BODIES OF KNOWLEDGE

CHILDREN AND CHILDHOODS
IN HEALTH AND AFFLICTION

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CHAPTER 8

“MAKING A PLAN TO KEEP MY BABY”: NAVIGATING MATERNAL HEALTH POLICY AMONG SOUTH AFRICAN MINEWORKERS

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Introduction

As the chapters in this book make clear, childhood is often understood as a particular phase of maturation, and yet as a lived construct, it is far more slippery. This final chapter asks the reader to grapple with the mercurial aspects of childhood as a social category that begins to take shape in the womb. Historically, scholars have not considered the gestational life of the foetus as a part of childhood because of the often-prickly debate between prolife and prochoice research and advocates.¹ However, there has been a growing new international interest in the first thousand days of a child's life as somehow formative if not predictive (Pentecost et al., 2018; Pentecost & Ross, 2019), in the sense that discussing life in these early stages is less about questions of morality and more about how the environment (both external and internal) shapes the concourse along which life might be grown. The project is not only gaining traction in childhood studies, but is also being

1 For a thorough review of the historical framings of this debate, see Mary Ziegler's work titled, *'The Framing of a Right to Choose: Roe v. Wade and the Changing Debate on Abortion Law'*. Whilst this account traces the debate in American law there are some overlaps that can be extended to included global shifts in the debate. In terms of positioning the discussion in Africa, Chiweshe Malvern and Catriona Macleod in their incisive article, *'Cultural De-colonization versus Liberal Approaches to Abortion in Africa: The Politics of Representation and Voice'*, situate the debate along lines of ontological merit, engaging in a much needed critical overhaul of how we can reimagine the discussion of reproductive health rights in Africa.

used to guide public health policy both at an international and local level (Bust & Pedro, 2020; Darling et al., 2020; Department of Health, South Africa, 2013; Thurow, 2016). The ‘first thousand days’ concept was coined in 2008 after a *Lancet* Series on Maternal and Child Undernutrition recommendation aimed at focusing nutrition interventions from the period of a child’s conception until the age of two years (Bryce et al., 2008; Pentecost & Ross, 2019). The ‘first thousand days’ refers to the period from conception to the toddler’s second birthday. The concept is based on the premise that the first thousand days is a critical window period for a child’s development. Healthy nutrition and cognitive development within this window is vital in shaping individual and population health outcomes over time, hence, how well or how poorly mothers and children are nourished and cared for during this time has a profound impact on a child’s ability to grow, learn and thrive (Schwarzenberg & Georgieff, 2018; Darling, et al., 2020; Wrottesley, Lamper & Pisa, 2015). For example, poor nutrition within this period can potentially cause irreversible damage to a child’s cognitive development and increase the likelihood of adult-onset diseases such as cardiovascular diseases, diabetes, and in this case study, toxic stress that has later harmful impacts (Levine, this volume).

At a local level, the South African government has mobilised resources through various campaigns, from 2013 that are directed at ending early life malnutrition and drawing attention to the importance of investing in early childhood development (Bust & Pedro, 2020; Department of Health, South Africa, 2013, Pentecost, 2017). Michelle Pentecost and Fiona Ross (2019) in their article, *‘The first thousand days: Motherhood, scientific knowledge, and local histories’*, note that the interventions implemented throughout the country comprise of a perinatal nutrition package that includes both vertical strategies to target maternal and child undernutrition and behaviour or ‘lifestyle’ modification tools adopted from disease management frameworks. The South African government has made many attempts to intervene in securing maternal and infant well-being including, most importantly, the prevention of mother-to-child transmission. While policies are important in framing rights and potential health benefits, the fit between ideals and people’s material circumstances is often at odds. As I show in the case of women who mine, policies aimed at protecting foetal life may be incongruent with how women imagine child-centred worlds.

It is the position of the first thousand days scholarship, adopted here, that allows me, although written through the experience of mothers, to frame how environmental conditions impact the gestational life of embryos in order to build onto and expand how representations of childhood and youth are shaped through critical decisions mothers make during the gestational period. This chapter draws on ethnographic research in 2016 conducted in Phokeng, Rustenburg, the heart of the platinum mining industry in South Africa. Rustenburg is a town about 130km north-west of Johannesburg and is a global centre of platinum mining. It has two of the largest platinum mines in the world and the world's largest platinum refinery, which processes around 70% of the world's platinum. The chapter illustrates how mining makes mineworkers vulnerable or susceptible to various occupational health-related problems, particularly reproductive health-related problems, that can arise from exposure to toxic chemicals whilst mining underground and which can potentially be harmful to their health and the health of the foetus. While there is a growing body of literature that demonstrates the toxic effects of underground work for women and fetuses (Best Start, 2011; Bezuidenhout, 2006; Chen, 2012; Dorman & Boudreau-Larivière, 2012), less research has considered how women make decisions regarding the future well-being of their babies. As I show, they make trade-offs between exposures in the present and social well-being in the future. Mining companies are required to adhere to legislation such as that in the Employment Act, Health and Safety Acts, and National Health Act that are designed to ensure health and well-being. But, as I show, the unintended consequence of the implementation of these policies may lead to forms of precarity and vulnerability; where female mineworkers evade mining policies which put their health and the health of their unborn babies at risk.

