COVID-19 PANDEMIC IN SOUTH AFRICA
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Preface

The Covid-19 pandemic has without doubt been the biggest disruptor to our lives ever since the second World War. No territory has been spared the impact of the SARS-Cov-2 and its various impacts. Whether these are health related with the number of cases or death, direct and indirect – most health systems have been tested for something they were never designed for. Economically many countries, even the wealthiest of these have suffered the brunt of the SARS-Cov-2. Due to lockdowns in various guises across the world many industries have suffered with economic growth being severely compromised and unemployment rising to unprecedented levels.

In South Africa the first case was reported in early March in Kwazulu-Natal and this was followed by the first death towards the end of that month, just as our lockdown was beginning. At the time little was known about how it will impact our population. Only the experience of China and the emerging crisis in Europe was there to guide us. The contrast with SARS-Cov-1 is marked. This disease spread to only about 30 countries and infected about 8500 person with just under 1000 fatalities. Whilst SARS-Cov-2 is less fatal it has spread to more countries and is exposed to more people than the former. The fact that we need to deal with asymptomatic cases, cases that show no symptoms but that can pass the infection onto another person is at the heart of the challenge of establishing exactly how many cases we might have. The reporting and classification of fatalities also poses the same problem in determining the number of deaths. Many estimates or forecasts of the pandemic have failed mostly because they did not take the unique demography and epidemiology of the country into account.

It is abundantly clear that the demography of the country has been severely impacted by this pandemic. From a fertility point of view questions are abound as to whether there will be a change to fertility patterns that have been noted in the past. In particular, have adolescent pregnancies which represent one of the more vulnerable groups, shown an increase. Has access to reproductive health services been impacted? In a country like South Africa where the age structure is determined mostly by fertility how determining might any of these changes be? With mortality the main question being asked is around the number of deaths and its impact on other diseases. In this case the analysis on excess deaths is an important input which highlights the magnitude and the timing of the excess deaths and given that the only changes between 2018 or 2019 and 2020 is the lockdown and the pandemic itself. Any differences should hence be attributable to these two factors. In as far as determining causes of these excess deaths the death notification forms will be able to reveal what causes were attributed to these deaths. The timing and distribution of deaths is also important to determine the trajectory that we are seeing. However the most critical descriptor in understanding this situation we are in is the breakdown by age and sex, which lies at the heart of the study of demography, since this will indicate to us who was most vulnerable and most affected and where. Such a breakdown would as an example allow us to establish the impact of the pandemic on life expectancy.

Finally, migration has come to a full stop as a result of lockdowns and border closures. Even as we enter level 1, at the time of finalising this report there is no country with unconditional access to it. Whether screening or quarantining is required movement of people has been severely curtailed. Internally movement has mostly been temporary, for spending lockdown near family or returning from that. Very few movements have been

with permanent intent due to opportunities or choices in different parts of the country. The biggest impact of the slowdown in migration and mobility have been in the tourism sector upon which the South African economy relies so much on but also the sending of remittances to and from South Africa. It is estimated that there will be an approximate 20% slowdown in remittances in 2020 which seems very consistent with the slowdown in the quarter 2 contraction of our GDP.

When combined all the above ultimately has an impact on population structures of the country and of different regions of the country which can have a profound impact on the development of policies and in evaluating their efficacy. These impacts can be direct such as the ones described above or indirect and can be of long or short duration. These long term impacts can for example be measured, as suggested by Alberto Palloni the 2020 IUSSP laureate demographer, by following a cohort of currently pregnant women and measuring the developmental outcomes of their new born children as they grown up.

In this volume we look at the three main components of demography and consider how Covid-19 has impacted them. This is by all means not intended to be a definitive volume of demography and Covid-19. There is plenty of further research that the population and health sector can involve itself in to unravel this complex phenomenon. One of the unanswered question for example remains why Africa was hit as leniently as it has been thus far. Is it a matter of measurement coupled with less developed CRVS systems? Or is there a health advantage that Africa has used in terms of preparedness, early lockdown or experience from previous health crises. This is the beginning of a conversation to try and answer these questions and to lay the foundation to explore various others.

