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## **Even machines need servicing: Strained and silenced voices in institutional structures and nurses agency in Kenya**

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**Even machines need servicing:**  
**Strained and silenced voices in institutional**  
**structures and nurses agency in Kenya**



Kendra Valeria Parry  
Master's Thesis in African Studies  
Supervisor: Prof. Dr. M.E. de Bruijn

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# **Even machines need servicing: Strained and silenced voices in institutional structures and nurses agency in Kenya**

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Cover photo: A nurse is shown with the illustration of a hospital environment. The image is used as a symbol of agency, that is the nurse in interaction with the structure of her workplace (Taylor, 2022).

“No one knows whether at the global level a framework of democratic institutions will develop, or whether alternatively world politics will slide into a destructiveness that might threaten the entire planet. [...] There are good grounds for optimism [...] but in a culture that has given up providentialism futures have to be worked for against a background of acknowledged risk.” — **Anthony Giddens (1992)**

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# Abstract

In this study, nurses' well-being is explored in the context of the local efforts working towards nurses' wellness. The often silenced voices of Kenyan nurses are transformed into a theatre script to portray the findings. An ethnographic research gap on the topic focuses on the qualitative study of well-being through psychological, socio-economic, and political lenses. The research is grounded in theory from Anthony Giddens (1984, pp. 1-40), Amartya Sen (1993, pp. 30-53), and Mirjam de Bruijn and Jonna Both (2018, pp. 186-198), and navigates the agency-structure debate along with the model of duress to reflect on and understand the nurses' position in a constraining environment.

The research focused on two level 5 facilities, which are county referral hospitals, in two different counties of Kenya. The following research methods are conducted: a survey on socio-economic well-being with 65 respondents; interviews focusing on factors affecting nurses' well-being conducted through 4 focus group discussions with 39 nurses of different seniority levels and facilities, and informal interviews with approximately 25 nurses; and lastly, participant observation focusing on nurses agency and structures in places of gathering.

Altogether, the results conclude that the healthcare structures pertain as constraints on the nurses' agency and well-being despite the local efforts against this that may seem to have a positive impact. This is not to say that such local efforts should not continue, but rather to add a widespread focus on changing the outdated health structures that are limiting the majority of Kenya's health workforce.

**Keywords:** Well-being; Kenya; health workforce; agency; structure; duress; constraint

# Abbreviations

In order of appearance:

|          |   |
|----------|---|
| N4N      | Nurse4Nurses                              |
| FGD      | Focus group discussion                    |
| COVID-19 | Coronavirus Disease 2019                  |
| PM+      | Problem Management Plus                   |
| GBV      | Gender-based violence                     |
| GHQ-12   | General Health Questionnaire              |
| UK       | United Kingdom                            |
| NHS      | National Health Service                   |
| PST      | Problem-solving therapy                   |
| CHV      | Community health volunteers               |
| SRQ      | Self-Reporting Questionnaire              |
| WHO      | World Health Organisation                 |
| CMD      | Common mental disorders                   |
| SSA      | Sub-Saharan Africa                        |
| TINC     | Theory of Integrated Nurse Coaching       |
| ICT      | Information and communications technology |
| NNAK     | National Nurses Association of Kenya      |



# Acknowledgements

To all the nurses who talked to me and entrusted me with their stories. I hope you find that your voices have been heard in this piece.

To Mirjam, for helping me find my voice as a researcher; for pushing me to keep pursuing my interests; for checking in on me; for all the guidance; and for letting me in on her knowledge.

To all my professors for being so supportive during my studies.

To André for connecting me with Inuka.

To the team of Inuka (Africa), for everything.

# Chapter 1

## Introduction

*“Even if you are a machine you need to be serviced”, said Ian, the president emeritus of a Kenyan nurse association, while we were at Inuka’s offices. Together at Inuka, we were working on a project of peer-to-peer mental health coaching for nurses in Kenya. As our conversation followed, the need for support right away was felt immediately. His worry for the nurses showed, he was let down by the system, but he was determined and hopeful that things could change. He reminded us at Inuka that the coaching programme of Nurse4Nurses (N4N) we were setting in motion had a real chance of ultimately changing the lives of many nurses. His protégé, Omar, a registered nurse and project coordinator at Inuka Africa joined us. He was someone with whom I would be working closely during my research. During our conversations, it was mesmerising to hear about his positive outlook and the will to be better to deliver the best for the nurses. I wanted to support their mission however possible, to hear their stories, and to understand the situation better to support moulding the coaching programme to fit the nurses’ needs. But what was heard, was far beyond what could have been imagined.*

The topic of well-being has been at the forefront of my work, personal life, and now my research. Well-being is a term that covers a branch of social work, an academic discipline that focuses on the needs of individuals. The thesis employs the definition of well-being as a person having the capabilities to achieve relevant tasks or attain a wellness state of being (Sen, 1993, pp. 30, 36). Its relevance has grown for the wider population during the peak of the COVID-19 pandemic and the subsequent attention to social isolation. Likewise, the attention to research on the topic has grown since not long after the outbreak (Rosa et al., 2021, p. 194). Concurrently, so did my interest. With this, I was presented with an opportunity to focus on well-being support for those who were at the front line of the outbreak.

To elaborate on this topic, this chapter presents an overview of the thesis and introduces the concepts used to lead the research and successive analysis. “The Capability Approach” by Amartya Sen (1993, pp. 30-53) is considered a framework of analysis for understanding

well-being and agency throughout the research. This approach evaluates a person's ability to accomplish a variety of useful functionings or tasks to achieve wellness (Sen, 1993, p. 30). However, this may vary according to an individual's environment and basic needs (Sen, 1993, p. 31). The paper relates this theory to Anthony Giddens's (1984, pp. 25-27) reflections on the structure-agency debate. This situates the realities of the nurses' well-being in further context and illustrates the local efforts that are ongoing in Kenya to encourage nurses' well-being. This includes efforts organized by the government of Kenya or projects developed by companies and organisations in the country (see chapter 7). However, the thesis details how nurses' well-being is still at a low. Hereby, having their well-being at a low refers to the strain that nurses face and the negative coping mechanisms, such as alcoholism or violence, that nurses turn to. This is further illustrated through the use of a theatre script that details the nurses' day-to-day situation (see chapter 4). To answer why this is the case, I argue that theories developed by Sen (1993, pp. 30-53) and Giddens (1984, pp. 25-27) on the structure-agency debate can be used to fill in the gaps. Altogether, the theory and analysis answer the research question: *Why is nurses' well-being at a low despite local efforts against this?*

To answer the question, qualitative and quantitative research was conducted during an internship with 'Inuka Coaching' in Kenya, a problem-solving therapy initiative working on an 'N4N Well-being Support Pilot Study'. The thesis contextualises the research in a larger pool of research on nurses' well-being in Sub-Saharan Africa (SSA) as described in chapter 2 and utilises this to narrate the findings through the use of a theatre script in chapter 4. Next, the results expand on the script using theoretical knowledge in chapters 5 and 6. Ultimately, tying it back to well-being efforts for nurses in Kenya in chapter 7. Lastly, the discussion and conclusion in chapter 8 convey my overall argument that local well-being efforts must be supported by structural changes in the bureaucratic bodies that allow for nurses' agency to break through and bring about positive changes such as pay and staffing levels. In turn, I argue this would further allow nurses freedom and capabilities to focus on their well-being.

## The well-being crisis among nurses

*“We are ready to get help... Nurses need to know it is not normal to work a certain way that makes you feel the way you do.” proclaimed John during our first Focus Group Discussion (FGD). He worked as a nurse in a public facility. He described the scene of what it is like for him as a nurse: “You want to give your patients quality care. You have the will, but the exhaustion is pulling you down.” Hadiya, another nurse, nodded in approval. John continued “Patients walk in and there is no one [else] who can step in for you. You just have to do this. You are not even sure where to help. There is just chaos. You are overwhelmed. People [waiting] in line, mothers delivering. But you have to step up and use that extra energy. At the end of your shift, you are almost confused.” During the FGD we prompted for the options of support that are available to the nurses. John proclaimed “We are so much into mental health, for the patients or the public. But for the healthcare providers, we expect them to put up that brave face... The stigma is there. You just do your case... They say “you are a man”, judging you. They will judge you by saying he has just got a drinking habit, but they don’t want to know why you started that drinking habit. So on my part, I think there is almost nothing being done about mental health in the case of professional healthcare providers.”*

This excerpt introduces many themes relating to well-being, ranging from feelings of overwhelmedness and confusion; to dealing with stigmatisation, a lack of support, and unhealthy coping mechanisms. It shows the various well-being consequences that many nurses are experiencing in Kenya. This is no surprise as nurses are often at the frontline of crisis events, resulting in high work pressures. In particular with the events of COVID-19, nurses have faced high-stress situations (Rosa et al., 2021, p. 194). On a global scale, nurses were affected, with impacts revealing well-being disturbances at newly documented rates (Rosa et al., 2021, p. 194). In light of the pandemic, nurses are confronting a lack of resources, with their responsibilities soaring, and having to make strenuous decisions, all motivating factors for the risk of turnover intentions (Rosa et al., 2021, p. 194; Cole et al., 2021). Such a crisis reminds us why it is necessary to equip nurses with self-help tools to ensure their well-being and that of their clients. More so now, the necessity of the improvement of well-being support is at a peak (Rosa et al., 2021, p. 194).

Having identified the issue, this brings me to my problem statement. Especially in light of the pandemic, assisting nurses in meeting their well-being needs is of crucial importance. Studies show that nurses' are facing an increasingly greater impact on their well-being (Rosa et al., 2021, p. 194). The importance of this is further emphasised as their well-being not only affects themselves but can also affect their clients (Melnyk et al. 2020, p. 930; Moore, Avino, & McElligott, 2021). With this growing consequence, further studies must be conducted on the identification of the nurses' well-being journeys and their paths to receiving support (Ali, Shah, & Talib, 2021, p. 1). Therefore, the purpose of my research is to shed light on the realities of the nurses' well-being and how it fits in a larger picture of structure and agency. On a practical level, the research is set to support the development of a peer-to-peer programme to be tailored to fit nurses' needs, as developed by Inuka Africa. However, this thesis goes beyond this practice and analyses the social dynamics encountered during the research as well as the complexities of the social well-being question itself through theoretical reflections on authors such as Sen (1993), Giddens (1984), and Mirjam de Bruijn and Jonna Both (2018). Through such, the chapters analyse the impacts of agency, structure, and duress, whereby their interaction serves as a possible explanation for why nurses' well-being is at a low despite local efforts against this.

With this in mind, the research is set to mitigate the knowledge gaps in the field. Not only is there an African literature gap, but the published research on Kenya is predominantly focused on the quantitative aspects of the topic. For example, focuses are on the percentage of nurses' suffering from a mental illness or being found to be at risk, as well as the hospital ratings. Thus, this research addresses the gap by focusing on the qualitative aspects and researches the topic of well-being from a different perspective by focusing also on the influence of psychological, socio-economic, and political themes. The thesis goes beyond the previously sought-out practical needs but also embodies theoretical layers by answering follow-up questions. Firstly, 'What is the condition of the nurses and why are they in this condition?' is answered through an illustration based on a theatre script that the analysis unpacks further. This question is analysed in a theoretical chapter describing the structural constraints of nurses as posed by Giddens (1984). Furthermore, the theory section navigating Sen (1993) on well-being as well as the consequences of duress as described by Bruijn and Both (2018) answers the question: 'What does well-being mean and why it is necessary for nurses?'. Lastly, the discussion describes 'How are these arguments contextualised in the thesis?',

emphasising the advantages of support on the individual level, but also the burden that can arise without having a structural change in the system, and thus the importance of working on these two factors of support together.

From this chapter, having situated the relevance of the well-being of nurses, and understanding the influences of this as well as having introduced the main question and follow-up questions that will be answered throughout the research, the following chapter elaborates on the further context of the situation of nurses in Kenya and SSA.

# Beyond technical efficiency: The labour conditions of nurses in Sub-Saharan Africa

This chapter situates the context of nurses working in Kenya and SSA to understand ‘what is the reality of the nurses’ well-being?’. With the thesis focusing on Kenya, the chapter first delves into statistics and other figures representative of the country. A cross-sectional study conducted in Kenya with 255 nurses, of which more than sixty per cent participated in COVID-19 care shared its results on well-being (Ali, Shah, & Talib, 2021, p. 1). The findings showed that nearly fifty per cent suffered from depression, anxiety, and burnout, and approximately thirty to forty per cent suffered from insomnia and stress (Ali, Shah, & Talib, 2021, p. 1). Such findings highlight the importance of healthcare organisations prioritising investments in support interventions to improve nurses’ well-being (Melnik et al., 2020, p. 930).

Secondly, to understand the context of nurses, literature suggested that in terms of technical efficiency, public health hospitals in Kenya showed largely positive results. A study found that fourteen of a sample of fifty-four public hospitals, or 26%, were technically inefficient (Kirigia et al., 2002, p. 42). However, out of the fifty-four hospitals, the average technical efficiency was recorded at 74% (forty hospitals) (Kirigia et al., 2002, p. 42). More so, it is relevant to note that the efficiency scores ranged from 0 (completely technically inefficient) to 1 (100% technically efficient) and anything below 100% was considered technically inefficient (see Appendix A for measurement equation and results). In addition, another study looking at public health centres in Kenya found that the majority, 56% out of a sample of 32, were found to be technically efficient (Kirigia et al., 2004). Overall, the results deemed a relatively positive result for the hospitals in Kenya and a need to dig deeper to find the underlying themes causing nurses to feel at risk with their well-being.