This chapter highlights the complex political economic realities and multiple forms of vulnerabilities faced by female mineworkers pertaining to their experiences of pregnancy. These include how pregnancy, mining policies, the fear of being economically redundant, motherhood and the in-utero experience shape one another. I argue that pregnant mineworkers often 'make a plan' by evading mining policies that are designed to ensure both their own and their developing foetus' safety in order to secure financial security for the baby's upkeep in the future. I demonstrate that these decisions are a reaction to broader forces and the structural violence that constrains them. I do this by illustrating how mining policies pertaining to pregnancy, specifically the threat of 'being sent home',

operate as forms of legitimate yet invisible sanctions that are used against the miner. Drawing on Johan Galtung's idea of structural violence, I argue that issues of systematic oppression are in fact expressions of violence. Galtung's notion of violence allows us to conceptualise and understand violence's multiplicity of forms rather than it being exclusively in physical form; he encourages scholars "to think of violence beyond billy clubs, batons and barricades" (Galtung in Ditts et al., 2012:1920). This approach also invites us to confront the ways in which violence is 'built into' structures, institutions, ideologies and histories, shaping experiences in ways that may not be immediately apparent. Galtung (1969:171) understands structural violence as 'silent', noting, "it does not show – it is essentially static, it is the tranquil waters". In this description he is acknowledging the often unnoticed or taken-for-granted structures. In this case Galtung's theory can be used to highlight how taken for granted structures, such as mining policies, affect livelihoods and experiences of pregnancy and childhood. His approach looks at the roots of violence rather than solely at the visible effects of it. Galtung (1969:168) emphasises that "Violence is present when human beings are being influenced so that their actual somatic and mental realisations are below their potential realisations". He (1969:168) further adds: "the systematic constraint on human potential due to economic and political structures", shows up in unequal power and consequently as unequal life chances. It is important to note that the health care and employment policies aimed to secure maternal and infant well-being are actually aimed at undoing violence. That is, they are a real and important attempt to reframe and equalise life chances. But they ignore/underestimate the structuring effects of violence. In an attempt to escape or cope with these legitimated forms of violence, women evade mining policies. However, this places them in a vicious cycle of invisible violence. Boycotting these mining policies exposes these women to another form of violence – slow bodily violence that could harm their babies and their children's children. It was through my careful ethnographic attention to the women's intention of evading mining policies that it became apparent that children are imagined by miners and enacted long before the baby is actually born. Female mineworkers made concrete decisions as to whether to work above or below ground. This provides an insightful perspective on the type of care work that is done by a mother (mineworker) into imagining a child and imagining the best future possible for that child before the child. This study highlights the challenges that women in mining face in an attempt to keep their babies and forge a healthy childhood for them.

Contextualising women in mining and gendered risks

Since the inception of South Africa's formal mining industry in 1866, when gold was discovered on the Witwatersrand, the mining sector has primarily favoured the employment of male migrant workers (Butchart, 1996; Musonda, 2020). Although women remain a minority in the mining industry, the history of their involvement within the industry can be traced back to centuries ago. Historically, women have been allocated subordinate positions or placed in lower-rank activities in mining companies as cleaners or administrators (Badenhorst, 2009; Botha & Cronje, 2015; Musonda, 2020). Underground mining has always been portrayed as a highly risky occupation, suitable for men and not women (Benya, 2009). As argued by Dutt and Macintyre (2006) in their study *'Women Miners in Developing Countries. Pits and Others'*, the heavy manual nature of mine work, combined with the risk and dirt that is associated with the job, arguably made men better suited for the job. In addition, various labour laws prohibited women from working underground, in efforts to protect women from harsh underground conditions. Furthermore, having to work in closed-quarters to men underground heighten their exposure to gender-based violence. For example, the South African Minerals Act of 1991 banned women from working underground (Simango, 2006). However, in efforts to gain ground on the challenges of unequal access to labour opportunities, the Mineral and Petroleum Resources Development Act (MPRDA) of 2002 replaced the latter law and opened underground occupations to women (Benya, 2009). In addition, the first Mining Charter was implemented in 2004, which was founded on the core aspects of the MPRDA, to introduce and ensure the full incorporation of women into this historically male-dominated sector. To further increase women's participation within the mining sector, the Mining Charter set a goal that required women to comprise at least 10% of any mining company's workforce by 2009 in an attempt to create employment for those who are classified as 'historically disadvantaged South Africans', as well as to promote gender equality. According to Benya (2009), the target of 10% set by the Mining Charter is taken seriously by mining companies as their renewal operating licences are directly linked to how they score on this criterion. As a result, since the promulgation of the MPRDA and the first Mining Charter, the number of women has increased considerably from 3% in 2004 to an overall of 20% in 2019 (Chamber of Mines, 2019).

The platinum mining sector employs a considerable number of female mineworkers in South Africa. In 2019, reports show that approximately 19,694 female mine-workers were employed within the platinum mining sector, most of them being employed in Rustenburg (Chamber of Mines, 2019). The majority of the women who are recruited to work underground throughout the platinum industry are of childbearing age (Dlamini, 2016). The proportion of such workers is not inconsiderable: Impala Platinum, for example, estimates that between 6-7% of underground female mineworkers are pregnant at any given time (Benya, 2009). Given the risk that is associated with mining (see below), mining companies are legally obligated to provide a safe working environment to women who are of reproductive age, their unborn children and all mineworkers who are breastfeeding.

