Applications* (6th ed.): SAGE