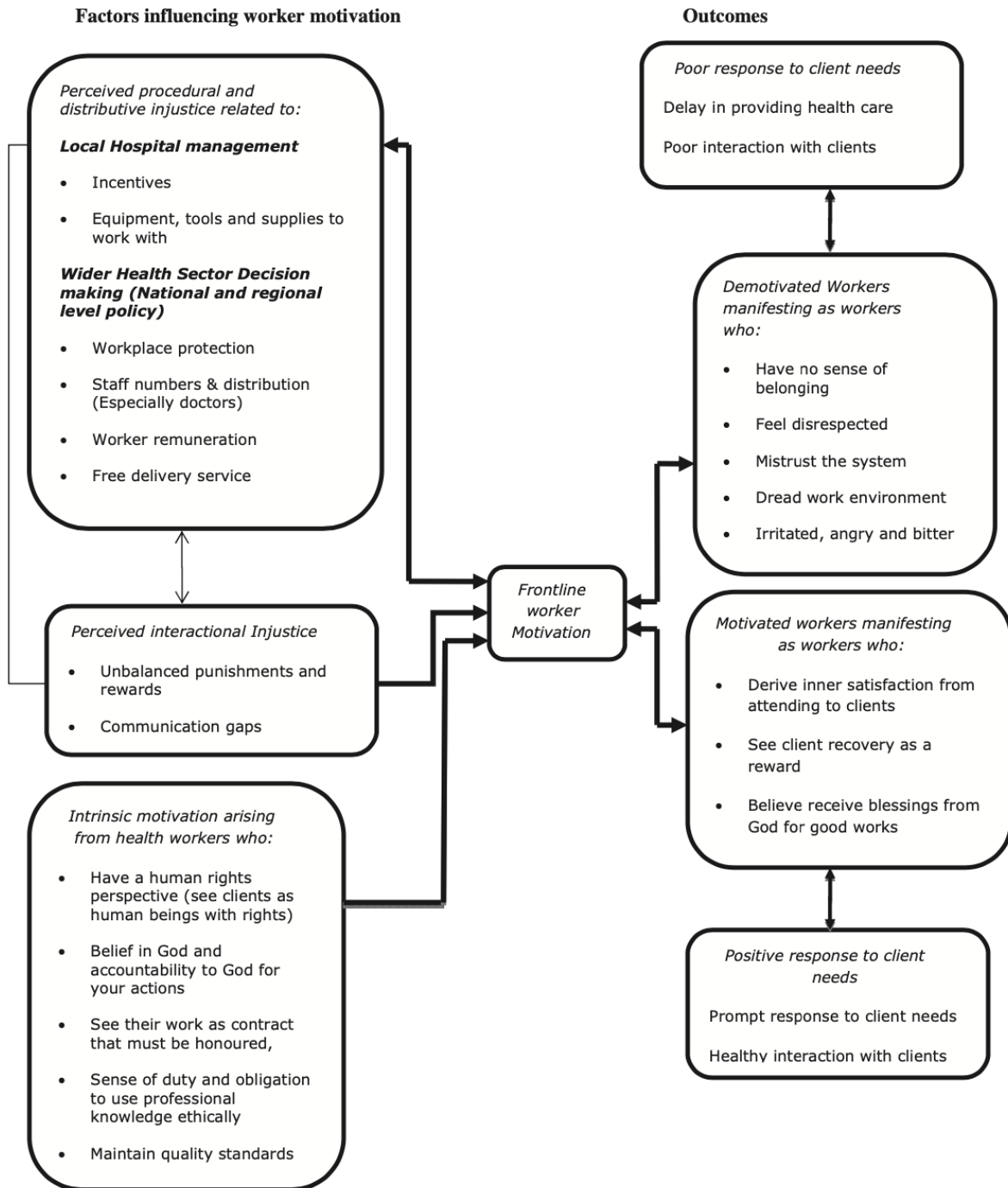
Further research showed another side of the ongoing struggles at different hospital levels in Kenya. A study found that healthcare centres are suffering from brain drain costs, whereby highly qualified doctors and nurses are emigrating to developed countries (Kirigia et al.,

2006). An estimate found that the cost of education from the primary level to the college of health sciences was US\$43,180 and that Kenya lost US\$338,868 per emigrated nurse (Kirigia et al., 2006, p. 7). This recorded loss takes into account the investment from the early stages of education, as well as the cumulative financial consequences of the investment returns that are lost due to brain drain (Kirigia et al., 2006, p. 6). In addition, brain drain provokes losses beyond the financial, and includes that of mentors, authorities, health services, researchers, the functionality of the referral system, tax revenue, job opportunities, separation of families, loss of middle class, and ‘internal’ brain drain, referring to those who have not migrated physically, but have internally migrated their activity direction (Kirigia et al., 2006, pp. 6-8).

*During my research, Omar described to me his ambitions to migrate to the U.K., where he could form part of the NHS. He mentioned that like him, many others were saving and waiting to move abroad to earn a better living. In instances like these, despite the positive results on Kenyan hospitals’ technical efficiency as shown in literature, the struggles were surfacing and there was a need for further answers. To address this the literature review turns to look beyond Kenya toward other SSA countries, such as Ghana.*

A study conducted with nurses in Ghana emphasized the need for well-being support (Abrese-Ako et al., 2014). The research focused on frontline workers including nurses and found that nurses believed their health was not a concern to those they worked for (Abrese-Ako et al., 2014, p. 19). Based on the theory of organizational justice, such research looked at the impact of healthcare workers' belief in a fair and just work environment such as through the payment of salaries. In turn, the workers would be more likely to be motivated to work and have a positive attitude toward the hospital and patients (Abrese-Ako et al., 2014, p. 17). This process that follows organizational justice can be seen in figure 1 below, which lists the factors influencing workers’ motivation and the positive or negative outcomes of (de)motivated workers.





**Figure 1. Processes in health worker motivation (Abrese-Ako et al., 2014, p. 20)**

The research's outcomes were in line with other studies which also suggested that factors such as a lack of supplies at a hospital could act as a demotivating factor (Abrese-Ako et al., 2014, p. 21). On the other hand, positive incentives included patient recovery, providing healthcare workers with a sense of fulfilment for doing a good job (Abrese-Ako et al., 2014, p. 24). Overall, said research called for the interest of frontline workers to be taken into account when developing interventions on the topic of building on the condition of

healthcare, a statement the thesis elaborates on throughout and also applies to nurses' participation in policy (see chapter 5) (Abrese-Ako et al., 2014, p. 25). Moreover, it called for the inclusion of frontline health workers in specific scenarios. Firstly, at the facility level, change was encouraged towards having a supportive management staff that can bring about positive working dynamics, and establish efficient communications, liability, and transparency (Abrese-Ako et al., 2014, p. 25). Secondly, at a country and regional level, there should be a new process endorsed, whereby the allocation of healthcare workers follows a needs-based approach (Abrese-Ako et al., 2014, p. 25).

All in all, such reflections made by Abrese-Ako et al. (2014, p. 24) were based on the research findings that frontline healthcare workers felt they were being let down by the system they were working under, ultimately leading to cases of resentment and negative attitudes towards patients. This is something the chapters on the structure-agency debate (chapters 5 and 6) elaborate on further through research findings. Altogether, my research ties in with other research findings that emphasise the need to further develop well-being support to have a long-lasting positive impact on nurses (Moore, Avino, & McElligott, 2021). The latter statement is addressed through the possibilities for changing structures such as political hierarchies to cater to the agency and support of nurses' well-being.

Another issue was the shortage of human resources in mental health in Kenya and SSA. Ndetei et al. (2007, p. 34) summarized that 53 psychiatrists were working in Kenya as of 2004, accounting for a psychiatrist-to-population ratio of 1:543,396, (see Table 1 for further details).

**Table 1. Psychiatrists distribution in public and private sectors per urban and rural setting in 2004. (Ndetei et al., 2007, p. 34)**

|              | <b>Private</b> | <b>Public</b> | <b>Total</b> |
|--------------|----------------|---------------|--------------|
| <b>Rural</b> | 2              | 7             | 9            |
| <b>Urban</b> | 16             | 28            | 44           |
| <b>Total</b> | 18             | 35            | 53           |

In addition, Ndetei et al. (2007, pp. 34-36) claimed that the Kenyan psychiatrist: population ratio had remained steadily neglected throughout the years. Thus, authors such as Marit Sijbrandij et al. (2006, p. 2) called for “short and relatively easy to administer” interventions to be conducted by non-specialist trainees, as an efficient method to meet the demand for the provision of mental health services, cross developing countries such as Kenya, where approximately half (45.9%) of the population live below the poverty line (Ndetei et al., 2007, p. 36). Such an intervention was tagged Problem Management Plus (PM+). Research on PM+ was conducted in Kenya and focused on treating female victims of gender-based violence (GBV). Evaluation of the administration of PM+ in Kenya showed positive results amongst the participants (MHIN, n.d.). The statistical analysis showed a significant positive correlation between the amount of PM+ sessions realized and a decrease in GHQ-12 score upon a 3-month follow-up assessment with the baseline score ( $r = 0.24$ ,  $P = 0.004$ ). A moderate effect size favoured PM+ ( $n = 209$ ) (0.57, 95% CI 0.32 to 0.83,  $p = 0.001$ ) (see Appendix B) (Bryant et al., 2017, pp. 10-13). All in all, such coaching programmes as described by Sijbrandij et al. (2006) and David Ndetei et al. (2007), and resembling the methods of Inuka coaching could therefore be seen or predicted for having positive results in the rollout with nurses.

Altogether, this chapter describes the labour conditions of nurses in the SSA context to understand the realities of their well-being. Figures show that nurses are suffering from a lack of well-being for issues such as a lack of effective management and a lack of support services. In turn, research authors are calling for short and effective interventions with non-trained specialists. However, this thesis further evaluates the impacts of structural factors that may continue to hinder nurses’ well-being despite such efforts. Before delving into the results, the following chapters reflect on the methodological approaches taken for the research.

## Chapter 3

### Methodological approaches

*From thousands of km away, I was getting ready for my fieldwork. My internship with Inuka had already begun as had the research on nurses. Together with colleagues we set up a survey that would be dispersed through their networks. As the results came in, the research started unfolding. Questions arising from the results were beginning to form. There were only slight discrepancies between those that found well-being as accepted compared to those that found well-being as stigmatized in the workplace. In time, realisation struck that although the survey had been made to get answers from the nurses, in reality, it had left many more questions unanswered. Only by being in Kenya and starting to interact with the nurses, would these explanations be heard. This chapter narrates the navigation through the process of what methodological approaches were taken and why it was most fitting for the research.*

#### Research methods: Quantitative

##### Survey

The research in the field began with a quantitative approach. A survey was distributed through Google Forms and the results were later analyzed using SPSS. The survey had 65 respondents and posed questions of the following themes: 1) Nurse demographics; 2) Workplace (environment, facility, county); 3) Socio-economic; and 4) Stigma levels of well-being. The questions of the survey were designed to include open and closed answers. Together with a Kenyan colleague, who shared her knowledge of the local context, questions were drafted to provide a better picture of the sample of nurses the survey was reaching and their perspectives on well-being. The results were later used to group the nurses into three different FGDs, being considerate of the balance in age, level of facility, and experience.

## Research methods: Qualitative

### Focus group discussions

*“Sharing of problems is a no-go zone.” Hadiya, a nurse working in a private facility shared in the FDG what she had been instructed in her first years. She continued with the warning she had been given: “these people are not your friends or family, and at the end of the day, some of them will even get you fired.” Hearing about the “lack of confidentiality” present for these nurses in their workplace made their opening up during conversations more appreciated. It was also a reminder of how valuable these experiences could be for them. We repeatedly emphasised that this was a safe space with no judgement, and nurses even brought it up before sharing some of their stories, “this is a safe space, you said right?” asked nurses such as Diana, before beginning to share their experiences. Overall, the FDGs worked as an outlet for nurses and also allowed them to have a sense of contributing to the improvement of their well-being care.*

### Group Definitions

The FDGs were separated into four groups. The 'Nurse Influencers Group' was selected based on those nurses who had good networking skills with fellow nurses and could achieve good outreach. Similarly, the 'Nurse Prospect Trainers Group' was selected based on nurses who had good speaking skills, were experienced, and had hosted or experienced a situation where they needed or provided coaching and support. They were likely senior nurses who could deal with intense facilities as shown by the survey results. The 'Common Nurses Group' was based upon general nurses ranging from students to junior and senior nurses. Lastly, the 'Administrator Nurses Group' was selected based on their position at work as administrative nurses whereby they would oversee other nurses also ranging from students to junior and senior nurses.

## Overview

Overall, the FGDs included a total of 39 participants from the four groups and questions expanded on the following themes: 1) Well-being as a topic including the interpretation of well-being; the impact of well-being activities in the workplace; coping mechanisms that nurses have already developed; any binding constraints preventing them from receiving support; any existing programmes and their accessibility levels to these programmes; their causes of stress; personal challenges; and the mental well-being state of nurses currently; 2) Impact of COVID-19; 3) Work-related impact such as the work environment and the stigma of mental health within it; the impact of their work on their mental health; describing a typical work-day; their workload and an outline of possible debriefing times; the positives of being a nurse; their social relation to colleagues; the patient expectations they face; existing referral systems for the support they are aware of; and income; 4) Coaching expectations were also discussed looking at the perception on talking to another nurse about personal struggles; and the preferences of different coaching settings; 5) Lastly, we asked the nurses about their ideas for Inuka's coaching pilot. Overall, the questions illustrated nurses' well-being and what they prioritise concerning well-being support programmes.

In this process, as an observer, there were notes being taken that were substantiated with the use of transcripts. A focal point of this role as an observer was being able to note any body movements, facial expressions, or gestures that may not have been caught by a recording device. However, the use of recordings as well as photography during the FGDs were also used as support in this process. The use of these draws on Sarah Pink's (2012) writings on the use of such elements as innovative research methods. Particularly since the 2000s, visuals have become a more accepted and essential part of qualitative research (Pink, 2012, p. 3). Turning to appeal to the visual and other senses, they can be used to assist and guide the research (Pink, 2012, p. 11). For this research, photography highlighted the structures, dynamics, and expressions of the nurses during the FGDs as well as later in their environments. Likewise, the recordings worked to highlight the key details of what was being said by the nurses. Excerpts from my notebook were incorporated throughout the thesis with the use of pseudonyms, whereas recordings and photographs were used to support my research process and analysis, but were not published to preserve the anonymity of the nurses.

## Participant observation

In addition, participant observation was enacted while visiting nurses in their daily life. Two visits took place in March 2022, which delved into the nurses' work situations and included visits to parts of their social life such as housing and other places of social gatherings. Another nurse was present at all times and assisted with context and further information on observations, which were recalled through note-taking.

## Interviews

Moreover, formal and informal interviews took place during meetings and general discussions with the Inuka team and with key nurse contributors. Likewise, interviews were conducted during visits to the nurses in group settings (3-15 nurses) and one-on-one, totalling approximately 25 nurses. For the latter, the nurse that was present facilitated the interviews through personal introductions and the importance of the topic.

## Steps of analysis

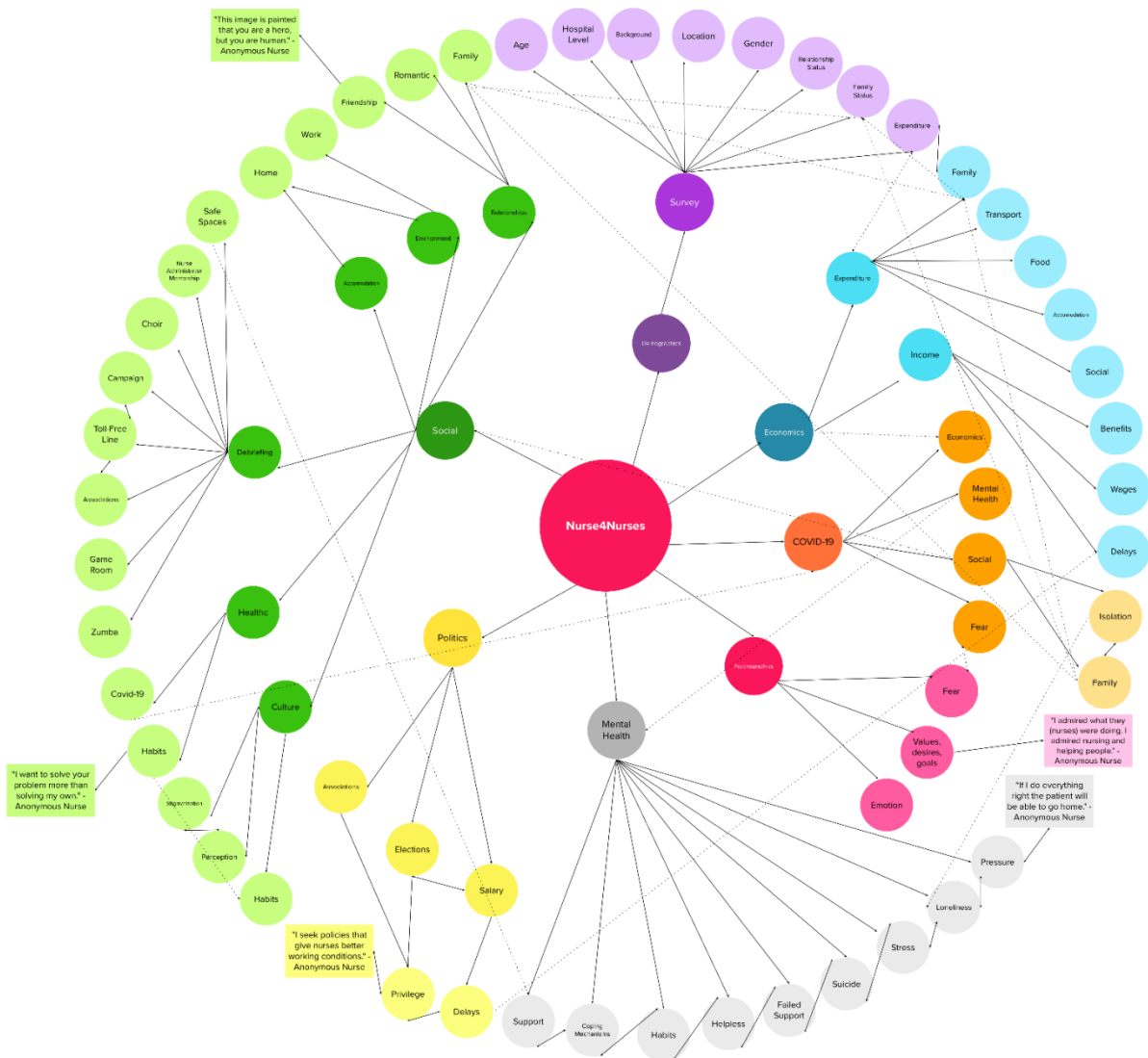
### Thematic analysis

Thematic analysis is a qualitative analytic method that looks for themes and patterns present in the text. The research identifies and analyses existing patterns present in the transcripts of the interviews (Braun and Clarke 2006, pp. 77-79). This also allows for a report on the experiences of participants and to examine the way these are affected by societal discourse and context (Braun and Clarke 2006, p. 81).