There are a number of laws and Acts that ensure that mineworkers are protected against discrimination by mining companies. First, the South African Constitution Section 9(4) and the Employment Equity Act, section 6, stipulate explicitly that no employee may be discriminated against on the grounds of pregnancy. Secondly, the Basic Conditions of Employment Act, 1997 (Act No. 75 of 1997), section 25, ensures that a pregnant employee is entitled to at least four (4) months' consecutive maternity leave. Section 26(1) reads that no employer may require or permit a pregnant employee or an employee who is nursing her child to perform work that is hazardous to her health or the health of her child. The Act furthermore in Section 26(2) states that during an employee's pregnancy, and for the period of six months after the birth of her child, her employer must offer her suitable, alternative employment on terms and conditions that are no less favourable than her ordinary terms and conditions of employment, if:

- o the employee is required to perform night work, as defined in section 17(1) or her work poses a danger to her health or safety or that of her child; and
- o it is practicable for the employer to do so.

Nevertheless, while there have been major advancements in making the mining industry more inclusive of women, especially in terms of occupational roles, the establishment of gender equity within this sector remains one of the biggest

challenges. These challenges include shift work,² sexual harassment, acceptance by male workers, physical constraints³ and lack of adequate infrastructure facilities like (toilets underground and access to safety equipment) (Botha & Cronjé, 2015). Women mineworkers are exposed to the various hazards due to the nature of their occupation. Furthermore, Hermanus (2007) points out that female mineworkers face greater risks to their safety in comparison to their male counterparts because most of the supportive infrastructure such as personal protective equipment (PPE), heavy mining machinery, tools and equipment are not designed for a woman to use. In addition, Badenhorst (2009:63) points out that the female body differs physically and biologically from that of men in the sense that the female body can become pregnant and thus the safety of two persons – the mother and baby with very specific risks – must be considered. Pregnancy and breastfeeding are considered the two major challenges mining companies need to address when incorporating women into the mining workforce.

The intersections between underground working and pregnancy

Literature demonstrates that mining significantly elevates the risk of a pregnant or nursing miner contracting reproductive health problems (Badenhorst, 2009; Butchart, 1996; Best Start, 2011; Bezuidenhout, 2006; Dorman & Boudreau-Larivière, 2012). Mining is observed to pose a "significant concern about the potential effects of occupational exposure to chemical substances, physical, ergonomic and biological hazards on reproductive outcomes" (Badenhorst, 2009:55). Dorman and Boudreau-Larivière (2012) argue that mining exposes a miner to a range of reproductive hazards that affect primarily those who are of reproductive age. Reproductive health hazards are defined as agents that have

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- 2 According to my observations of the female mineworkers they are primary care givers for their families. In many instances it is very difficult for females to achieve a good work/life balance because of the mining industry's constraints in terms of flexibility, remote site work and juggling child care with often unsociable hours and expectations of overtime.
 - 3 Women in mining often face a series of partial problems which makes it difficult for them to carry on their daily jobs. The protective gear and machinery, which is designed for men's bodies, makes it very difficult for female mineworkers to use. In addition, some of the tasks are difficult to perform due to the physical differences that exist between women and men. Women have smaller physical work capacity and physical strength in comparison to their male counterparts and thus they are more likely to experience undue physiological strain when performing prolonged and strenuous physically demanding tasks (<https://bit.ly/3iQmIhW>).

the potential to adversely affect the reproductive health of miners, which can have a negative impact on the growth and development of a foetus (Best Start, 2011). Reproductive abnormalities include birth defects, a miscarriage or chromosomal defects. In addition, post-genomic research suggest that the human genome is responsive to environmental factors in ways previously unanticipated by genomic sciences, including in modification of gene expression, and that there may be heritable effects to such expression. This raises questions about the body's permeability and about the lasting effects of environmental factors of many kinds on individuals, populations, and populations yet-to-come. Many argue that the mothers are seen as 'vectors' for foetal risk (Daniels, 2006; Richardson, 2015). A mother's lifestyle, behaviours and even dietary choices are observed to not only affect the immediate development of the foetus but also longer-term development, including in terms of propensity to obesity, diabetes and other conditions currently characterised as 'chronic conditions of lifestyle'. The danger of reproductive hazards is in their invisibility. The impact is not known until the baby is born and, in some instances, problems can be passed on to future generations. It is also important to note that the majority of the literature is drawn from cases of women coal miners in Canada (Badenhorst & Platinum, 2009; Best Start, 2011). The full extent to which platinum mining affects the reproductive health of female mineworkers remains unknown, particularly in South Africa.

Physical hazards

Mine work is associated with hard physical labour, thus strenuous activity of a pregnant employee is considered to increase the risk of injury and miscarriage. In addition, the long strenuous activity, combined with the fact that women have to stand for prolonged hours can have serious health effects – potentially causing medical conditions such as deep vein thrombosis⁴ or varicose veins⁵ (Dorman & Boudreau-Larivière, 2012). Furthermore, mine work also requires mineworkers to operate heavy machinery and tools that often vibrate which can cause the

4 Deep vein thrombosis (DVT) occurs when a blood clot (thrombus) forms in one or more of the deep veins in your body, usually in your legs. Available at <https://mayoclinic.org/2WqUVYw>. [Accessed 9 August 2021].