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CHAPTER 1: THE RELATIONSHIP BETWEEN PANDEMIC AND FERTILITY: SOME ASSUMPTIONS OF COVID-19 AND FERTILITY IN SOUTH AFRICA

1.1 OVERVIEW OF THE EFFECT OF PANDEMICS ON FERTILITY

The coronavirus disease (Covid-19) had its origin from China and was declared a pandemic on March 11 by the World Health Organization (Addi et al., 2020; Mohaye, 2020). In South Africa, current statistics suggest more than 627 041 confirmed cases of infection, with over 14 149 reported deaths (NISD, 2020). These numbers places South Africa as the fifth most infected country in the world as at the time of the study (ibid) (1/09/2020).

The pandemic will have consequences for human populations (Ghilandi et al., 2020). Currently, the focus is on deaths and the scientific debate is overlooking that population dynamics are shaped by fertility trajectories. Throughout history, changes in mortality due to events such as wars, famines, and pandemics were followed by changes in fertility, resulting in fewer births in the short term and recuperation in subsequent years (Palloni, 1988).

A central line of inquiry in demographic research concerns whether, when, and why fertility changes together with mortality. With the 2002 outbreak of SARS in Southern China, the 2006 bird flu in Asia, and the 2014 outbreak of Ebola in West Africa as recent examples, these questions seem especially relevant but there is a limited literature on epidemics and fertility[1] (Boberg et al., 2017). The 1918 influenza pandemic in Sweden provides a unique opportunity to study fertility dynamics following a short-term pandemic affecting both morbidity and mortality. The pandemic was unforeseen and characterised by high fatality rates but also by the fact that it primarily affected fertile men and women from 20 to 40 years old (Mamelund et al., 2016).

The results showed that a large morbidity and mortality shock such as the 1918–19 influenza pandemic influences fertility rates not only in the short term but even a decade later. There was also evidence for postponement of fertility, as an increase in fertility rates in rural areas in the years immediately following the flu peak was driven by married women with previous children giving birth during the baby boom of the 1920s. The little research on the impact of the 1918 influenza on human fertility has found that there is a link between excess mortality during the pandemic and subsequent birth rates, and the research in Norway observed a dip followed by a baby boom (Mamelund, 2004) whilst Bloom Feshbach et al. (2011) found a birth deficit of 6 to 7 months after the peak of the pandemic in Scandinavia and the United States of America.

Historically, economic crises have never been the preferred period for a couple to decide to have a baby, whilst the millions of jobs lost create a climate of uncertainty which depresses family projects; therefore the economic crises due to Covid-19 might produce similar demographic outcomes (Adsera, 2011; Goldstein et al., 2013; Matysiak et al., 2018). The consequences of the crisis are not expected to be equally distributed across the countries. The demographic and economic state might support or reduce the pre-crisis fertility plans of an individual (Kreyenfeld, 2016; Vignoli et.al, 2019).

In Europe for instance, the uncertainty caused by Covid-19 might have been made worse by the ongoing effects of the 2008-2011 economic crises which had an impact on fertility due to high unemployment rates,

[1] A growing literature evaluate fertility effects from the HIV/AIDS epidemic (Karlsson and Pichler, 2015; Castro et al., 2015).This is a very different setting compared to the more frequent short-term epidemics as HIV/AIDS has been a problem for more than 20 years.

particularly among young women. The modelling for the majority of European countries proved that the decline in fertility was more evident in regions affected by growth in unemployment (Comolli, C.L., 2017).

Luppi et al. (2020) offered an overview on the changes in fertility plan during the Covid-19 crisis among a sampled population aged 18–34 years in selected countries such as Italy, France, Germany, Spain and the UK. Among others, the study found that fertility plans have been negatively revised in these countries, but not in the same way. For example, the study found that fertility plans changed moderately, with many people still planning or postponing their decision to have a child during the pandemic era in Germany and France. The proportion of plan abandoners is much higher in the UK, compared to Italy. These are so, with no clear pattern of fertility plans observed in countries such as France and Spain (Luppi et al., 2020). Therefore, the study concluded that different mechanisms are at work, due to different economic, demographic and policy pre-crisis background, including post-crisis prospects existing within each country (ibid).