An interpretation of nuances in the data utilised Atlas.ti, a coding software, for a more in-depth review (see Appendix C for coding frequencies and excerpt examples). To address certain limitations of the analysis, such as biases, the research uses an inductive analytical approach. This means that one starts by listening to the recordings, then writing, reading, and re-reading the transcripts before selecting the themes that stood out the most. In this case,

inductive analysis refers to the process that was followed in this research, rather than otherwise attempting to fit the transcripts into codings that had been written in advance (Braun and Clarke 2006, pp. 83, 86-87, 89).

Lastly, having found an array of themes, these were filtered into overarching findings. For this step, a visual representation was created, such as the mind map below in figure 2 (see Appendix C for a larger version). This step helped to process the links among codes or themes and to have a better idea of the significance of each (Braun and Clarke 2006, pp. 89-91).



**Figure 2. Visual representation of themes**



From the themes outlined above, it was important to identify their position in a broader story about the data, as well as the detail of each theme itself (Braun and Clarke 2006, pp. 92, 94). With this in mind, opting to tell a broader story was done through the use of a script and providing the details through the use of characters' experiences. The use of a script in academia has been an emerging novelty and has been argued to allow for spaces of creative research (Baker, 2016). Yet, only a few publications thus far utilize screenplay as part of the research findings (Baker, 2018).

### The use of theatre as a research outlet

The decision to use a screenplay to narrate the findings of the research is supported by Baker's (2018) recognition of play scripts as knowledge objects that trigger varied responses from the reader including 1) engagement with the story; 2) assimilation of the messages portrayed; and 3) a sensation of comfort and/or discomfort. Particularly about the latter, the screenplay in the thesis is influenced by Artaud's *Theatre of Cruelty* who often describes his theatre in terms of magic, where distressing scenes are juxtaposed by images of a dream world, with shocking effects intended to last in the mind of the reader (De Vos, 2011, p. 18). All in all, the use of a script in the research allows for the creation of a coherent plot and also provides a space to delve into the data such as the themes and sub-themes described or observed among nurses to engage the readers. In this way, the script is also a useful medium to convey nurses' circumstances. The case studies that entail the personal stories of nurses are thus conveyed in a way that protects the nurses' identities, through the use of pseudonyms and the creation of characters inspired by different stories, media, and literature. The script illuminates the connection of the nurses' circumstances to the structure-agency debate and is therefore also situated in the theoretical reflections of the following chapters. In addition, it opens a door to the discussion of well-being support efforts and concluding remarks on the suggested requirements for long-lasting positive change.

### Creative approach

For the research, practical theories are paired with a public health approach. This is combined with insights from sociology and anthropology. The chapter on methodology shows the

different methods used to research the subject that can be related to different disciplines such as psychology and African studies. Furthermore, the creative approach, including presenting the findings via a theatre script also gives the study an angle on literary studies.

The use of a multimedia environment is also used for its advantages in engaging readers and illustrating data. Visual methodology as described by Pink in *Advances in Visual Methodologies* links new theoretical developments with technological advancements and multi-media practices (Pink, 2012). The methods and analysis are appropriate given the use and presentation of visual and innovative data, including tables, figures, and the use of a script. Although images disclosing the research participants are not used, due to the sensitive nature of the topic, tables and figures are shown to illustrate factors relating to the research topic. Key images include, for example, the mind map that illustrates key themes of well-being as described by nurses, or the cover image of the thesis that represents a struggling nurse trapped by the structures of her working environment. Overall, the use of imagery is used to assist my arguments and engage the reader's visual senses (Pink, 2012). This is paired with reflection notes that are incorporated throughout the thesis and found at the beginning or end of chapters. These are used to immerse the reader into the research process using a creative approach, with diary-note-like excerpts that introduce a topic or act as a final reflection.

## Ethical considerations

### Research Ethics

The data analysis and publication of any collected data considers consent, data privacy, confidentiality, and/or anonymisation. The involvement of participants was voluntary, and those attending FGDs were provided with a small stipend for transportation costs. In addition, confidentiality and anonymity were incorporated through the use of pseudonyms throughout the thesis and by not mentioning nurses' county origins to further protect their privacy. This was an important decision, with the relevant steps taken to approach confidentiality having been discussed with my supervisor, especially given that the research involves vulnerable

groups. Specifically, since the N4N Pilot Study is based on the theme of well-being, many participants were naturally involved with the theme. To avoid any risks to the participant, or myself as a researcher, the questions were focused on my area of knowledge such as that stemming from the socio-economic well-being theme. Further questions relating to mental health well-being were asked by colleagues at Inuka, who are trained psychology professionals. For questions on the latter, which were particularly addressed during the FGDs, the role of an observer was taken rather than the facilitator, working to prevent any harm to the participants during the research. Furthermore, to help mitigate any harm posed to me as the researcher, there was an undergoing of well-being coaching sessions with the Inuka company and debriefs on findings with colleagues also involved in the process. Likewise, all nurse participants were encouraged to partake in free well-being coaching sessions and to share the details of such with others.

*Altogether, the methodological process took me on a journey as a researcher. Before arriving in Kenya work on the survey had started. Within the same day of arrival, calls were being made to confirm the attendance of nurses at the first FGD event. This was my first interaction with the nurses. Quickly, my position as a researcher on the topic shifted from doing literary research to being in the field. Through interactions and introductions with the nurses conversations became more approachable. Nurses came to me for questions during our events. Some became excited to see me in social environments, whereas others would question my motives, and ask what they got out of my research. The process was a lesson of developing patience, empathy, and an open mind. My mindset shifted from an initial shock to hearing about some findings, to then trying to get some answers as to why this was happening and an understanding through the use of theories and analytical methods. More and more, by starting to ask the right questions, as described in this chapter, answers were discovered from a place of knowledge and thoughtfulness, leaving me with an eager mindset to convey and make justice to the stories encountered, a challenge approached through the use of a script, as narrated below.*

## Chapter 4

### The silence among us

*Theatre script based on true events...*

*\*\*\* Trigger warning: PTSD, alcoholism, domestic violence, suicide, death, self-harm, abortion.*

*Characters:*

*Ojwang (male): His name means survivor. He is a junior nurse. He is thoughtful and caring for others, but feels he has been wronged too many times. He is wearing a nurse's uniform.*

*Wawira (female): Her name is Kikuyu, given to those hardworking. She is a senior nurse and is a strong and determined woman. She is wearing a nurse's uniform.*

*Isaac (male): He is an administrator nurse. He has a detachment from people and seems to be in his own world. He is wearing an administrators nurses uniform.*

*Fatuma (female): She is a junior nurse. She is sweet and often quiet and reserved. She is wearing a nurse's uniform.*

## Act I

*Ojwang call's for the elevator from the first floor, the accident and emergency unit in a public level 6 hospital. He steps onto the old, large, metal box, which makes a creaky noise as the doors close behind him. You can hear the sound of chatter and weeping in the background slowly fading away. He steps foot onto the elevator and exhales deeply. Finally, he gets a minute of peace after having dealt with the streaming line of incoming patients and teaching other students for 13 hours with little or no breaks. As he patiently waits to get to the 12th floor, other nurses join in for the ride. Isaac, a nurse administrator walks in with the slightest stagger in his walk. Isaac looks up and down at Ojwang, takes a deep breath, and sighs, then moves to ignore him as he goes through a bunch of administrative papers. Ojwang's body becomes smaller as he looks down and huddles in the corner. The elevator thumps as it stops on the 8th floor. The doors open to chaos. However, this time it's a different kind of crying that can be heard in the distance. Mothers are heard screaming and babies are heard letting out their first cries. Senior nurse Wawira rushes in pushing a pregnant mother on a hospital bed. A junior nurse, Fatuma, rushes in with her, steering the bed by the side. Wawira clicks forcefully on the buttons as they wait anxiously to get the patient to the ICU floor for an emergency c-section delivery. All of a sudden, the elevator stops with a loud thud causing the nurses' teeth and the patient's bed to rattle. Wawira and Fatuma look at each other in panic and then look down at the desperate mother. Ojwang looks scared and confused by the situation. But Isaac knows what has just happened, he was too used to this by now. He has a look of regret but still manages to keep his composure, he knows he has once again lost one of his nurses to suicide.*

Isaac: (deep exhale, there is a slight slurring of his words throughout the act) There goes another one.

Fatuma: (panting) What do you mean? What just happened?

Wawira: (through gritted teeth) He means a nurse just committed suicide in the elevator.

*The sound of a heartbeat faintly starts playing in the background. It slowly increases in speed and volume as the conversation continues.*

Ojwang: (increasingly louder speaking to himself) (in Swahili) Hili haliwezekani! Hapa ni kujijali. (This is not possible! Here you take care of yourself.) There is no one looking out for us. This was inevitable given our situation. Look at us! How did we not prevent this? We just lost another brother.

Isaac: Watch yourself! I will not tolerate this behaviour in my hospital. I am doing the best I can.

Ojwang: How is that so? There are no tools set in place. Take last year when we lost so many to several suicides. Was that you doing your best?

Isaac: Listen, if you have something to say, go talk to a counsellor, I will not have you speaking to me like this in my hospital. You answer to me. As for the tools, we have options, and if you don't want to go to Zumba or choir, that's not my problem. Committing suicide is a choice you can prevent. If you don't like it you can go work for another hospital.

Fatuma: (softly speaking to herself) We have counsellors?...

Ojwang: (loudly) You think suicide is a choice? Do you think I want to go to Zumba or choir? (*Bangs the elevator wall*) I don't have time for that, and I don't have time for games, those options aren't enough!

*The sound of the heartbeat suddenly stops. Wawira notices the pregnant mother has lost consciousness, she feels for a pulse and starts to worry.*

Wawira: Quiet! This mother has gone into cardiac arrest.

*Wawira throws herself onto the hospital bed and starts doing chest compressions.*

Wawira: It's not working.

*Wawira looks around to remember she is in an elevator with no equipment in her surroundings and starts to panic.*

Fatuma: We need a defibrillator!

Wawira: There is no time for that. We need to get the baby out now.

Fatuma: We don't have any equipment. What are we going to do?

Wawira: We never have the right equipment anyway, we're in constant adaptation with the lack of resources and this time is no different. We'll just have to improvise.

Ojwang: I have a scalpel! (*hands it over to Wawira*)

Fatuma: (crying) We are going to lose them both! What are you doing? Let's wait for the elevators to start working again and then we can call a doctor.

Wawira: Listen, she told me before she didn't want the baby. She already asked me before to do this procedure myself anyway, and if I don't do this now we are going to lose them both.

*Wawira holds the scalpel in her hands ready to open the mother up. She reaches for the mother's stomach. The lights turn red and are followed by a blackout. For a moment there is silence, followed by the sound of a baby crying.*

*End scene.*



## Act II

*Wawira is holding the baby in her arms as Fatuma is seen crying on the floor. Ojwang kneels next to Fatuma to console her. Isaac is seen in a corner of the elevator sitting down, not interacting with others, and looking ahead with a straight face. The mother's body has been covered with bedsheets. The rest of the actors' freeze as Wawira approaches the front of the stage. The lights turn red.*

Wawira: (breaking the fourth wall, she speaks to the audience as she is still holding the baby) Every day I have to make life and death decisions between babies and mothers. When a mother is in labour I will do everything in my power to be with her and help her. But most of the time, we don't even have the right equipment or tools to keep them alive. I see mothers suffering because I cannot provide them with the right care. Instead, the hospital wants me to be in so many places at once, working with other patients, whilst I have a mother next to me who is bleeding to death. This scheme is a money-making business. "You were trained to be a general nurse," they say. But I am in the maternity ward. There are 60-100 patients I am already dealing with per shift and I am working with them alone. (In Swahili) Uko peke yako (You are on your own). Both in our well-being and our duties. We are not able to focus on our duties because we are understaffed. Our hospital doesn't work because we have groups of people striking and we have to take over their duties. Still, they would rather I take on different shifts rather than pay them their dues. On top of that, the other nurse working with me has to take care of the administrative duties. This means, I cannot leave the patients, there would be no one left to help them. I can't even strike for my rights because I don't have it in me to leave my patients behind. So I fight to stay and

survive the injustices we face. Because I cannot face the consequences of the contrary. I cannot leave a mother who is bleeding to death without doing everything I can to help. I cannot leave before a mother wakes up to the news that her baby did not make it. It's the number of deaths that we're experiencing that is traumatising. But still, I am expected to get on with it and do my work. By this, I mean not only my work as a nurse in the maternity ward, but I'm also referring to all the other roles I have to take. I work as my security, I take care of the food and the bed sheets for the patients, I work to keep a clean hospital, and teach other students all at once because no one else will. Do you see why it's overwhelming?

Do you see this mother behind me? She died trapped in this box because either way we don't have the right tools where and when we need them. Now I am carrying this child in my arms and he is motherless. Let me tell you, this could have been prevented. The government could have invested the budget they were supposed to instead of keeping it in their pockets. As I said, healthcare is a money-making business, and the governmental elections coming up are the casinos where politicians go to spend their money. We have a sign out front, it says "This is a corruption-free zone". Well, I am calling their bluffs. It is time healthcare got the investment it needed.

So what do I want? I want to be able to tend to a mother's delivery without having to worry about having to feed another one at the same time. I want to be able to give a mother and baby oxygen when it is needed. That when we are informing a family we lost a patient and we have to say we tried everything we could, we mean it. The whole situation makes me anxious. When I come to work I dread that I will be losing

another mother. There is only so much death someone can take. Especially when we don't get any help to deal with the psychological trauma of losing patients. The help we have available now is just not enough.

Plus, if the pandemic couldn't make clear the need for help, I don't know what will. Like many of us, 2020 was the time that hit my anxiety the worst. I felt the most alone. When I finally got the courage to ask for time off, because I had to visit my family who lives in Nyeri, I was struck by the realisation that even my own family didn't want me at home. They weren't interested in seeing me, no matter how badly I was doing. They were afraid of me because hospitals were known to be the hotspot for COVID-19. It was then I realised the only people I could count on were the ones here next to me, my fellow nurses. I was just never sure how it would be if I were to open up to them about what I was going through.