5 Varicose veins occur when one's veins become enlarged, dilated, and overfilled with blood. Varicose veins typically appear swollen and raised, and often have a bluish-purple or red colour. Available at <https://bit.ly/3iVZRMJ>. [Accessed 9 August 2021].

placenta to detach from the uterus, resulting in a miscarriage or a preterm delivery (Badenhorst, 2009). The vibrations may also reduce uterine blood flow⁶ (Oshu & Okazawa, 1994). Exposure to these vibrations is likely to increase the risk of the pregnant mineworker developing pre-eclampsia (Haelterman et al., 2007).

Working conditions underground expose the mineworker to extreme heat, with temperatures that range from 27 to 30 degrees celsius. Bortha and Cronje (2015) claim that constant exposure to high occupational heat loads can lead to several serious complications among miners. While this is a non-gendered aspect complication, being pregnant or nursing an infant exacerbates complications associated with extreme heat. Some of the complications noted among pregnant workers are lethargy and fatigue, as well as heat stress complications which can trigger heat strokes, which can be fatal in some instances (Bortha & Cronje, 2015). Extreme heat can also have negative effects on the foetus, resulting in developmental abnormalities such as a neural tube, heart and abdominal wall defects (Dorman & Boudreau-Larivière, 2012). Prolonged exposure increases the risk of foetal distress as well as spontaneous abortion (miscarriage).

Chemical hazards

Various chemicals, such as carbon monoxide, lead, hydrogen sulfide, cadmium, arsenic, nitrates, nitrites, organic nitro compounds, nitrogen oxides, and nitrogen dioxide, are used to extract platinum ore, and pose a great risk to the health of the mother and her unborn child (Dorman & Boudreau-Larivière, 2012; Botha & Cronjé, 2015). These pass readily from maternal blood through the placenta to the foetus, and may result in chromosomal abnormalities, hypoxia,⁷ reduction in foetal growth and preterm delivery (Badenhost, 2009). Furthermore, exposure to the above chemicals that are associated with mining can result in spontaneous abortion, stillbirth delivery or early postnatal death. In addition, biomedical literature on epigenetics⁸ illustrates that exposure to hazardous or radioactive

6 The blood that flows to the uterus.

7 A term used to describe the amount of oxygen reaching the tissue.

8 Epigenetics is the study of heritable changes in gene expression; however, it does not involve changes to the underlying DNA sequence. Available: <https://bit.ly/3gpwEJF>

chemicals whilst pregnant can result in epimutations.⁹ Skinner et al's (2014) work on epigenetics illustrates that epimutations can persist for several generations. For example, an experiment conducted on rats exposed to methoxychlor or vinclozolin (hazardous chemicals) whilst in the womb were observed to pass on epimutations to the fifth generation of rats (Skinner et al., 2014). The implications are profound: If a pregnant mineworker is exposed to hazardous or radioactive chemicals, it can result in epimutations of their children and their children's children, creating a vicious cycle of generational bodily violence.

How mining policies materialise into the rhythms of day-to-day life

Mining presents a range of potential reproductive risks to the female employee (Dorman & Boudreau-Larivière, 2012). However, the topic remains under-researched making it difficult for mining companies to formulate regulatory policies that both ensure gender equity whilst protecting the reproductive health of female mineworkers. To accommodate for the invisible nature of harm that mining poses to the pregnant mineworker, mining policies stipulate that when a female mineworker discovers that she is pregnant, she must immediately report the pregnancy to the Human Resource shift manager who will then look for alternative employment (Company Pregnancy Policy), usually on the surface, where working conditions are not considered to be risky, as required in terms of rights to well-being described in Section 26 of the Constitution.

However, according to my research, participants' alternative jobs are not always possible or available. At times, the number of pregnant women exceeds the number of available alternative jobs on the surface. Many of my research participants claim that if there is no alternative employment, pregnant mineworkers are sent home until they give birth, a finding supported by Benya's (2009) research into women in mining and occupational cultures in mines. Benya (2009) observed that at times women can be sent home for nearly 10 months if they report their pregnancy during the first trimester and there is no alternative employment. According to her they stay home for eight months until they give birth, after which they stay home for a period of two to three months to breastfeed as women are not

9 Epimutations are defined as epigenetic aberrations, typically defined as those that predispose individuals to cancer through soma-wide changes in the expression of the afflicted gene.

permitted to work underground whilst breastfeeding, as infants may be exposed to toxic metals through breastfeeding. According to the claims of my research participants, if a woman falls pregnant and is sent home until she gives birth (given the fact there is no alternative employment) she will only be compensated for four months of maternity leave, as stipulated by the Basic Conditions of Employment Act (BCEA) of 1997, Section 25. These unfair discriminatory practices against pregnant women in the platinum mining sector are not just unique to the experiences of my research participants, but they also echo the experiences of many female mineworkers within this sector, although these issues are often swept under the carpet. In a recent court case, *Impala Platinum Ltd versus Jonase and Others* (2018), the presiding CCMA (Commission for Conciliation, Mediation and Arbitration) Commissioner found that the company had unfairly discriminated against two of its pregnant employees when two employees were removed from their work stations underground and were not given alternative positions. As a result, the two Impala Platinum employees were forced to take six months' unpaid maternity leave/suspension whilst waiting for their paid maternity leave after giving birth (Salt & Lindhorst, 2018). During the hearings the Commissioner remarked:

The truth of the matter is that it is the duty of the employer to provide employees with a safe working environment, however, that does not mean that employees should be prejudiced or disadvantaged in the process. I agree with the employer that it is risky to allow pregnant employees to work underground but I disagree with the fact that an employer can direct employees to take unpaid leave where it is unable to secure an alternative. I am of the view that the employer's failure to find alternatives was unfair to employees and that constitutes discrimination as the sole reason for the failure is the employees' pregnancy. The employer is actually saying those who fall pregnant would do that at their own peril as there is no guarantee that an alternative will be found, and that cannot be condoned.