1.1.1 Non-communicable diseases and comorbidities

According to the Centre for Disease Control and Prevention (CDC), the main comorbidities that lead to Covid-19 infections and deaths are hypertension, obesity, chronic lung conditions like tuberculosis, chronic obstructive pulmonary disease (COPD), asthma and cystic fibrosis, diabetes, cardiovascular conditions like coronary heart disease, congenital heart disease and heart failure (CDC, 2020). On the study of the prevalence of comorbidities among individuals with Covid-19 by Bajgain et al. (2020), it was established that hypertension, followed by diabetes and cardiovascular diseases were the most common comorbidities seen in Covid-19 positive patients across all the epicentres worldwide. All these conditions are similar to non-communicable diseases (NCDs) and underlying causes of death among women 15–49 in South Africa (Stats SA, 2020).

The diseases account for 41 million deaths each year, out of which 85% of deaths occur in low and middle-income countries (LMICs) and nearly half of the deaths occur between the age of 30 and 69 (WHO, 2018). Among all the diseases, cardiovascular diseases, cancers, diabetes and respiratory diseases are responsible for 80% of all deaths (WHO, 2011). The diseases are linked with individual behaviour such as tobacco use, harmful use of alcohol, obesity, blood pressure and cholesterol level risk factors (ibid).

Non-communicable diseases account for almost 65% of women's deaths globally and the majority of deaths occur in low and middle-income countries (LMICs) (Yaya et al., 2018). The conclusion from the study that established socioeconomic inequalities in the risk factors of non-communicable diseases amongst women of reproductive age in Sub-Saharan Africa indicated that NCDs among women of reproductive age have doubled in many African countries (ibid). The body of literature indicates that women are more likely to experience co-occurrences of behavioural and metabolic risk factors, thus increasing the risk of NCDs to themselves and future generations (Khuwaja and Kadir, 2010).

Sex disaggregated data from 125 countries as of 24 June 2020, showed that although the gender gap of Covid-19 infections is closing, globally the male infection rate (54%) is still higher than infections in females (46%) (Tolmay and Morna, 2020). In South Africa, on the 5th of August 2020, it was established that more women (57%) were infected compared to men (42%), however the death rate for men (51%) was slightly higher than

that of women (49%). In line with these, the chapter seeks to explore the segment of women aged 15–49 and establish the extent of NCDs, types of underlying causes of death and assess the selected risk factors associated with the diseases. The pattern of Covid-19 infections and deaths among these women will be investigated.

1.1.2 Data sources

The study used data from the South Africa Demographic Health Survey, 2016 and the Mortality and causes of deaths, 2017.The DATCOV data obtained from the National Infectious and Communicable Diseases (NICD) website was also used in the study. This is an administrative data of cases of people diagnosed with Covid-19 in South Africa since the inception of the pandemic. Initiated on 1st of April 2020, the DATCOV is a sentinel hospital surveillance for Covid-19 infections, admissions and deaths in South Africa. This data is obtained through public and private hospitals that have agreed to report Covid-19 related information in all nine provinces of South Africa.

1.1.3 Limitations

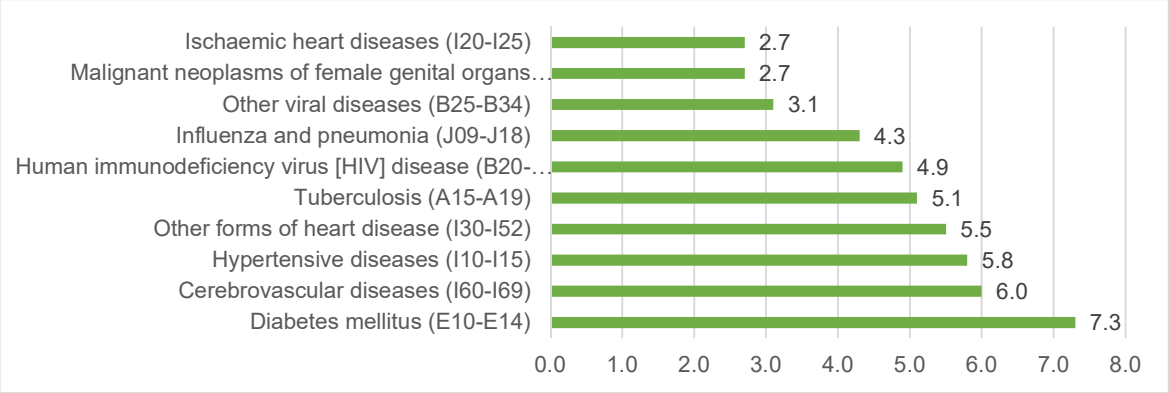
The main limitation of this study is the paucity of fertility data during the Covid-19 period. The conclusions of the study will mainly be based on the literature review and existing data. Due to the sentinel nature of the Covid-19 pandemic, the rate of reporting, testing and case definitions for testing changes over time, potentially affecting the estimated rates used in the report. Therefore, the study is subject to influence beyond the control of the researcher.