*The lights turn bright yellow. She lifts the baby into the sky and swirls around, playing with the baby in her arms as she dances. Baby laughs can be heard as Wawira starts humming a lullaby. For a moment, there is a clear difference in Wawira's energy, she has found an escape in her patient. The noise slowly starts to decrease to silence as Wawira goes back into her starting position and sits down with the rest, still holding the baby. Her energy switches back.*

*End scene.*

## Act III

*Isaac stares at the sharp light of the elevator twinkling above him as he is sat down. Fatuma stares at his face.*

Isaac: (talking to Fatuma) What are you looking at?

Fatuma: Nothing...

Isaac: You might as well say it. We're stuck here, I've got nothing to hide.

Fatuma: I don't feel at liberty to discuss this with you.

Isaac: If you don't say it I will. So what? I take a little sip to ease the pressure now and again. With what I go through, no wonder. I never drink at the hospital though! I try my best at my job and I still look like the bad guy to most of you. Well, there's a reason where this is coming from. In case you haven't noticed. I am also exhausted. The negativity from this environment that we are in, seeps its way to affect how we feel. When there is chaos, people come to me complaining. Constantly I hear complaining and there is only so much I can take. So junior, this is why I have become an irritable person, and why I have resorted to alcohol. I have nurses that lose patients and are then admitted into the psychiatric ward, I am losing my nurses left and right and I can't help them, because I can't help myself. For so long I have felt like I had to take care of others, but who was there to take care of me?

We've all felt the pressure. Especially during the pandemic. It was during that time when the managers were forcing us to come to work even if we were sick unless we had proof of

testing positive. Even we who were older and more vulnerable had to come, it didn't matter what the consequences were. It was shameful. I felt demoralised walking into the hospital with no PPE equipment or no mask on. But this issue goes beyond the pandemic. Stress has always been around us. It is that only now has the rest of the world started to notice what we go through. I had to work such long hours, I barely saw my wife. What I did to my family... my wife, my kids... I took it out on them... It's not ok...

Fatuma: What happened?

*Isaac freezes, he looks up at the twinkling light. He starts shaking his head, gradually stronger and stronger his arms are swinging, his body is shaking, and he starts screaming. The lights quickly switch to red. A spotlight is focused on him.*

Isaac: No! No! No no no no.

*Isaac goes quiet. The rest of the actors' freeze. He approaches the front of the stage.*

Isaac: (breaking the fourth wall, he speaks to the audience) How could I tell them that the trauma from work does not leave my mind for a second? I don't have anyone to talk to. I don't get to see my wife when I come back from my night shift because she is working during the day. So I seek an escape with the barmaid because I need intimacy to get the thoughts out of my head. Then when I finally see my wife I take it out on her because I resent her for not having enough time together. I take it out on everyone. I am detached from making friends at work because I don't believe they want anything to do with me. Perhaps it is my fault. I should be better. I have

treated them badly for too long. I can't control it. A rage comes over me and I black out.

*There is a blackout. A spotlight turns on to illuminate the right wing of the stage, showing a white screen. Shadows are projected by the actors behind it. Isaac is seen on top of a woman. Another woman walks in the door with two children behind her, a girl, and a boy. She gasps. Isaac turns his head to face them and starts screaming in rage.*

Isaac: Get out of here!

*Isaac goes over to the woman who has just entered and slaps her across the face. She falls onto the floor. The children are heard crying and pleading for their mother to help them.*

Isaac: (He slurs his words. In Swahili.) Nyamaza! (Shut up.)

*He grabs the girl forcefully. The woman uses all her strength to get back up and manages to grab the boy. They run away and can no longer be seen from the screen. Isaac is seen throwing a bottle after them. As he misses his aim, the girl manages to escape and glass is heard shattering. The children are heard crying softly in the distance. The noise fades away until there is silence. The lights turn back on focusing on the centre stage at the elevator. Isaac is seen returning to his place and sitting down. He can hear Fatuma's voice faintly in the background, slowly getting louder until he returns to consciousness. He turns to face her. His face is frozen.*

Fatuma: Are you okay? What happened? Does this have to do with your family?

Isaac: Nothing happened. They are fine.

Fatuma: You can talk to us.

Isaac: I said it is fine.

*Everybody freezes except for Isaac. A soft melody can be heard in the background. The lights turn red again. The kids hop across the stage to appear next to him. They hop around him cheerfully in circles. Isaac's body is seen shaking as he covers his ears and looks away. His thoughts are seen to be tormenting him.*

Isaac: (yelling) Go away!

*The children laugh and run away.*

*End scene.*

## Act IV

*A spotlight focuses on Fatuma who is at the centre of the stage.*

Fatuma: (breaking the fourth wall, she speaks to the audience)  
I know something happened that he is not telling us. It is the same for everyone here. We are all going through something in our work that affects our personal lives and vice versa. I have little to no social life and little time for my friends and family. I long to be able to talk to those around me, and I want to open up to Wawira when I am working with her. But these different levels of seniority make me afraid to open up to her at all. I feel some sort of resentment toward her. I don't know if she fears I will be taking over her senior position. But it's not something I am looking forward to. She has been working for 10 years and still has received no salary increase. I am supposed to be earning 75k KSH per month, but still, I need about another 40 years of experience before I can start earning double. I am the main provider for my extended family, and right now, this is not enough to sustain them. It's like that nurse I heard about, he had been working for 6 years and spent 6 months with no salary. The sense of helplessness drove him to suicide. Especially during the political elections, many of us like him face those 6 months without being paid our dues. Whereas those that are being paid usually have some sort of an internal arrangement. But so many of us put up with it. Our strikes only last a few days because we know the patients need us and we want to care for them. So we find other options to avoid facing the alternative. We work as locum nurses, filling in for others where we can. But I earn a maximum of around 1H KSH for a 12-hour shift. Even then, it is usually another nurse that is paying me for taking



on their shift, not the government. The whole situation, it's just demotivating.

Also, I feel like if I tell Wawira or others about my problems, then what? She is probably also going through her things and I don't want to burden her. I've told others and it hasn't helped, they are not equipped to help me. From when I got here, I was told that these people were not my friends, that some of them may even get me fired if it came to it. But I am so desperate I have still tried to open up, no matter how hard it is to do so. Take the example of when I told my friend that I was depressed and she laughed at me. I chuckled back and we pretended as if nothing had happened. We continued with our day as normal. To her, I am painted as this hero because I am a nurse, but I just need to be considered a human. I've also told my family that I was feeling depressed. But even that was a mistake. They told me I couldn't be depressed, that I am too young to be depressed, and that I should just go to work and get on with it. My male colleagues, I've overheard them trying to talk and they're just told "chillax dude" "you are a man" (In Swahili) "Kuwa mwanamme" (Be man enough). This problem does not discriminate on gender, and it is not taken seriously. I think it has something to do with our upbringing and this culture we're in where mental health problems are for 'crazy' people and 'help' is only offered if we have visible mental health issues. The problem is mental health is not prioritised, only mental illness. Treatment over prevention. But by then it's too late. The reason why we're stuck here is an example of that.

Yet the staff still chooses to remain silent about it. Others only notice when the behaviour starts to change, like Isaac's drinking. We may know about it, but we don't stop to think about the reason behind why he is drinking. As for the help

available, I am not even sure where to get it. I didn't even know that it was available to me, I thought it was for the patients. Either way, I fear that if I go to someone like a counsellor, my story will be known throughout the hospital. These counsellors, I've heard them talk to others about the stories of the nurses that go to talk to them. They may have good intentions by giving us examples and not saying their names, but we all know who they are talking about regardless. What is anonymous and confidential about that? I can't afford for others to hear about my family problems. They will see me as compromised and unworthy. I already feel like a failure for not being able to maintain my family together. So if word gets out, it will be even worse, I'll be judged as a woman and a mother for getting a divorce.

*Fatuma drops to the ground on her knees, she covers her face in shame.*

*The light turns blue. Two kids and a male partner approach her. They are dancing to an upbeat but soft melody. Fatuma smiles and is pulled by one of her kids to join them. She and her partner look at each other shyly and each dance separately with the kids. Fatuma closes her eyes in relief and sorrow, holding her child tightly in her arms, then softly letting go as she lets go of her dreams of her perfect family and safe space.*

*End scene.*

## Act V

*The actors are all sitting in the corners of the elevator. Wawira seems preoccupied with the baby in her hands and Fatuma approaches to help her. A spotlight shines on the other side of the elevator where Ojwang and Isaac are sitting. Ojwang turns to Isaac and stares at him. He finally speaks.*

Ojwang: Hey man, I'm sorry about lashing out earlier, I was out of place.

Isaac: (inaudible mumbling)

Ojwang: I just wanted to say, if you want to talk... I have no idea how long we'll be stuck in here...so I just wanted to explain myself and where that came from.

*Isaac stays looking down; he does not seem to be listening.*

Ojwang: I know maybe you don't want to talk to me because I am just a junior nurse, and you are an administrator. I get it. Trust me, if we were in any other situation, I would probably not come talk to you about this, and I would never think you would want to talk to me about your problems. But I can tell we are both struggling. So I was thinking maybe we could also help each other out.

Isaac: You know nothing about what I am going through.

Ojwang: Maybe not. Especially if you don't tell me what that is, and you don't have to if you don't want to. But maybe it helps if I tell you about my struggles first.

*There is a brief pause of silence.*

Ojwang: I am struggling, Isaac. I had that scalpel with me because I was planning on really hurting myself with it today. We have it rough, our well-being takes a tumble, and no one can deny that. We are going through the same things.

Isaac: I am nothing like you! You are a man! You shouldn't be depressed, you should be stronger than your problems. I don't know what you are doing talking about well-being and hurting yourself.

Ojwang: (quietly laughs to himself) I am tired of pretending this isn't an issue. God wouldn't want this for us. Depression is real and no human is immune to depression. Seeing someone else take their life today has opened my eyes to the need for help. I want to help others by talking about this issue in front of us. Even if I can't help you then I know others need help and that will listen to me.

Isaac: Listen, brother, I don't know what you are pretending. Someone opens up to you and then what? How are you magically gonna help them? (In Swahili) Hujui jinsi ya kusaidia (You don't know how to help).

Ojwang: Maybe I don't have the knowledge or training, but I can't sit here and do nothing.

Isaac: What are you going to do? You still can't change the rest of the system. You said it yourself. You're delusional. Helping other nurses is evading the problem. We are not the issue. Just a consequence. There are bigger fish to fry, and there is nothing you can do about that. This will never change.

Ojwang: Maybe you're right. But I gotta take the first step. Maybe people will open up to me. After I can think of the stuff you talk about like policy-making.

Isaac: Be careful man. You want to help others more than you want to help yourself. I've been there. But you need to be able to help yourself first. I know this all too well. You're wasting your energy, I've tried. I've pushed the government to give us more supplies, I've pushed them to give us more staff, trying to make policy and political change, but nobody is listening. Year after year I am just let down. We try until we give up and there is silence among us. Silence from us who have let go of our freedom and silence from those in power.

I wasn't always such a negative person, I used to be like you. I thought I could change the system. But every day, I'd come to work and I was never good enough for anyone. The supervisors demanded more, the patients thought I was rude, heck even the patients' families would be aggressive at me when my hands were just tied. I kept putting others first until I just couldn't take it anymore. No one was there to help me. No security to guard me against angry families, and no counsellors to speak to about what I was going through. Maybe I failed you too. I became the administrator I once dreaded, and for that, I hope one day you can forgive me.

*The elevator bell dings 3 times. Each time the actors make different movements, ending by facing the audience.*

*End scene.*

## Act VI

*Ojwang is standing at the centre of the stage. He is all that can be seen through a spotlight. There is a blue light as he recaps the following.*

Ojwang: 2 years have passed since that day we got stuck in the elevator. When the doors of that elevator finally opened we walked out into more chaos. The police said they found a note from the nurse who had committed suicide blaming the system and her husband for the abuse she faced. They later found she had killed her children before returning to the hospital to end her life. As dreadful as it may sound, it was not uncommon to hear of these situations. In particular, it happened when mothers did not want to leave their children alone to bear the injustices of the world. Perhaps in the hands of an abusive father or in the face of poverty. We soon found out the victim was Isaac's wife. I learned more of his story in the months after the incident. He came to talk to me after being diagnosed with PTSD and alcoholism. But even with the training that I was doing to help others, it wasn't enough to help him. I referred him to a rehab centre, where I later found out he too committed suicide. His note said he had evil spirits haunting him and leading him to end his life. I think he couldn't cope with the guilt and shame he was carrying. Like him, many people's illnesses and situations are overlooked, and in doing so it can end with them being buried.

But we're not all like that. Some of us may carry heavy burdens, some of us may not, and some of us may know how to cope, whereas others cannot. This is why we need to make these tools accessible. I've received training to coach other nurses with their well-being and I've had many people come to me and be grateful for the support. I know many are appreciative of

these kinds of programmes because it's an immediate sense of relief for better care and a sense of better self. But I can still say that Isaac was right about one thing. I still struggle with feeling like a victim of something beyond my control. I may be helping nurses on an individual level, but it is not going to be enough unless there is a large-scale change in the system.

Fatuma joined me in becoming a coach. She has been a powerful advocate by being better able to open up to others and has gotten others to do so in return. Through opening up to others, she soon realised others are also going through the same in their families, and although she still struggles, she has gained a support network through her work. Wawira on the other hand left for the UK to pursue her further career options in hopes of finding a different system. The baby she had tried to rescue did not make it after we got out of the elevator. She became attached quickly to the baby and blamed the lack of resources for preventing her from saving him. Like her, many others found reasons to leave the country and go to practice abroad.

This is why beyond all the help people like myself can provide, we still need a systematic change. Money needs to be invested back into the health system. Yes, it is about giving support, but we can't victimise ourselves. This is not an individualistic problem. The whole country needs to face a change to bring about a sustainable solution. Do I think that will ever happen? I am not sure. Right now I try to stay positive, but I'd be lying if I didn't admit the negative thoughts do come flooding from time to time. I am glad that when this happens I now have some people I can go to, and being able to speak to them in a safe space has been relieving. But Isaac's words still stay with me. I often

wonder whether my work is even worth it without having a systemic change happening by its side. Maybe it's time for me to pursue policy-making, and figure out a way that can provide nurses with the different kinds of support they need. The kind of support includes the government paying their nurses, and providing the tools and equipment for practices as well as for well-being support. Maybe it's time that from the silence among us, our voices are now heard and amplified, working to improve our conditions.

*Ojwang turns his face to the back of the stage and looks up at a screen displaying images and videos of nurses working together, forming part in support activities, and fighting for their well-being and that of their peers. He turns back to face the front of the stage and smiles.*

*End scene.*



## Chapter 5

### Constrained by structures

The following chapters address the themes and findings portrayed in the script. This chapter infers ‘What is the condition of the nurses and why are they in this condition?’ through the description of the hospital facilities in Kenya, focusing on the structures of institutional hierarchies for example those behind national policies of the health system, and the illustration of this posed in the script. The main theme emphasised throughout the script can be explained by the long-standing debate in academia on structure and agency. These chapters present structure and agency as forming each other and use these theories to explain what are the constraining or enabling forces for the well-being of nurses. Giddens et al. (2018, p. 8) describe structures as frameworks that determine or influence an individual’s position. These can include actors of power such as the government and political leaders (Giddens, et al., 2018, pp. 317-350). Throughout, the chapter shows the interaction between the individual and the structure, otherwise presented as the agency (Giddens, et al., 2018, p. 8). Agency - which will be used interchangeably with the notions of freedom and capabilities - comes from the German philosophy *handlungsfreiheit*, and will be further explained in the following chapter.