Given the economic repercussions of being sent home until one gives birth, female mineworkers are often put in a difficult position where they have to choose between their rights to employment, economic stability, and reproductive health and potentially their own health and that of their unborn baby. I shall draw on my field notes further to illustrate the challenging position that pregnant mineworkers find themselves in:

They [the mining company] tell you all of this gender what, what. They tell you when you get the job that you will never be discriminated for bearing life and that their polices and staff will do their best to ensure

provisions for pregnant women. But I have come to learn that despite this gender inclusivity nonsense, as a woman there is a time in your life, that you will be put in a disadvantaged situation in your career because you bear life. That is just the way life works dear. If you want blame someone blame God for making you a woman. Mo Athi pauses for a moment, deep in thought as she observes Kasime rubbing her belly. She sinks herself into the multi-coloured scatter cushions on the sofa with a sudden exhaustion. I probe a little further and ask her when and how she came to this realisation. To which she responds by saying, "For me, it was that moment was when I told my HR manger that I was pregnant with my first child. Do you know what he asked me? He asked me if I was going to get an abortion." The veins along her forehead and throat begin to bulge out as she gets infuriated.

A fuckin' abortion, '*mogopolô o wa boso*' (meaning crazy idea in Setswana). At times, I want to be angry at that guy. How could he be so cold hearted and so insensitive? But the goodness in me thinks he probably asked me this question to see if I was ready for the repercussions; the possibility of 'being sent home'... I think he did me a favour by asking me that question. I thought long and hard about what he said, I was sooo excited to have my first child that I had not even thought about what would happen if I was sent home before the time to take paid maternity leave. That's when I realised how naïve I had been to trust the mining companies and their policies to keep my baby and me safe. I realised that if I was forced to take early maternity, there was the possibility that I would not be able to afford bringing this child into the world. You see it was either having my baby or potentially giving up my paycheck. It's a tricky situation but ultimately the choice is yours and you will have to live with that. We cannot do it all, be mothers and not suffer in the workplace because of it.

These are the concerns raised by Mo Athi,¹⁰ who has been working at Kruger Platinum for over 12 years. According to her and her work colleagues, she was one of the first female miners (a rock drilling operator) to work in Shaft 16. Her concerns highlight that mine work, mining policies and their implementation, and pregnancy are not mutually compatible. Women who become pregnant often fear the economic repercussions that are associated with pregnancy, as is the case for many women in different industries (Best Start, 2001). Pregnant women fear that they may 'be sent home' until they give birth. The notion of 'being sent home' causes great anxiety amongst mineworkers, not only because of their immediate contexts but because of the historical and cultural underlay associated with the fear of being sent home. The South African mining industry, over the

10 Given the sensitive nature of this research I have made use of pseudonyms to refer to my research participants and the mining company where my research participants work.

past decades has contributed to substantial mortality and morbidity of miners. Charles van Onselen in his book *The Night Trains: Moving Mozambican Miners to and from the Witwatersrand Mines, 1902-1955*, well documents the inordinate suffering of the gold miners. He notes (2019) how the 'three miners' lung diseases intertwined – pneumonia, silicosis and tuberculosis – and led to excessively high death rates among miners. Furthermore, he (2019) grimly highlights how mining companies during the nineties, having squeezed all but the life out of the miners, would politely dispose of miners secretly by sending them back home when they had become redundant as result of ill-health. It is against this historical narrative, that in this context, the phrase offers insight on how mining policies pertaining to pregnancy are often comprehended by mineworkers, as well as the paradoxical implications they have in the everyday practices of a pregnant mineworker. The fear of being sent home reveals nuanced ideas of the body that have been shaped by mining policies and capital over the last century and a half.

It is against this backdrop, I argue, that according to the miner, bodies are classified into two categories: the efficient labour-producing body and the rejected body that fails to measure up to the standard of the latter category (Butchart, 1996). The rejected body is often observed to be 'sent home to die'. The phrase being 'sent home to die' is one that has been used in popular media to describe the South African mining industry's historical legacy whereby a mineworker who has contracted incurable and highly infectious TB (described as 'treatment failures'), silicosis and other lung diseases, is discharged from mining hospitals to die at home, putting friends, family and people in their community at risk of catching the disease, and placing the burden of care on their families (Rabe, 2018; Naidoo, 2020). For example, epidemiologist, Jonathan Smith, in his 60-minute documentary *They Go to Die* (which investigates the life of former migrant gold mineworkers in southern Africa who have contracted drug-resistant tuberculosis (TB) and HIV while working at the gold mine), uses the phrase 'sending them home to die' as a way of describing how miners have been made redundant and disposed of when they are too sick to work (Mazotta, 2011). Jaine Roberts, in her research for the Health Systems Trust, which evaluated the functioning of the Occupational Disease in Mines and Works Act 78 of 1973 as Amended (ODMWA), assessed the current and historical monitoring of occupational lung diseases in former miners. She defines 'being sent home' as a synonym for words like 'retrenchment' or 'redundancy' (Roberts, 2009a). This phrase can be extended to