1.1.4 Situational analysis

1.1.4.1 Underlying causes of death among females

Figure 1.1 indicates that among the 10 underlying causes of death, diabetes mellitus (E10-E14) (7,3%), followed by cerebrovascular diseases (I60-I69) (6,0%), hypertensive diseases (I10-I15) (5,8%) and other forms of heart disease (I30-I52) (5,5%) were the main ones. Tuberculosis (A15-A19) (5,1), which is a contagious disease ranked number five.

Figure 1.1: The ten leading underlying natural causes of death among females, 2017

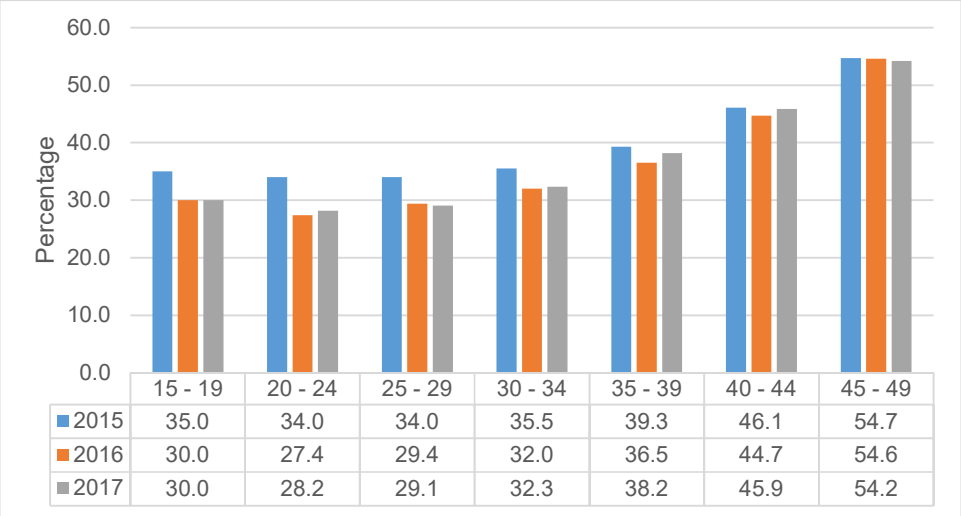


Source: Mortality and causes of death in South Africa: Findings from death notification, 2017

1.1.4.2 Non-communicable diseases (NCDs) among women 15–49

Over the period 2010 to 2014, the gap between communicable diseases (CDs) and non-communicable diseases (NCDs) widened, with more deaths occurring due to non-communicable diseases (Stats SA, 2020a). Figure 1.2 indicates an increase in NCDs, from an average of 34% among women aged 20–24 and 25–29 to 54,7% among women between the ages of 45–49 in 2015. There was a steady decreasing pattern of NCDs from 2015 to 2016 across all age groups except for women aged 45-49. Over the period 2016 and 2017, there was an insignificant change in NCDs across all age groups.

Figure 1.2: Percentage of deaths due to non-communicable diseases (NCDs) among women aged 15–49, 2015-2017



	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49
2015	35.0	34.0	34.0	35.5	39.3	46.1	54.7
2016	30.0	27.4	29.4	32.0	36.5	44.7	54.6
2017	30.0	28.2	29.1	32.3	38.2	45.9	54.2