The two parts of this debate describe and analyse the occurrences of the script, based on the realities faced by nurses. To address this, the chapter delves into the notion of structure and then complements the discussion with the theory of agency and its interlink with the model of duress. The relevance of the two for the nurses can be seen from a general standpoint whereby a work environment is a structured entity where there is the execution of skills and capacities. Ideally, the need for a structured entity could benefit from the exercise of such skills and capacities (Giddens, et al., 2018, p. 356). However, the case of the nurses who are often experiencing ‘duress’ at the workplace has often shown the negative aspect of structures, under which individuals may find themselves trapped, having to conform to it, and ultimately form part of the structure. Inevitably, this may also have an effect on their level of agency, which will be discussed in more detail in the following chapter.

Firstly, this chapter focuses on the structuration theory, whereby Giddens (1984, p. 16) reflects on ‘structures’ to exist outside of individuals, acting as a root of restriction on the individuals’ freedom and capabilities. He defines structures as “the properties which make it possible for discernibly similar social practices to exist across periods and space and which lend them ‘systemic’ form” (Giddens, 1984, p. 17). In the context of the nurses, an illustration of such existing structures can be seen in the workplace and extend to the political bodies governing these structures.

To illustrate the workplace, the chapter turns to the research findings. The interview focused on nurses from two level 5 hospitals, which are county referral hospitals. For purposes of anonymity, these are referred to as facilities A and B. During an interview with a young male nurse from facility A, he detailed his perception of the expectation in his workplace for nurses to take on multiple roles such as security, service (cleaning and food facilitation), and technical assistance. Another young male nurse described that in his regard, there was a lack of space for nurses to debrief. In addition, from facility B, further issues were uncovered by young male nurses who described there to be a lack of accommodation available and salary delays for nurses in public hospitals, particularly in the months leading up to governmental elections. This was described to be because of the money being used to sponsor the elections. Such injustices resulted in an ongoing go-slow taking place from support staff in facility B. Overall, talking with a group of nurses diverse in age and gender, our interaction could suggest the need for a safe workspace, as nurses described instances of patient’s families getting aggressive, as well as the need for spaces of debriefing, and altogether effective support programmes to assist them in trauma recovery, particularly after the outbreak of COVID-19.

In the script, the government can be seen as a constraining entity that inhibits the nurses in different aspects. From this, the script emphasised the economic constraint that nurses face largely due to the government’s role. This stems from the structural findings of corruption in the government. Kenya’s government faced a scandal of losing 2 billion KSH a day to corruption, which Omar described as ultimately leading nurses to question the lack of investment in the healthcare system (Muriuki, 2021). Another example is that during COVID-19 nurses were given an additional recognition package of 15,000 KSH for three months under the presidential directive. The stipend was given 6 months after the outbreak of COVID-19 in Kenya, long after the ‘cries’ of the nurses, as Omar described to me. However,

when the stipend stopped for no reason the nurses were left to wonder why, but simply conformed and accepted it from the structural entity. Likewise, there was another instance of alleged corruption during COVID-19 whereby \$2bn of aid and grants were misused. This led to an investigation and complaints from healthcare workers about the consequential lack of PPE equipment (Igunza, 2020).

Congruent with my arguments, a study conducted by Juma et al. (2014) found that structural factors acted as the primary constraint against nurses' involvement in national policy processes for the health sector of Kenya. The authors expanded on the study setting, including that 45.3% of Kenya's public health sector workforce is comprised of nurses (Juma et al., 2014, p. 2). Nevertheless, because of The Public Health Act, which recognizes doctors as the heads of government departments, nurses are seen to be unrepresented among the national policy committees. A typical view from the nurses was that they were not included in the policy decisions on their work environments (Juma et al., 2014, p. 4). In addition, the structure of the decision-making level of the health sector is arranged after the governmental levels. By focusing on the central level, nurses' involvement in policy formulation has been often restricted (Juma et al., 2014, p. 6). The study argues that such structures are embedded in Kenya's colonial legacy, whereby colonialists favoured doctors, as a male and white-dominated field, over nurses, which was a female and African-dominated profession (Juma et al., 2014, p. 6). The hierarchy of such has been further engrained in the legal system with the Public Health Act, ultimately leading to the exclusion of nurses in senior authority positions as part of the health system. In turn, while physicians could act as programme managers, department heads, and administrative directors of facilities, nurses were only allowed to represent fellow nurses, thus acting as a constraining factor for policy participation (Juma et al., 2014, p. 6).

In an analysis of the structuration of social systems, such systems, which fall back on rules and resources, are constructed and reconstructed through exchanges (Giddens, 1984, p. 25). Within the notion of structuration, is the theorem of the duality of structure, whereby the existence of agency and structures do not exist as independent entities, but rather in duality (Giddens, 1984, p. 25). Structure does not exist separate from the agents in them performing daily actions, otherwise referred to by Giddens (1984, p. 26) as "the *durée* of daily social activity".

Moreover, Giddens (1984, p. 28) refers to the ‘modalities’ of structuration to illustrate the duality of structures in interaction. Such a modality can be seen in figure 3 (see below). Hereby, the illustration of a dominating structure can be seen through the modality of a facility, whereby the interaction is the exertion of power (Giddens, 1984, p. 29). This illustration can be seen in the nurses’ examples of structural facilities that exist parallel to the hospital environments, whereby power is being exerted in domination from the leaders of the structural facility, but also with a reciprocal agency from the nurses, who have repeatedly voiced their positions and needs, such as voicing for policy-making through nurse associations. The following chapter further elaborates on the theorization of agency and the nurses’ capabilities of such.

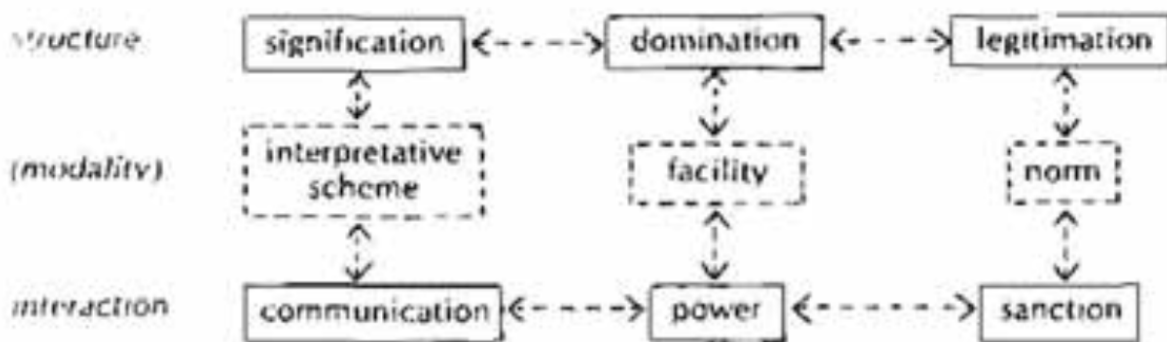


Figure 3. “The modalities of structuration” (Giddens, 1984, p. 29).

| Structure(s)  | Theoretical Domain  | Institutional Order                             |
|---------------|---|---|
| Signification | Theory of coding  | Symbolic orders/modes of discourse              |
| Domination    | Theory of resource authorization<br>Theory of resource allocation | Political institutions<br>Economic institutions |
| Legitimation  | Theory of normative regulation                                    | Legal institutions                              |

Figure 4. “Structures and forms of institution” (Giddens, 1984, p. 31).

Likewise, figure 3 also alludes to the institutional orders found within structures. Examples of these are outlined in figure 4 (see above). Relevant to the research on nurses are those of domination that are discussed in the scenario above about political and economic institutions (Giddens, 1984, p. 31). Further elaboration of Giddens (1984, pp. 31-32) on domination and

powers does not draw on the inequalities of arrangements but rather refers to them as an intrinsic aspect of human interaction. This is particularly so given that agents within structures still hold capacities to refuse the domination or transcend the domination at a later stage (Giddens, 1984, p. 32). Yet, my argument reminds the readers of the current positions that nurses find themselves in. Although following Giddens' (1984) approach, I reflect on the crucial necessity for nurses to transcend their ongoing interaction with the structural dominations - of hospital and national policies for the health sector in Kenya - that is their agency.

Altogether, this chapter drew on Giddens' (1984) structure theory and illustrated an example of such through the workplace of nurses. The interviewees that were referred to suggested instances of what acts as constraints in their facilities, which were further supported by others' research findings. The latter focuses on how institutional structure poses the primary constraint for nurses' involvement in policy decision-making for Kenya's health sector. With this, further context has been added to the analysis of the illustration conveyed in the script and my overall argument of why nurses are in such constraining conditions.

## Chapter 6

### In dire need of agency

To illustrate the other side of the structure-agency debate, this chapter looks at ‘What does well-being mean and why it is necessary for the nurses?’ through an exploration of Sen’s (1993) work on agency as well as the consequences of a period of stress or duress as described by de Bruijn and Both (2018).

Sen (1993, p. 30) has situated well-being through his work on the capability approach. Hereby, Sen (1993) discusses an individual’s capabilities and freedoms as a form of agency. In line with Giddens’s (1984) structuration theory, agency is present through the interaction of actors and structures (Sen, 1993, p. 30). This research focuses on the structures of institutional hierarchies and describes the nurses’ agency as one that is restrained in the capability and freedom of being in a content state (Sen, 1993, pp. 36-37).

Sen’s approach further describes how agency interacts with different contexts. For example, for someone living in poverty, their priority is likely to be attaining basic capabilities such as being well-fed or having shelter (Sen, 1993, p. 31). Sen (1993, p. 32) refers to such a process of categorising an individual’s priorities as a dominant ranking of value objects which occurs in an evaluative space. If this is applied to the context of nurses, during the research many had voiced having low or a lack of income, in addition to many’s social settings, where they had to maintain a family. In turn, this could suggest that their capabilities and freedom to focus on other matters of their well-being, such as being content, are hindered by the need to focus on basic capabilities. This exemplifies how achieving certain capabilities is in line with someone's freedom, however, these nurses are forced to focus on their basic capabilities for survival rather than being able to choose to focus elsewhere (Sen, 1993, p. 33).

This is further explained by the relation of capabilities to levels of freedom, one that is not as simplistic, and raises questions about the missed opportunities for freedom (Sen, 1993, p. 33). For example, take a nurse not daring to voice an issue at the workplace for fear of being fired, even though it is possible to do so. In this instance, as that nurse wants to keep their job, is it possible to say that they are at freedom to voice their issues? (Sen, 1993, p. 33). Sen (1993, p.

34) regards freedom and the metric of value to be assessed cohesively. This contradicts other evaluative suggestions of looking at freedom independently from the value given that it relates to the scope of opportunities available to someone (Sen, 1993, p. 34). However, Sen disregards this notion, given that the freedom of a person relates to the options a person can choose from (Sen, 1993, p. 34). Therefore, a person's freedom must be evaluated on the options they have available.

The above-mentioned can be illustrated by an example. During the research, this was given by a one-on-one interview with a male nurse working in the cancer treatment facility, who mentioned that a fellow nurse had voiced their issues in a social media post about the lack of PPE equipment available during COVID-19. The interviewee stated that the nurse was then forced to be relocated to another hospital in what was inferred to be a direct consequence of them voicing their struggles. In the end, a nurse association helped the nurse to maintain their position at their current hospital. Nevertheless, the fear of being fired was present. This situation describes how the nurses' agency is restrained whereby describing their experience with the hospital was overrun by the fear of being jobless. Moreover, this fear can lead to negative socio-economic repercussions, such as lack of income, lack of healthcare, as well as facing the social constructs of being unemployed. This is why nurses are in dire need of conveying their agency and narrative.

The script illustrated the agency structure debate with the nurses trapped inside a structure, metaphorically represented by the elevator. The nurses bring forward instances of trying to voice their agency but being shut down, representing the real-life situations of many. Isaac recalls his journey trying to make a difference through policy and changing the system. Unfortunately, he was caught in structures and faced limited freedom. The structure he was in acted as a prison and led to a situation of duress where he was faced with constraint and a lack of support to work past it. He had little room to manoeuvre past his position, as he was faced with multiple actors forming part of the system. In his case, like many, not only did this include facing restraint and adversity from governmental bodies, but also hospital supervisors, and patients, as well as a lack of support from officials and counsellors for his physical and mental well-being. Ultimately, this led to a restraint on his agency, whereby he conformed to the system that was difficult to change, gave up on his determination to transform it, and created his duress. He became the administrator he once 'dreaded' and

started acting adverse toward his junior nurses, consequently fostering the duress or constraining environment of the structural system.

Relating this to the capability approach, Isaac's attempts of utilizing his agency for policy-making are linked to a sense of functioning. In the capability approach, Sen (1993, p. 38) refers to capability as "a space of functionings". Sen focuses on capability as a form of an integrated approach looking at the possible combinations of functionings one can choose. Hence, this integrated approach can look at the achievement of well-being and the freedom for well-being hand in hand, where the former relies on realized functionings, and the latter on a combination of functionings from one's capabilities (Sen, 1993, p. 39). This is highlighted given the possible inherent value of a person's freedom for their well-being attainment, in allowing for them to be freely available to choose in their capabilities (Sen, 1993, p. 39). In the context of nurses, the research suggests that nurses have to relinquish liberty because they have to provide for themselves and their families and live with corruption. By accepting their environment and situation they become victims of the structure, having detrimental effects on their agency and focus on their well-being. In the structure of the nurse environment, as was displayed in the script, it is often unattainable in the eyes of the nurses to escape the structures. The interplay between the structure and agency, encapsulated in the script, hardly leaves the nurses with room to manoeuvre and leads to a sense of duress.

This concept is explained by the model of duress. De Bruijn and Both (2018, p. 186) use the concept as an analytical lens to describe the hardships that people in situations of conflict have endured, focusing on West and Central Africa. In this regard, duress pertains to instances of conflict, threat, or violence, as well as other actions used to coerce an individual into doing something unwillingly or against their judiciousness (Bruijn and Both, 2018, p. 189). When the model is applied to the situation of the nurses in Kenya, similar conceptual references can be identified. In this instance, the notion of duress focuses on the constraining factors. For example, during the outbreak of the pandemic, the number of deaths experienced by nurses at unprecedented rates could be linked to resembling situations of conflict. The resulting trauma from the deaths and the lack of effective support available to deal with such is a resembling factor of the hardships nurses experience. Furthermore, when these hardships form a part of a system that has been deeply rooted for years, the hardship expands in layers,



and becomes an internalized factor of its actors, who continue to pass it on, as illustrated by the example of Isaac (Bruijn and Both, 2018, p. 192).

As de Bruijn and Both (2018, p. 187) describe, these situations often lead them to have little to no choice, if one can refer to such as a choice, to resort to other coping mechanisms. Thus, in situations, as faced by the nurses who submit to their agency, many may resort to outlets as depicted in the script such as moving countries, alcoholism, abusive or detached behaviour, suicide, and self-harm, as depicted by Wawira, Isaac, and his wife, as well as Ojwang in the initial acts respectively. All in all, the model of duress adds a layer of understanding to the constraints that structure poses on the agency of the nurse, one where the agency is particularly hindered in situations of hardships (Bruijn and Both, 2018, p. 194). In turn, when faced with such adversity, it often takes a significant change from a source external to oneself, such as illustrated in the script by the suicide leading to Ojwang and Fatuma's involvement in well-being coaching, which switches the way an individual senses the way out.

Altogether, this chapter elaborates on the meaning of well-being as described by Sen (1993) and the importance of the agency - or interaction of the nurses with the structure for their well-being. Illustrations extracted from the script present situations where nurses succumbed to their structures, leading to detrimental consequences for their agency. This reality of the nurses serves to explain why the nurses' well-being is at a loss, and only with a significant change at a structural level can there be a change in direction. Nevertheless, the occurrence of such must continue to happen alongside local efforts, that is Kenyan political bodies, companies, or organisations that work to encourage well-being. The following chapter describes the involvement of nurses in several programmes set to improve well-being.