the other occupational lung diseases such as silicosis which cannot be cured. In *Broke and Broken: The Shameful Legacy of Gold Mining in South Africa*, Ledwaba and Sadiki (2016) drew on Mthobeli Gangtha's narrative, a miner who was told 'go home and die' to demonstrate how black bodies in a capitalist system are a mere 'body-thing', not even deemed as subjects but like animals. In March 2001 Mthobeli Gangtha went on leave, and when he returned and underwent the mandatory fitness test he was told, "Look here, stop wasting our time... Don't even think of trying to find work through TEBA40 because you will never be able to work again. Just go back home and wait to die" (Ledwaba & Sadiki, 2016:35). The phrase 'being sent home to die' also illustrates how miners perceive big mining conglomerates as discarding humans when they are no longer labour-producing bodies.

Although these cases index diseases and debility, the fear of being sent home has a wider resonance and all my research participants expressed their anxiety about it. I will draw on Noma's sentiments to illustrate how this fear is comprehended. Noma is in her mid-forties and has been working on the mines for over a decade. She works as a pipe installation officer, and is responsible for repairing and installing water and gas pipes underground. She is the sole breadwinner for her children and extended family. When I asked her what being sent home looked like, she said:

My uncle fell sick on the mines. I know that a few months after my uncle left the mine, he got really sick. It was bad. I know he was given money, but I am not sure how much. I am assuming it was not much because the mining company gave me his job and I still have to contribute to his medical bills... When he came back home, he was not the uncle I remembered. The man I grew up to know was healthy, fit and full of life. Now I look at him he is so frail, like a living carcass. He struggles to do anything, he even struggles to plough the little vegetable garden at the back of the house. He complains that his chest is heavy. You can see it's killing him; it is only a matter of time. The saddest part is that after all those years on the mine he does not have enough money to pay for the medical expenses, for illnesses that you got from working in the mines. Actually, what will kill him is not having enough money to get the fluid from his chest or lung drained. I wonder at times; will this also be my fate?

The sick miner becomes categorized as a reject who is sent home either permanently with incurable disease or temporarily with pregnancy. In both scenarios, being sent home has serious immediate economic repercussions for

the miner and their families. It demonstrates that the material consequences of policy pertaining to health, the experiences of ill health and pregnancy, often have the potential to trigger economic instability in a miner's life.

This should prompt us (scholars, policy advertisers and mining companies) to radically reshape the manner in which we understand health in relation to mining and the health-seeking behaviour of mineworkers. Here, we see how the threat of 'being sent home' is associated with invisible gendered inequalities that further disadvantage women in the mining realm. Because men do not fall pregnant, they do not face the risk of financial instability as a result of their reproductive and paternal responsibilities. The outcome of this fear results in mineworkers concealing their pregnancies in an attempt to maximise or accommodate their economic needs. I shall draw on my field notes to demonstrate how mineworkers' experiences of pregnancy is affected by the fear of being sent home and its association with economic instability.

One day I had accompanied Kasime and her sister to the shop Baby City to do some last-minute shopping before the arrival of her baby. Kasime now works at Kruger Platinum, Shaft 16. At the time of the research, she was eight months pregnant and working on the surface as an administrator rather than in her usual job as a winch operator underground. As we walk around the shop, she picks up a small Mickey Mouse Onesie (babygrow). She holds it up for her sister and me to see. Her sister with excitement exclaims, "Yoh, motho waka (my person in Tswana) this is sooo cute, you must definitely get this. I am sure you must be soo excited," to which Kasime responds "Yoh, Tjommie (Afrikaans word for 'my friend')", whilst smiling from ear to ear as she hugs the Onesie in such a ridiculous manner, that her sister and I begin to laugh. She continues to speak: "I think that I might be a bit more excited about this baby than I was my first". I respond by asking what the lowest point in her first pregnancy was. She pauses for a moment and replies:

I remember looking at the two lines on the pregnancy test wondering what the hell I am going to do with a baby. I was going to have a baby, my first child. I am still living with my parents. And how do I even tell my boyfriend then, how do I even call him to tell because I discovered that he was married and had another family. I was so disappointed when I found out I was pregnant, that has to be the lowest point in my pregnancy. I felt stuck. There was also the possibility that if the mining company found out I was pregnant I could be sent home; I was not prepared for that. I am the only breadwinner in the family.

As a result of this potential fear, Kasime concealed her pregnancy until she was nearly five months pregnant as she was still working underground as a winch operator. She strategically concealed her pregnancy by not taking any leave in an attempt to avoid mandatory medical examinations of miners upon return from leave and by wearing oversized overalls and clothing. In addition, she noted that if she needed medical attention she would go to a private physician as opposed to the mining clinic or hospital for free medical attention, incurring personal medical costs.

Similarly, Lerato, a Safety Officer at Kruger Platinum, Shaft 16 concealed her pregnancy in an attempt not to be made economically redundant or to lose income by moving to a lower paid job above ground. She worked until she was six-months pregnant:

I kind of know what the risks are. I know what some of the implications are of working underground and being pregnant. But I had no choice, I can't afford not to work for more than a year and not get paid, that's why I carried on working underground even after I found out I was pregnant. I didn't tell HR. These policies are ridiculous; if I knew that I was guaranteed a job on the surface I wouldn't have done what I did. To follow the rules does not make economic sense so we have to make a plan.