# A sense of a way out: Inuka and other support efforts for nurses' well-being

This chapter delves into the well-being support efforts for nurses in Kenya. Firstly, it details and contextualises Inuka's mental health pilot N4N, as well as other activities that were noted during the FGDs. Quantitative analysis also complements these findings to delve into 'why is nurses' well-being still at a low despite local efforts against this?'.

Inuka is a well-being coaching company that started a pilot by the end of 2021 to provide mental health support to the nurse community in Kenya with a grant received from the Johnson & Johnson Foundation (Inuka, 2021c). The pilot aims to reach 4,000 nurses in the first year and scale up to 70,000 of the total nurses' workforce in Kenya. As described by Inuka (2021c) the social impact pilot would help address nurses "who are dealing with unprecedented mental and emotional strain following the increased workload due to Covid-19 patients and also low wages, limited governmental support, and resources."

Their rollout in Kenya is based on evidence-based results from published research of the pilot cohort study on the delivery of problem-solving therapy (PST) via community health volunteers (CHV) (Doukani et al., 2021). The study used a Self-Reporting Questionnaire (SRQ) based on the WHO's guidelines, which was used as an evaluation of the well-being status of participants. Common mental disorders (CMD) were measured using the reporting tools. Their research results showed significant improvement across time as recorded on the SRQs. CMDs improved particularly among males, people over the age of 30, those who had not reported idealisation of suicide, and those that had reportedly higher income (Doukani et al., 2021, pp. 1, 6).

Using a task-shifting approach, as utilized by Inuka, has been in line with the WHO's recommendation for improving the workforce in low-resource countries (Doukani et al., 2021, pp. 1, 4). This refers to the redistribution of tasks among health workers where specific tasks are shifted from highly qualified nurses to health workers with less training in an

attempt to more efficiently utilise the human resources available (WHO, 2008). For the N4N pilot, this would include using nurses as coaches, which would allow for the nurses as non-specialist workers to deliver PST, a strategy which was found to reduce symptoms of trauma, depression, and anxiety disorders in low and middle-income countries (Doukani et al., 2021, p. 2). This includes examples in SSA, such as the example of the Friendship Bench in Zimbabwe, a project led by the co-founder of Inuka, which significantly improved CMD through community grandmothers delivering PST (Chibanda et al., 2016).

In Kenya, further examples of local efforts to promote well-being can be illustrated by the words of Kevin, a male nurse who works in a public facility maternity ward. During the FGDs, notes of the discussion he led included his access to “counsellors... [or] creative activities like [a] choir to sing and relieve tension... [as well as] Zumba as a way to reduce anxiety and psychological trauma which you see working with patients.” Further discussion clarified that the choir was present as a support method before COVID-19, and Zumba was hosted by the nursing council of Kenya (a government entity and regulatory body for the training and practising of nursing). The practice of coffee or tea being given out was also described as a volunteer and facility-based programme. Likewise, participants discussed a Toll-Free Line was established in partnership with a local equity bank with all the associations for medical providers (including the Kenyan medical association, pharmaceuticals society of Kenya, Kenya laboratory association, Koza city [a government ICT project], and the NNAK). Furthermore, a nurse involved in the project detailed that the money invested in the project was used for staff and promotion. However, many like Kevin expressed wanting more from the support programmes. Thus, despite the local efforts towards well-being, further theoretical knowledge illuminates possibilities as to why the nurses’ well-being is still low and relates these to structural problems.

To add to this, quantitative analysis was conducted to provide context to nurses’ socio-economic realities. From the collection of the survey results (see Appendix D for descriptive results of the sample), an exploratory analysis was conducted using linear regression and binary logistic regression. The results on the following were *not* significant: 1) gender on perception of mental health; 2) age on perception of mental health; 3) facility-level on the perception of mental health; 4) years of practising nurse on expenditure; 5) age on involvement in support programmes; and 6) years of practising nurse on involvement in support programmes (see more in Appendix D). Linear regression was used to test one to four

and binary logistic regression to test the two latter. The justification for focusing on the effects of each varied. For the first three, the independent variables tested their effects on the perception of mental health, as factors such as gender and age commonly have a varied effect on mental health perception, thus it was also interesting to test for the effects of the facility level. The fourth tested whether the years of practising being a nurse affected expenditure as it was disclosed that after a certain amount of years, nurses may start to earn more, thus possibly leading to less expenditure. Lastly, for the final two, the effect of age was tested on the involvement in the planning of support programmes for the same reason as on mental health perception and also used the years practising as a nurse given that people who have been practising for longer may have felt more assertive in their position to be involved in such groups.

On the other hand, the following effects *were significant*: 7) having dependents on expenditure; and 8) perception of mental health on involvement in support programmes. The former was used as having dependents may be a reason to be spending more money on basic needs such as food and better shelter, and the latter was used as those who thought that there was higher stigmatization may be more inclined to want to work in support programmes. The results below further analyse these.

The effects of having dependents on expenditure were analyzed using standard linear regression. The results showed that the effects *were significant*.  $B = .72, SE = .25, \beta = .33, p = .006$ , explaining 11.2% of the variance in expenditure. This was such that having dependents significantly increased expenditure, compared to not having dependents.

In addition, the effects of the perceived perception of mental health in the workplace on the involvement in the planning of support programmes were analyzed using a binary logistic regression model. The results showed that the effects *were significant*:  $\chi^2(1, N = 66) = 4.064, p = .044$ , explaining 8.4% (Nagelkerke R2) of the variance in the outcome. This was such that participants who believed well-being to be more stigmatised than accepted in the workplace were more likely to be involved in the planning of a support programme than not be involved.

Altogether, the regression analyses showed interesting results. However, it must still be taken into consideration that the small sample size (N=66) can be seen as potential criticism meaning the findings might not be as robust because of such. It is also not possible to determine causality from cross-sectional data. Yet, the results from the sample size show considerable socio-economic results regarding expenditure and involvement in support programmes, which can be taken into consideration for future well-being efforts for nurses. Ultimately, the quantitative results are tied together with the qualitative data and support the findings, leading to a final discussion and conclusion.

To conclude this chapter, the qualitative findings of FGDs are emphasised where nurse participants described thinking that many of the support activities are not enough in supporting their well-being. This is despite quantitative results that show that those that believe mental health is still stigmatized at their workplace are more involved in the planning of such support programmes. Thus, I argue that my further research on the restraining structure and agency environment for nurses in Kenya acts to mitigate this knowledge gap on why nurses may not feel like the support activities are enough, despite their willingness to be involved in them.

# Conclusion: Navigating nurses' well-being and prospects

This chapter delves into 'how are my arguments on why nurses' well-being is at a low contextualized in the thesis?'. The thesis outlines the overarching themes and examples presented throughout the thesis. The incorporation of these credits the support mechanisms working on the individual level, but also paves the way for the attention needed to have a structural change in the system and the overall importance for the two to work together.

## Discussion

A trend among well-being efforts is that they currently focus on the individualistic. In other words, they focus on helping the nurses at an individual level rather than focusing on the system as a whole. The examples of local efforts to spur well-being among nurses, referring to those that are enacted by Kenyan organisations, companies, or the government include coaching, Zumba, choir, coffee breaks, and appreciation payments during COVID-19, and can be seen as immediate responses to help with the nurses' well-being. The coaching programmes as seen in the example of Inuka can be seen from the research to add a layer of response, whereby the programme addresses a series of complexities within the realm of well-being in SSA. For example, coaching trains non-skilled individuals which allows for cost-effective and faster results. They are also effective in addressing various aspects of the nurses' needs, which include someone to talk to and maintain confidentiality and anonymity.

However, the issue pertains, and the nurses' well-being is still at a low level despite the local efforts against this. This brings me to the structure-agency debate. The results showed that nurses' well-being efforts are constrained by a systematic structure, which is exacerbated by the duress that is endured from a socio-economic and political perspective in the workplace and the overall realities of the nurses (Bruijn and Both, 2018). Such hardship often results in nurses turning to other outlets as coping mechanisms, which can end in devastating losses as

the script illustrated. On the other hand, for some, an occurrence may cause a shift of thinking among the nurses, changing their perception of the way out of the structural duress they live in. The occurrence of COVID-19 can be seen as such an event, given that the nurses endured deaths at traumatic rates in addition to losing many of the staff to several suicides. This event can be used as an explanation for many of the recent local efforts to mitigate nurses' strain and why many nurses are hanging onto their agency and hoping to bring about change. For this to succeed, the research looks at how the well-being of the nurses exists in a continuum between the local efforts towards nurses wellness and the issues of structure-agency present by the nurses and their workplace as well as the health sector of Kenya at large. Thus, I argue that local well-being efforts are not able to succeed without change in the agency-structure interplay of the nurses. Local efforts towards nurses' well-being must exist in parallel to structural changes that allow for positive responses among the nurses' agency. For example, through further inclusion of nurses in policy-making to get more staff or better pay.

Furthermore, this wicked problem (see Rittel and Webber, 1973) is heightened by the interlink of well-being as described through the lens of capabilities and freedom. As many nurses are focusing their capabilities on the attainment of basic needs such as providing food and shelter for themselves and their families (also described in the quantitative results, see the effects of dependents on expenditure), this exacerbates a barrier to the achievement of more complex functionalities such as happiness (Sen, 1993, pp. 36-37). Moreover, their agency is likely to be further suppressed by the missed opportunities for freedom, whereby nurses may be more fearful of speaking up against institutional wrongdoing because of fear of getting fired or suffering similar consequences. Altogether, the well-being efforts are considered but it is still argued that these programmes can have higher effectiveness if they take into account the creation of broader systemic changes in the institutions of nurses.

Moreover, the qualitative ethnographic approach was used to describe the realities of the nurses living in structures that often constrain their agency, emphasized by their situations of duress. Having discussions with the nurses allowed for a deeper insight into what was appreciated and what was needed or lacking concerning the local efforts for well-being support programmes. However, the results situated my argument on the effects of a larger structural system on the well-being of the nurses. Likewise, the quantitative findings allowed for a description of the sample of nurses as the thesis describes. In particular, it was emphasized how there was significant variance between those who believed there was higher

stigmatization of well-being in the workplace and those who were involved in the planning of well-being support programmes.

Overall, the thesis substantiates the importance of qualitative data. From herewith, future research can delve deeper into the structure-agency debate between nurses and political bodies. Perhaps future research can also gain access to the political structures, to have a better understanding of how to unfold efficiently future local efforts towards well-being. Equally interesting, would be the opportunity to delve further into the discourses on well-being presented in social media by the nurses, and on post-event evaluations of well-being efforts, helping to understand particularities of well-being as described on social media platforms, and the achievements and losses of such local efforts.

## Conclusion

The thesis navigates the well-being of nurses in Kenya and the impact of structural institutions that act as a strain. Insight into the realities of the nurses' lives illustrates the complexity behind the question of well-being. Ultimately, the structural-agency debate answers the main research question: *Why is nurses' well-being at a low despite local efforts against this?* The nurses' agency is hindered by the structures of their workplace and its governing policies. In addition, the realities of the nurses' labour conditions explain the internalization of duress. In turn, the nurses search for different sources of outlet. The script illuminated negative examples of these that are used as coping mechanisms such as self-harm, alcoholism, and violence. This is not to detract from the positive impacts of local efforts that are used to improve nurses' well-being, as well as the positive examples of coping mechanisms that include nurses' involvement in such well-being support programmes, which is particularly the case for those who believe well-being is stigmatised in their workplace (see chapter 7). However, I argue that despite the efforts improve well-being conditions, there must be a structural change in the system whereby local efforts towards well-being are accompanied by national changes within hierarchical structures, to bring about a long-lasting positive impact on the nurses.



Altogether, qualitative and quantitative findings contextualised the structure-agency debate. This has allowed me to argue why nurses' well-being is at a low despite the local efforts made against this. By further focusing on the structures and agency hand in hand with the existing support programmes I argue that nurses' well-being has its well-hoped-for chance at prospering.

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Appendix A

Measurement of Technical Efficiency of Public Hospitals in Kenya (Kirigia et al., 2002, p. 41)

| Model 1. DEA weights model,<br>input-oriented, CRS  | Model 2. DEA weights model,<br>input-oriented, VRS  |
|---|---|
| $\text{Eff} = \text{Max} \sum_r u_r y_{rj_0}$ $u_r, v_i$ <p>s.t.</p> $\sum_r u_r y_{rj} - \sum_i v_i x_{ij} \leq 0; \quad \forall j$ $\sum_i v_i x_{ij_0} = 1$ $u_r, v_i \geq 0; \quad \forall r, \forall i.$ | $\text{Eff} = \text{Max} \sum_r u_r y_{rj_0} + u_0$ $u_r, v_i$ <p>s.t.</p> $\sum_r u_r y_{rj} - \sum_i v_i x_{ij} + u_0 \leq 0; \quad \forall j$ $\sum_i v_i x_{ij_0} = 1$ $u_r, v_i \geq 0; \quad \forall r, \forall i.$ |

Where

- $y_{rj}$  = the amount of output  $r$  produced by hospital  $j$ ,
- $x_{ij}$  = the amount of input  $i$  used by hospital  $j$ ,
- $u_r$  = the weight given to output  $r$ , ( $r = 1, \dots, t$  and  $t$  is the number of outputs)
- $v_i$  = the weight given to input  $i$ , ( $i = 1, \dots, m$  and  $m$  is the number of inputs)
- $n$  = the number of hospital,
- $j_0$  = the hospital under assessment

From Model 2 it is possible to derive scale efficiency, that is whether a hospital is operating on an optimal scale of production or not. Note that<sup>(12)</sup>

$$\text{Scale efficiency score} = \text{CRS TE Score} \div \text{VRS TE Score}.$$

Table 2. “Technical and scale efficiency scores for public hospitals” (Kirigia et al., 2002, p. 42)

**Table II.** Technical and Scale Efficiency Scores for Public Hospitals

| DMU (Hospitals) | Technical efficiency | Scale efficiency | DMU (Hospitals) | Technical efficiency | Scale efficiency |
|-----------------|----------------------|------------------|-----------------|----------------------|------------------|
| Gatundu         | 100                  | 100              | Nanyuki         | 100                  | 100              |
| Tambach         | 100                  | 100              | Chuka           | 100                  | 100              |
| Nandi Hills     | 100                  | 100              | Bungoma         | 100                  | 100              |
| Ngao            | 100                  | 78               | Mt. Elgon       | 100                  | 100              |
| Tigoni          | 100                  | 100              | Gilgil Mental   | 100                  | 100              |
| Kapkatet        | 100                  | 100              | Busia           | 100                  | 100              |
| Karatina        | 100                  | 100              | Homa Bay        | 100                  | 98               |
| Makueni         | 100                  | 100              | Nyahururu       | 100                  | 100              |
| Ishara          | 100                  | 100              | Maralal         | 100                  | 100              |
| Port Reitz      | 100                  | 100              | Kisii Central   | 100                  | 100              |
| Kathiani        | 100                  | 100              | Moyale          | 100                  | 100              |
| Miathene        | 100                  | 100              | Muranga         | 100                  | 100              |
| Kangundo        | 100                  | 100              | Kapsabet        | 100                  | 93               |
| Bondo           | 100                  | 100              | Narok           | 99                   | 97               |
| Makindu         | 100                  | 100              | Musambweni      | 97                   | 100              |
| Naivasha        | 100                  | 100              | Moi (Voi)       | 97                   | 95               |
| Molo            | 100                  | 100              | kinango         | 97                   | 86               |
| Webuye          | 100                  | 100              | Mandera         | 95                   | 96               |
| Transmara       | 100                  | 100              | Ol'Kalou        | 94                   | 97               |
| Elburgon        | 100                  | 100              | Kwale           | 89                   | 91               |
| Kilifi          | 100                  | 100              | Iten            | 86                   | 87               |
| Malindi         | 100                  | 100              | Taveta          | 80                   | 97               |
| Marsabit        | 100                  | 100              | Loitokitok      | 77                   | 97               |
| Meru            | 100                  | 100              | Lodwar          | 70                   | 92               |
| Mathare         | 100                  | 100              | Old Nyanza      | 69                   | 76               |
| Mbagathi        | 100                  | 100              | Hola            | 58                   | 85               |
| Thika           | 100                  | 100              | Lamu            | 54                   | 64               |

## Appendix B

**Table 3. “Participant characteristics and trauma exposure assessed at baseline” (Bryant et al., 2017, p. 10)**

| Characteristic or exposure                     | PM+ (n = 209) | EUC (n = 212) | t (P value)  |
|--|---------------|---------------|--------------|
| Age, mean (SD)                                 | 35.2 (14.1)   | 35.9 (12.7)   | 0.57 (0.57)  |
| Education, mean (SD)                           | 8.7 (3.6)     | 8.2 (4.2)     | 1.20 (0.23)  |
| <b>Marital status, n (%)</b>                   |               |               | 0.68* (0.98) |
| Single   | 25 (12.0)     | 30 (14.1)     |              |
| Married  | 122 (58.4)    | 119 (56.1)    |              |
| Divorced/separated                             | 42 (20.1)     | 45 (21.2)     |              |
| Widowed  | 20 (9.5)      | 18 (8.5)      |              |
| <b>Working, n (%)</b>                          | 104 (49.8)    | 108 (50.9)    | 0.12* (0.73) |
| <b>Suicidal intention in past month, n (%)</b> | 50 (23.9)     | 35 (16.5)     | 2.80* (0.09) |
| <b>LEC total, mean (SD)</b>                    | 7.0 (3.2)     | 6.7 (3.3)     | 0.75 (0.45)  |
| <b>LEC event, n (%)</b>                        |               |               |              |
| Disaster                                       | 118 (56.5)    | 102 (48.1)    |              |
| Fire   | 123 (58.8)    | 116 (54.7)    |              |
| Road accident                                  | 121 (57.9)    | 110 (51.9)    |              |
| Serious accident                               | 97 (46.4)     | 105 (49.5)    |              |
| Chemical exposure                              | 70 (33.5)     | 70 (33.0)     |              |
| Physical assault                               | 155 (74.2)    | 153 (72.2)    |              |
| Assault with weapon                            | 104 (49.8)    | 95 (44.8)     |              |
| Sexual assault                                 | 59 (28.2)     | 72 (34.0)     |              |
| Unwanted sexual contact                        | 59 (28.2)     | 63 (29.7)     |              |
| War exposure                                   | 59 (28.2)     | 59 (27.8)     |              |
| Kidnapped                                      | 43 (20.6)     | 38 (17.9)     |              |
| Life-threatening illness                       | 109 (52.1)    | 103 (48.6)    |              |
| Witness violent death                          | 103 (49.3)    | 98 (46.2)     |              |
| Unexpected death of loved one                  | 159 (76.1)    | 157 (74.1)    |              |
| Intimate partner violence                      | 153 (73.2)    | 152 (71.7)    |              |
| <b>Baseline score, mean (SD)</b>               |               |               |              |
| GHQ-12   | 19.1 (6.0)    | 18.8 (5.9)    | 0.39 (0.69)  |
| PCL  | 33.7 (19.7)   | 31.5 (18.9)   | 1.2 (0.24)   |
| WHODAS   | 28.0 (7.5)    | 27.2 (7.2)    | 1.1 (0.26)   |
| PSYCHLOPS                                      | 16.6 (3.2)    | 16.4 (3.3)    | 0.67 (0.50)  |

\*Chi square test.

EUC, enhanced usual care; GHQ-12, 12-item General Health Questionnaire (range 0–36; higher scores indicate elevated anxiety or depression); LEC, Life Events Checklist; PCL, Posttraumatic Stress Disorder Checklist (range 0–80; higher scores indicate greater severity); PM+, Problem Management Plus; PSYCHLOPS, Personalized Outcome Profiles (range 0–20; higher scores indicate poorer outcome); WHODAS, WHO Disability Adjustment Scale (range 0–48; higher scores indicate more severe impairment).

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**Table 4. “Estimated mean scores for primary and secondary outcome measures at baseline, posttreatment, and 3-month follow-up for women with a history of gender-based violence.” (Bryant et al., 2017, pp. 12-13)**

| Category                               | Outcome  | PM+<br>(n = 209) | Enhanced usual care<br>(n = 212) | Estimated mean difference<br>from baseline | P value              | Effect size<br>(95% CI)    |
|--|--|------------------|----------------------------------|--|----------------------|----------------------------|
| <b>Primary outcome</b>                 | <b>GHQ-12</b>                                  |                  |                                  |  |                      |                            |
|  | Baseline, mean (95% CI)                        | 19.4 (18.5–20.3) | 18.5 (17.6–19.4)                 |  |                      |                            |
|  | Posttreatment, mean (95% CI)                   | 10.9 (9.9–12.0)  | 13.9 (12.9–15.0)                 | 3.91 (2.40–5.42)                           | 0.001                | 0.67 (0.41 to 0.93)        |
|  | 3-month follow-up, mean (95% CI)               | 8.7 (7.6–9.7)    | 11.0 (10.0–12.1)                 | 3.33 (1.86–4.79)                           | 0.001                | <b>0.57 (0.32 to 0.83)</b> |
| <b>Secondary outcomes: continuous</b>  | <b>PCL</b>                                     |                  |                                  |  |                      |                            |
|  | Baseline, mean (95% CI)                        | 33.9 (30.9–36.9) | 31.5 (28.5–34.5)                 |  |                      |                            |
|  | Posttreatment, mean (95% CI)                   | 9.7 (7.1–12.3)   | 14.4 (11.8–17.0)                 | 7.13 (3.22–11.03)                          | 0.001                | 0.37 (0.17 to 1.03)        |
|  | 3-month follow-up, mean (95% CI)               | 6.6 (4.4–8.8)    | 8.2 (4.4–8.8)                    | 3.95 (0.06–7.83)                           | 0.05                 | 0.26 (0.02 to 0.50)        |
|  | <b>WHODAS</b>                                  |                  |                                  |  |                      |                            |
|  | Baseline, mean (95% CI)                        | 28.1 (26.0–28.2) | 27.0 (25.9–28.1)                 |  |                      |                            |
|  | Posttreatment, mean (95% CI)                   | 18.3 (17.1–19.5) | 20.5 (19.3–21.7)                 | 3.26 (1.49–5.03)                           | 0.001                | 0.44 (0.20 to 0.68)        |
|  | 3-month follow-up, mean (95% CI)               | 16.3 (15.1–17.4) | 17.2 (16.1–18.2)                 | 1.96 (0.21–3.71)                           | 0.03                 | 0.21 (0.00 to 0.41)        |
|  | <b>PSYCHLOPS</b>                               |                  |                                  |  |                      |                            |
|  | Baseline, mean (95% CI)                        | 16.6 (16.0–17.2) | 16.5 (15.9–17.1)                 |  |                      |                            |
|  | Posttreatment, mean (95% CI)                   | 9.5 (8.6–10.4)   | 12.6 (11.7–13.5)                 | 3.20 (2.09–4.32)                           | 0.001                | 1.00 (0.65 to 1.35)        |
|  | 3-month follow-up, mean (95% CI)               | 8.5 (7.6 to 9.5) | 10.6 (9.6–11.5)                  | 2.15 (0.98–3.32)                           | 0.001                | 0.67 (0.31 to 1.03)        |
| <b>Life Events Checklist</b>           |  |                  |                                  |  |                      |                            |
| Baseline, mean (95% CI)                | 8.9 (8.4–9.5)                                  | 8.6 (8.1 to 9.2) |                                  |  |                      |                            |
| 3-month follow-up, mean (95% CI)       | 7.6 (7.0–8.3)                                  | 7.0 (6.4–7.7)    | 0.31 (0.02–1.23)                 | 0.51                                       | 0.03 (–0.23 to 0.15) |                            |
| <b>Secondary outcomes: categorical</b> | <b>Psychological morbidity based on GHQ-12</b> |                  |                                  |  |                      |                            |
|  | Baseline, n/total (%)                          | 178/209 (85.2)   | 182/212 (85.8)                   |  | 0.36                 | 1.3 (0.7 to 2.2)           |
|  | Posttreatment, n/total (%)                     | 60/168 (35.7)    | 102/175 (58.3)                   |  | <0.001               | 2.5 (1.6 to 3.9)           |
|  | 3-month follow-up, n/total (%)                 | 39/156 (25.0)    | 59/163 (36.2)                    |  | <0.03                | 1.7 (1.0 to 2.8)           |
|  | <b>PTSD diagnosis based on PCL</b>             |                  |                                  |  |                      |                            |
|  | Baseline, n/total (%)                          | 153/209 (73.2)   | 151/212 (71.2)                   |  | 0.89                 | 1.03 (0.7 to 1.6)          |
| Posttreatment, n/total (%)             | 40/164 (24.4)                                  | 51/172 (29.7)    |                                  | 0.28                                       | 1.31 (0.8 to 2.1)    |                            |

(Continued)

**Table 3. (Continued)**

| Category | Outcome                        | PM+<br>(n = 209) | Enhanced usual care<br>(n = 212) | Estimated mean difference<br>from baseline | P value | Effect size<br>(95% CI) |
|----------|--------------------------------|------------------|----------------------------------|--|---------|-------------------------|
|          | 3-month follow-up, n/total (%) | 28/155 (18.1)    | 24/163 (14.7)                    |  | 0.41    | 0.78 (0.4 to 1.4)       |

P values for continuous measures refer to between-group differences in change from baseline. P values for categorical measures refer to between-group differences at each assessment. Continuous outcomes are based on estimated mean values derived from HLM analyses. Categorical outcomes are based on treatment completers. Calculated mean differences differ marginally from absolute differences between estimated means because the estimated mean differences are derived from HLMs.

GHQ-12, 12-item General Health Questionnaire (range 0–36; higher scores indicate elevated anxiety or depression); HLM, hierarchical linear model; PCL, Posttraumatic Stress Disorder Checklist (range 0–80; higher scores indicate greater severity); PM+, Problem Management Plus; PSYCHLOPS, Personalized Outcome Profiles (range 0–20; higher scores indicate poorer outcome); PTSD, posttraumatic stress disorder; WHODAS, WHO Disability Adjustment Scale (range 0–48; higher scores indicate more severe impairment).

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## Appendix C

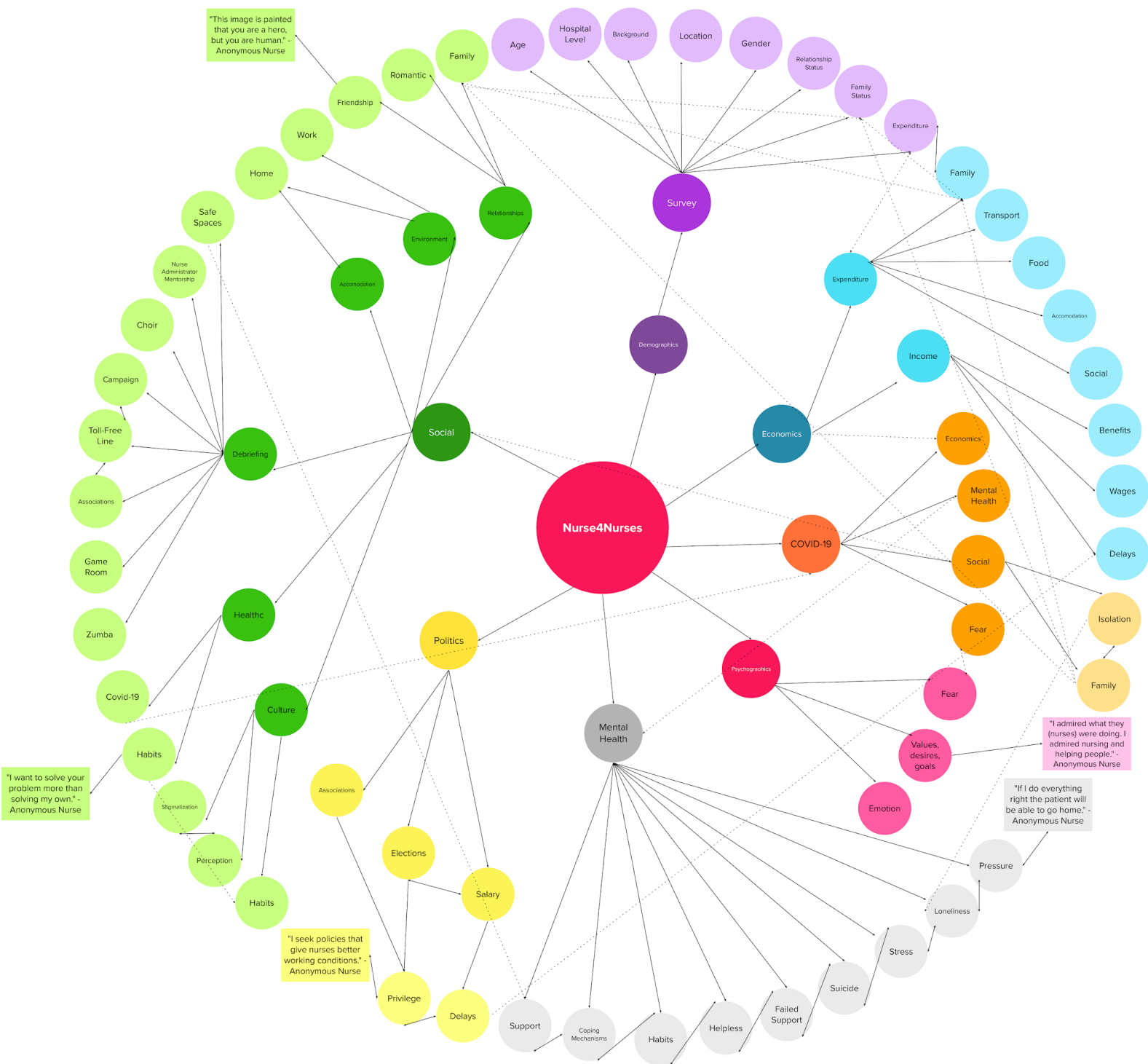
**Table 5. Themes and frequency of codes attached to quotes from the nurse interviewees during FGDs**

|                      |                        | <b>Frequency</b> | <b>Percent (%)</b> |
|----------------------|------------------------|------------------|--------------------|
| <b>Mental health</b> | Failed support         | 27               | 19.71              |
|                      | Support                | 8                | 5.83               |
|                      | Helpless               | 24               | 17.52              |
|                      | Loneliness             | 17               | 12.41              |
|                      | Pressure               | 49               | 35.77              |
|                      | Stress                 | 9                | 6.57               |
|                      | Suicide                | 3                | 2.19               |
|                      | Total                  | 137              | 100                |
| <b>Psychographic</b> | Emotion                | 23               | 46                 |
|                      | Fear                   | 13               | 26                 |
|                      | Values, desires, goals | 14               | 28                 |
|                      | Total                  | 50               | 100                |
| <b>Social</b>        | Culture                | 38               | 24.84              |
|                      | Family                 | 17               | 11.11              |
|                      | Friends                | 7                | 4.58               |
|                      | Health                 | 6                | 3.92               |
|                      | Home environment       | 2                | 1.31               |
|                      | Work environment       | 79               | 51.63              |
|                      | Relationship           | 4                | 2.61               |
|                      | Total                  | 153              | 100                |