Given the biomedical literature pertaining to risk that is associated with mining and pregnancy, it appears negligent for women to continue working underground whilst pregnant or whilst breastfeeding. This idea of negligent behaviour extends beyond biomedical discourses. For example, when presenting my findings to an urban educated audience I was asked by an exasperated man, "But don't they know the harm they will cause to their baby?" In fact, the women have carefully thought through the implications of working underground whilst pregnant, it is a calculated economic risk, the 'choiceless choice', echoing a well-covered debate on the difficult realities working mothers live through (Edgley, 2021; Okimoto & Heilman, 2012; Luppi & Arpino, 2020). Considering the ways that women understand their roles in providing for their families, it becomes clear that they were engaged in a delicate cost-benefit analysis that forced them to choose between working underground while pregnant, potentially risking their own and their unborn child's health, or failing to bring in sufficient income to meet their household needs because they could not be accommodated in safer work environments. I draw on a snippet of a conversation I had with Noma, as evidence to demonstrate my argument.

Noma pointed out that one of her biggest challenges was being able to afford the best prenatal care for a baby:

Having a baby is expensive. When you are pregnant the mining company refers you to a gynecologist. They give you the list of three of them, the first one on the list you can go to for free the other two on the list you to have to pay an additional fee, its R250 per consultation because it's a private practice. I think that price might even be subsidised by the mining company. With my first child I went to the gynecologist what was free of charge but I learnt my lesson, never again, yho. I had to queue for the gynecologist the whole day and on top of I was not happy with his service. His mind was all over the place, he was very unprofessional. You will also be wondering if he is all over the place, will he be the best doctor to have, will he be able to diagnose my child or me quickly if something is not okay. So, this time I have decided to go to the private doctor for better care, at least with the private care I know that my baby would receive the best health care. This type of care does not come cheap. Imagine if I was sent home and only received four months of pay; this four months' pay would not even be enough to cover my consultation, never mind all the other expenses that come with having babies, diapers, wipes, Purity¹¹ and whatever. Working whilst pregnant for those few months is a small cost to pay when I thought of the bigger picture.

The economic uncertainty that is associated with pregnancy policies was not the only reason that compelled pregnant mineworkers to conceal their pregnancy. Their relationship with their 'baby daddies'¹² often played a role. For example, whilst having a conversation with Thandi, she pointed out that the dynamics she had with both fathers of her children left her with no choice but to work underground whilst pregnant:

When I told my baby daddy that I was pregnant, he completely freaked out. We had only been dating for a few months. He was not interested. He asked if I was going to get an abortion. He went on to tell me that he already had seven kids and that he was not looking to incur another expense of a kid because I had been silly enough to stop taking my contraception pills. After a while I made the decision. I went to tell him that I was going to keep the baby. He was sooo angry, he hit me. He beat me sooo hard that I fell flat on the floor. It is bit of a blur, I think I must have passed out for a moment. Everything happened quickly and the next thing the neighbours had called the police and when I regained consciousness, they were all standing over me. My face was wet as if they had poured cold water on it. They didn't arrest him though, instead they drove me home, well they

11 Baby food

12 A colloquial term to describe the father(s) of one or more of a woman's children, especially one who is not her husband or current partner.

did ask if they should take me to the hospital, but I refused. I was scared. I could not deal with the reality that I might have just lost my child. But with all the craziness and the different emotions that I was going through, I decided. I was going to have this baby and I had to deal with the fact that I am going to raise this child myself. I had to make the decision that I could not expect my baby daddy to contribute financially to this baby's upkeep. I had to just accept that I was by myself and that I would make ends meet. I was not prepared to ask for the help of a man who could treat me like that. I refuse to bring up my child like that... What also makes it worse is that I didn't have the support of my other child's father, he has his own life with more important commitments. If I had that support, I would not have to contemplate working underground whilst pregnant, but as a mother you've got to do what you got to do and put aside your dignity to do what is a best for the unborn baby and the children who are already at home.

Similarly, my research participants pointed out that the absence of fathers in their children's lives and the lack of financial assistance from their baby daddies forced them to work underground whilst pregnant. The decision to work underground because of 'baby daddy issues'¹³ echoes a broader fatherhood crisis that seemingly is prevalent in South Africa. Morrell & Richter (2006) highlight that there are a significant number of fathers in this country who unfortunately do not want to participate in the lives of their children – or even acknowledge the existence of their own children. A study conducted by Human Sciences Research Council (HSRC) and the South African Race Relations Institute (SARRI) found that over the past five years, 60% of South African children have absent fathers, and more than 40 percent of South African mothers are single parents. By comparison, in the United States 25% of mothers are single parents and in the developed world the average is just 15% (Human Sciences Research Council, 2018). South Africa thus has one of the highest global rates of single motherhood. The report notes that issues pertaining to absent fathers and fatherhood are embedded within dynamic family structures and practices, economic realities and historical processes, in which mining played a significant part (Human Sciences Research Council, 2018). The origins of the high rates of absent fathers are an indication of the complexity of South Africa's history. Bertelsmann (2016) notes that apartheid played a fundamental role in damaging the structure of family life in South Africa: without the ability to own land and live close to their low-paying

13 Baby Daddy issues is an informal term generally referring to the trouble women face with the father of their babies/children, the fathers are usually absent in the lives of their babies/children.

jobs, black men were subjected to the migrant labour system that took them away from their families for months or years at a time. Today, geographically disrupted families are still the norm for many South Africans.