**Table 6. Code table consisting of examples for different themes (Full table not available due to protection from harm of the participants due to sensitive subject)**

| <b>Code Name</b>                           | <b>Description</b>   | <b>Example of excerpts from FGDs transcripts</b>   |
|--|--|--|
| Mental Health - Failed support             | When a support programme does not appear to be working among nurses.   | I knew [the counsellors] were there but in my head, they were for the patients only, not for me. I was not oriented that they were there to help me.   |
| Mental Health - Support                    | An illustration of a support programme among nurses.   | I work in a psychiatric hospital, so they are more responsive to our needs. It's not completely free, you have to pay, but you are offered sessions with a counsellor or guide.  |
| Mental Health - Helpless                   | When nurses feel like they are not helped.   | You don't have anyone around to help you navigate any problems.  |
| Mental Health - Loneliness                 | When nurses feel like there is no one to turn to during shifts or outside of work.                             | Sometimes I share with family but no one really understands. They discuss their own stress in return and we only confront each other. Sharing of problems is a no-go zone.   |
| Mental Health - Pressure                   | When nurses feel like there is a lot of tasks piling up, or that there are high expectations demanded of them. | There is 1 nurse for 50 patients and we are under pressure to do the right thing. Our senior bosses have very high expectations. They want you to be perfect.  |
| Mental Health - Stress                     | Example of stress.   | They all find it normal to feel stressed.  |
| Mental Health - Suicide                    | When nurses brought up the matter of suicide.  | We have an example from last year, where a nurse committed suicide. He had been employed for almost 6 years and for 6 months received no salary.   |
| Psychographic - Values, desires, and goals | Relating to something that inspires nurses.  | I had the heart to help, be compassionate, and give back to the sick.  |
| Social - Culture                           | Something that nurses grew up with or see as standard around them.   | It is not in our upbringing. Mental health it's not something we really talk about.  |
| Social - Family                            | When mentioning relations to family.   | The worst moment was around 2020. Nobody wants you at home. "Have you taken the tests", asked my mother. I had to cancel the flight and had a complete mental breakdown.   |
| Social - Work environment                  | When describing situations at work.  | During your day you contact deaths and abuses, and they influence your mental health. They just see it as part of your day, then it is part of your week, your month, and something you get used to. One is overwhelmed being surrounded by people and deaths. |

**Figure 2. Visual representation of themes**



## Appendix D

### Descriptive results

**Table 7. Descriptive results**

|                           |                                    | <b>Frequency</b> | <b>Percent (%)</b> |
|---------------------------|------------------------------------|------------------|--------------------|
| <b>Gender</b>             | Female                             | 48               | 72.7               |
|                           | Male                               | 18               | 27.3               |
| <b>Age cluster</b>        | 20-29                              | 28               | 42.4               |
|                           | 30-39                              | 31               | 47.0               |
|                           | 40-49                              | 5                | 7.6                |
|                           | 50 and above                       | 2                | 3.0                |
| <b>Marital status</b>     | Divorced                           | 1                | 1.5                |
|                           | Married                            | 35               | 53.0               |
|                           | Separated                          | 1                | 1.5                |
|                           | Single                             | 29               | 43.9               |
| <b>Dependent children</b> | No                                 | 17               | 25.8               |
|                           | Yes                                | 49               | 74.2               |
| <b>Expenditure %</b>      | 30                                 | 12               | 18.2               |
|                           | 50                                 | 12               | 18.2               |
|                           | 70                                 | 33               | 50.0               |
|                           | 100                                | 9                | 13.6               |
| <b>Level of facility</b>  | Level 1 Community Facility         | 0                | 0.0                |
|                           | Level 2 Health Dispensary          | 5                | 7.6                |
|                           | Level 3 Health Centre              | 8                | 12.1               |
|                           | Level 4 County Hospital            | 17               | 25.8               |
|                           | Level 5 County Referral Hospital   | 25               | 37.9               |
|                           | Level 6 National Referral Hospital | 11               | 16.7               |
| <b>Participants Total</b> |                                    | 66               | 100.0              |

## Regression analysis

1) **Gender on the perception of mental health.** The effects of gender on the perceived perception of mental health in the workplace were analyzed using standard linear regression. The results showed that the effects were *not* significant.  $B = .06, SE = .30, \beta = .03, p = .835$ .

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics |     |     | Durbin-Watson |       |
|-------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|-------|
|       |                   |          |                   |                            |                 | F Change          | df1 | df2 |               |       |
| 1     | .026 <sup>a</sup> | .001     | -.015             | 1.081                      | .001            | .044              | 1   | 64  | .835          | 1.610 |

a. Predictors: (Constant), Howdoyouidentify

b. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df | Mean Square | F    | Sig.              |
|-------|------------|----------------|----|-------------|------|-------------------|
| 1     | Regression | .051           | 1  | .051        | .044 | .835 <sup>b</sup> |
|       | Residual   | 74.812         | 64 | 1.169       |      |                   |
|       | Total      | 74.864         | 65 |             |      |                   |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

b. Predictors: (Constant), Howdoyouidentify

**Coefficients<sup>a</sup>**

| Model |                  | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t      | Sig.  | 95.0% Confidence Interval for B |             | Correlations |         |      | Collinearity Statistics |       |  |
|-------|------------------|-------------------------------|------------|--------------------------------|--------|-------|---------------------------------|-------------|--------------|---------|------|-------------------------|-------|--|
|       |                  |                               |            |                                |        |       | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part | Tolerance               | VIF   |  |
| 1     | (Constant)       | 2.938                         | .156       |                                | 18.824 | <.001 | 2.626                           | 3.249       |              |         |      |                         |       |  |
|       | Howdoyouidentify | .063                          | .299       | .026                           | .209   | .835  | -.534                           | .659        | .026         | .026    | .026 | 1.000                   | 1.000 |  |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

2) **Age on the perception of mental health.** The effects of age on the perceived perception of mental health in the workplace were analyzed using standard linear regression. The results showed that the effects were *not* significant.  $B = .12, SE = .18, \beta = .08, p = .522$ .

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics |     |     | Durbin-Watson |       |
|-------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|-------|
|       |                   |          |                   |                            |                 | F Change          | df1 | df2 |               |       |
| 1     | .080 <sup>a</sup> | .006     | -.009             | 1.078                      | .006            | .414              | 1   | 64  | .522          | 1.585 |

a. Predictors: (Constant), Whatisyouragecluster

b. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility



**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df | Mean Square | F    | Sig.              |
|-------|------------|----------------|----|-------------|------|-------------------|
| 1     | Regression | .482           | 1  | .482        | .414 | .522 <sup>b</sup> |
|       | Residual   | 74.382         | 64 | 1.162       |      |                   |
|       | Total      | 74.864         | 65 |             |      |                   |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

b. Predictors: (Constant), Whatisyouragecluster

**Coefficients<sup>a</sup>**

| Model |                      | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  | 95.0% Confidence Interval for B |             | Correlations |         |      | Collinearity Statistics |       |  |
|-------|----------------------|-----------------------------|------------|---------------------------|-------|-------|---------------------------------|-------------|--------------|---------|------|-------------------------|-------|--|
|       |                      | B                           | Std. Error | Beta                      |       |       | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part | Tolerance               | VIF   |  |
| 1     | (Constant)           | 2.755                       | .337       |                           | 8.178 | <.001 | 2.082                           | 3.428       |              |         |      |                         |       |  |
|       | Whatisyouragecluster | .116                        | .181       | .080                      | .644  | .522  | -.245                           | .478        | .080         | .080    | .080 | 1.000                   | 1.000 |  |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

3) **Facility level on the perception of mental health.** The effects of facility-level on the perceived perception of mental health in the workplace were analyzed using standard linear regression. The results showed that the effects were *not* significant.  $B = .02, SE = .12, \beta = .02, p = .895$ .

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics |     |     | Durbin-Watson |       |
|-------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|-------|
|       |                   |          |                   |                            |                 | F Change          | df1 | df2 |               |       |
| 1     | .017 <sup>a</sup> | .000     | -.015             | 1.081                      | .000            | .018              | 1   | 64  | .895          | 1.617 |

a. Predictors: (Constant), Whatlevelisyourfacility

b. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df | Mean Square | F    | Sig.              |
|-------|------------|----------------|----|-------------|------|-------------------|
| 1     | Regression | .021           | 1  | .021        | .018 | .895 <sup>b</sup> |
|       | Residual   | 74.843         | 64 | 1.169       |      |                   |
|       | Total      | 74.864         | 65 |             |      |                   |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

b. Predictors: (Constant), Whatlevelisyourfacility

**Coefficients<sup>a</sup>**

| Model |                         | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  | 95.0% Confidence Interval for B |             | Correlations |         |      | Collinearity Statistics |       |
|-------|-------------------------|-----------------------------|------------|---------------------------|-------|-------|---------------------------------|-------------|--------------|---------|------|-------------------------|-------|
|       |                         | B                           | Std. Error | Beta                      |       |       | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part | Tolerance               | VIF   |
| 1     | (Constant)              | 2.885                       | .540       |                           | 5.346 | <.001 | 1.807                           | 3.963       |              |         |      |                         |       |
|       | Whatlevelisyourfacility | .016                        | .118       | .017                      | .133  | .895  | -.220                           | .251        | .017         | .017    | .017 | 1.000                   | 1.000 |

a. Dependent Variable: Whatistheperceptionofwellbeinginyourfacility

4) **Years of practicing nurse on expenditure.** The effects of the years practicing being a nurse on expenditure were analyzed using standard linear regression. The results showed that the effects were *not* significant.  $B = .00, SE = .02, \beta = .00, p = .979$ .

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics |     |     | Durbin-Watson |       |
|-------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|-------|
|       |                   |          |                   |                            |                 | F Change          | df1 | df2 |               |       |
| 1     | .003 <sup>a</sup> | .000     | -.016             | 0.952%                     | .000            | .001              | 1   | 64  | .979          | 2.037 |

a. Predictors: (Constant), HowlonghaveyoubeenapracticingnursePleaseroundofftow

b. Dependent Variable: Approximatelywhatpercentageofyourincomedoyouspendonyou

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df | Mean Square | F    | Sig.              |
|-------|------------|----------------|----|-------------|------|-------------------|
| 1     | Regression | .001           | 1  | .001        | .001 | .979 <sup>b</sup> |
|       | Residual   | 57.954         | 64 | .906        |      |                   |
|       | Total      | 57.955         | 65 |             |      |                   |

a. Dependent Variable:

Approximately what percentage of your income do you spend on you

b. Predictors: (Constant), How long have you been a practicing nurse Please round off to

**Coefficients<sup>a</sup>**

| Model |   | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  | 95.0% Confidence Interval for B |             | Correlations |         |      | Collinearity Statistics |       |  |
|-------|---|-----------------------------|------------|---------------------------|--------|-------|---------------------------------|-------------|--------------|---------|------|-------------------------|-------|--|
|       |   | B                           | Std. Error | Beta                      |        |       | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part | Tolerance               | VIF   |  |
| 1     | (Constant)  | 2.587                       | .178       |                           | 14.545 | <.001 | 2.232                           | 2.943       |              |         |      |                         |       |  |
|       | How long have you been a practicing nurse Please round off to | .000                        | .017       | .003                      | .026   | .979  | -.033                           | .034        | .003         | .003    | .003 | 1.000                   | 1.000 |  |

a. Dependent Variable: Approximately what percentage of your income do you spend on you

5) **Age on involvement in support programmes.** The effects of age on the involvement in the planning of support programmes were analyzed using a binary logistic regression model. The results showed that the effects were *not* significant:  $\chi^2(1, N = 66) = 2.170, p = .141$ .

**Omnibus Tests of Model Coefficients**

| Step   | Step  | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step  | 2.170      | 1  | .141 |
|        | Block | 2.170      | 1  | .141 |
|        | Model | 2.170      | 1  | .141 |

**Model Summary**

| Step | -2 Log likelihood   | Cox & Snell R Square | Nagelkerke R Square |
|------|---------------------|----------------------|---------------------|
| 1    | 80.395 <sup>a</sup> | .032                 | .045                |

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

6) **Years of practising nurse on involvement in support programmes.** The effects of the years practising being a nurse on the involvement in the planning of support programmes were analyzed using a binary logistic regression model. The results showed that the effects were *not* significant:  $\chi^2(1, N = 66) = .984, p = .321$ .

### Omnibus Tests of Model Coefficients

| Step   |       | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step  | .984       | 1  | .321 |
|        | Block | .984       | 1  | .321 |
|        | Model | .984       | 1  | .321 |

### Model Summary

| Step | -2 Log likelihood   | Cox & Snell R Square | Nagelkerke R Square |
|------|---------------------|----------------------|---------------------|
| 1    | 81.581 <sup>a</sup> | .015                 | .021                |

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

7) **Having dependents on expenditure.** The effects of having dependents on expenditure were analyzed using standard linear regression. The results showed that the effects *were significant*.  $B = .72, SE = .25, \beta = .33, p = .006$ , explaining 11.2% of the variance in expenditure. This was such that having dependents significantly increased expenditure, compared to not having dependents.

### Model Summary<sup>b</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics |     |     | Sig. F Change | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            |                 | F Change          | df1 | df2 |               |               |
| 1     | .334 <sup>a</sup> | .112     | .098              | 0.897%                     | .112            | 8.061             | 1   | 64  | .006          | 2.196         |

a. Predictors: (Constant), DoyouhaveanydependentsChildren

b. Dependent Variable: Approximatelywhatpercentageofyourincomedoyouspendonyou

### ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df | Mean Square | F     | Sig.              |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1     | Regression | 6.483          | 1  | 6.483       | 8.061 | .006 <sup>b</sup> |
|       | Residual   | 51.472         | 64 | .804        |       |                   |
|       | Total      | 57.955         | 65 |             |       |                   |

a. Dependent Variable:

Approximatelywhatpercentageofyourincomedoyouspendonyou

b. Predictors: (Constant), DoyouhaveanydependentsChildren

### Coefficients<sup>a</sup>

| Model |                                | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  | 95.0% Confidence Interval for B |             | Zero-order | Correlations |      | Collinearity Statistics |       |
|-------|--------------------------------|-----------------------------|------------|---------------------------|-------|-------|---------------------------------|-------------|------------|--------------|------|-------------------------|-------|
|       |                                | B                           | Std. Error | Beta                      |       |       | Lower Bound                     | Upper Bound |            | Partial      | Part | Tolerance               | VIF   |
| 1     | (Constant)                     | 2.059                       | .218       |                           | 9.466 | <.001 | 1.624                           | 2.493       |            |              |      |                         |       |
|       | DoyouhaveanydependentsChildren | .717                        | .252       | .334                      | 2.839 | .006  | .212                            | 1.221       | .334       | .334         | .334 | 1.000                   | 1.000 |

a. Dependent Variable: Approximatelywhatpercentageofyourincomedoyouspendonyou

8) **Perception of mental health on involvement in support programmes.** The effects of the perceived perception of mental health in the workplace on the involvement in the planning of support programmes were analyzed using a binary logistic regression model. The results showed that the effects *were significant*:  $\chi^2(1, N = 66) = 4.064, p = .044$ , explaining 8.4% (Nagelkerke R2) of the variance in the outcome. This was such that participants who

believed well-being to be more stigmatized than accepted in the workplace were more likely to be involved in the planning of a support programme than not.

**Omnibus Tests of Model Coefficients**

|        |       | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step  | 4.064      | 1  | .044 |
|        | Block | 4.064      | 1  | .044 |
|        | Model | 4.064      | 1  | .044 |

**Model Summary**

| Step | -2 Log likelihood   | Cox & Snell R Square | Nagelkerke R Square |
|------|---------------------|----------------------|---------------------|
| 1    | 78.501 <sup>a</sup> | .060                 | .084                |

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.