Given the sentiments that my research participants have raised, we are seeing intersections of histories, which are themselves a product of the migrant labour system. There is large body of literature that well documents how the system of migrant labour has had a detrimental effect on family life among South Africans, bringing about a spatial fragmentation of the family network (Simkins & Dlamini, 1992; Ramphele, 1993), and its impacts still echo the reality of many families today (Jones, 1992; Smit 2001). Historically, men were separated from their families and that, in the present tense, has given rise to a context in which men are not properly attached in families and as a result women expose themselves to incredible dangers to augment their salaries that may have been provided elsewhere. One could argue that these apartheid policies, in conjunction with discriminatory mining practices/policies, undermine family-making and make women expose themselves to more risk.

Slow Violence

It is at this point that I draw on Rob Nixon's notion of slow violence. Slow violence is defined as "a violence that occurs gradually and out of sight, a violence of destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all" (Nixon, 2011:3). Nixon uses this theoretical concept to highlight the invisibility of strategic challenges that environmental calamities pose. His research demonstrates that the repercussions of present-day environmental degradation – caused by calamities such as warming of the atmosphere, deforestation, radiation or oil spills – will be postponed for years, decades or even centuries. Yet it is not only the environment that is a casualty of this slow violence, but humans who rely on the environment, in particular farmers.

Whilst Nixon's (2011) concept is primarily based on the impact of environmental calamities, it can be used to change the way in which we perceive and respond to mining-related health problems. The narratives of my research participants illustrate how mining policies pertaining to pregnancy often inadvertently place female mineworkers in more vulnerable and precarious situations. Through policy and mining practices they are forced to 'make a plan' to manoeuvre themselves out

of tricky situations to ensure financial stability to be able to care and provide for their children. Paradoxically, their plans to attain the latter goals mean they subject themselves to slow bodily violence, which could negatively affect the health of their children. The implications of their actions are in line with Nixon's argument that the repercussions of slow violence are not immediate or directly visible.

The unjust nature of mining practices forces female mineworkers to inhabit the role of *homo economicus*. Female mineworkers have to become *homo economicus*, to think only in economically rational terms even though this may endanger their unborn baby in the moment. The uncertainty associated with the current mining practices compels women to make decisions they wouldn't have to make if they were guaranteed full pay regardless of whether alternative job can be found or not.

Conclusion

It is evident that the lived reality of being pregnant and being a mother whilst working underground, and the experiences of the foetus in the womb are embedded in the larger matrix of culture, history and the political-economic relations of mining (Kruger, 2020). By drawing on the narratives of five female underground miners, this chapter has illustrated the multiplicity of risks and violence that are clustered together and act synergistically in some individuals, resulting in various forms of precarity and precariousness, which both shape and impact on how women understand the relation between their maternal and their working roles. From biomedical and occupational health and safety literature pertaining to the risks associated with mining and pregnancy, it appears 'negligent' for women to continue working underground whilst pregnant or whilst breastfeeding. The idea of negligent mothering fails to take into account all the uncertainties and disruptions that punctuate female mineworkers' lives in terms of being able to care for their children. It fails to take into account the ordinary aspects of life and mothering that 'become brutal' because the institutions that are meant to be caring become violent and cruel (Kruger, 2020). This idea of 'negligent behaviour' extends beyond biomedical discourse. I argue that the notion of 'making a plan' by concealing their pregnancy whilst working underground is a sacrifice, a sign of love and an attempt by women to gain their dignity from the very institutional structures that in many cases render them powerless, vulnerable, disposable and

places them in precarious situations. In a context that decent supportive pregnancy infrastructures and policies and in which economic stability may quickly become happenstance, female mineworkers take calculated risks. Finding themselves in a limited zone, where they have to choose between their reproductive health and financial stability, women's decision-making on behalf of their babies requires that they make decisions in terms of an economically rationalist model; in effect, and ironically, making them *homo economicus*.

By drawing attention to the ways in which pregnant women make decisions in contexts where they are undermined by existing work policy and practice, I have demonstrated the significance of context for an understanding of how mothers are complicit in the making of childhoods prior to the physical birth. My approach insists that we can further understand childhood by taking account of how people imagine familial futures and act in relation to them. I have drawn attention to the modes through which those futures are made possible and the risks that people run in crafting them.

I had just finished changing baby Omps' diaper after a hot day spent in company with Kasime and her newborn baby when Kasime said, "I want so much for you, my love. I want you to have opportunities I never had. I will work hard for you my only sunshine not to become a miner like me."

Postscript

I dedicate this chapter to all the brave and phenomenal female mineworkers I have met whilst doing my fieldwork. Thank you for expanding my Masters research beyond the scope of academia. Through this research process I have sisters and family for life, lessons on life and the lessons of the harsh reality of motherhood. The most valuable life lesson I have learnt from you phenomenal women is that often our destiny as women is in the shadow of men. We are constantly condemned for thinking for ourselves, being ourselves, for owning our experiences, our bodies and our lives. Yet despite these condemnations, you have managed to gather all this energy around you and match with the realisation that this life is yours. Sorting out your life through 'making a plan' entails the risk of being misunderstood, perceived as ignorant, a bad mother and broken. I have watched you sort out your lives and honestly it takes a certain kind of bravery. This bravery gives you the courage to own your own agency, to own your desires, to own your fear and to own your own destiny.

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