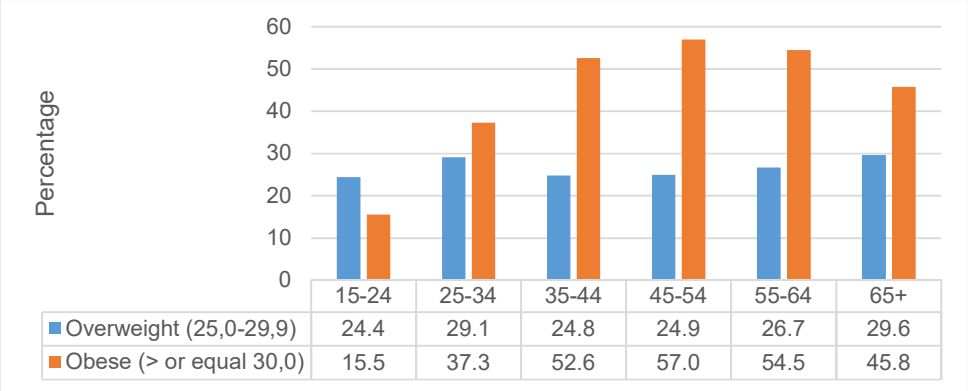
Source: Mortality and causes of death in South Africa: Findings from death notification, 2017. The unknown age and ill-defined diseases have been redistributed proportionately to causes of death.

1.1.5 Risk factors among women aged 15–49

1.1.5.1 Weight

Findings in Figure 1.3 indicate that the higher proportion of overweight women was evident among the age groups 25–34 (29,1%), 55–64 (26,7%) and 65+ age group (29,6%). Except for the age group 15–24, women across all age groups seemed to be obese. The majority of women aged 35–44 (52,6%), 45–54 (57%) and 55–64 (54,5%) were obese.

Figure 1.3: Percentage of women by specified body mass index (BMI) and age



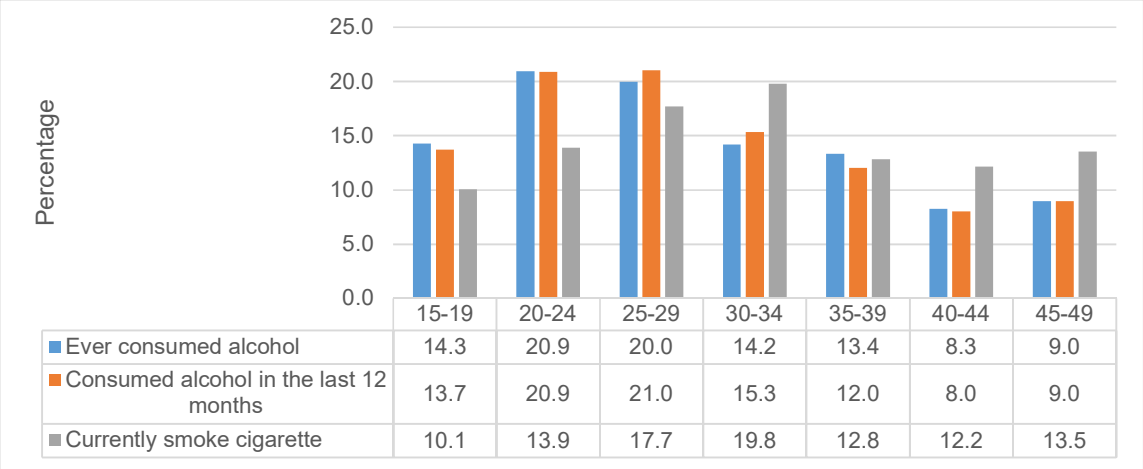
	15-24	25-34	35-44	45-54	55-64	65+
Overweight (25,0-29,9)	24.4	29.1	24.8	24.9	26.7	29.6
Obese (> or equal 30,0)	15.5	37.3	52.6	57.0	54.5	45.8

Source: South Africa Demographic Health Survey, 2016. Excludes pregnant women and women with a birth in the preceding 2 months.

1.1.5.2 Alcohol consumption and age

The results presented in Figure 1.4 suggest that the proportion of women who ever consumed alcohol was highest among women aged 20–24 (20,9%) and 25–29 (20,0%). Similarly, the majority of women who consumed alcohol in the last 12 months before the survey were among the age groups 20–24 (20,9%) and 25–29 (21%). With regards to smoking, a high proportion of women who smoke cigarette was found among women aged 25–29 (17,7%) and 30–34 (19,8%).

Figure 1.4: Percentage of women smoking and consuming alcohol by age



	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Ever consumed alcohol	14.3	20.9	20.0	14.2	13.4	8.3	9.0
Consumed alcohol in the last 12 months	13.7	20.9	21.0	15.3	12.0	8.0	9.0
Currently smoke cigarette	10.1	13.9	17.7	19.8	12.8	12.2	13.5

Source: South Africa Demographic Health Survey, 2016. Currently smoking include those who smoke occasionally.

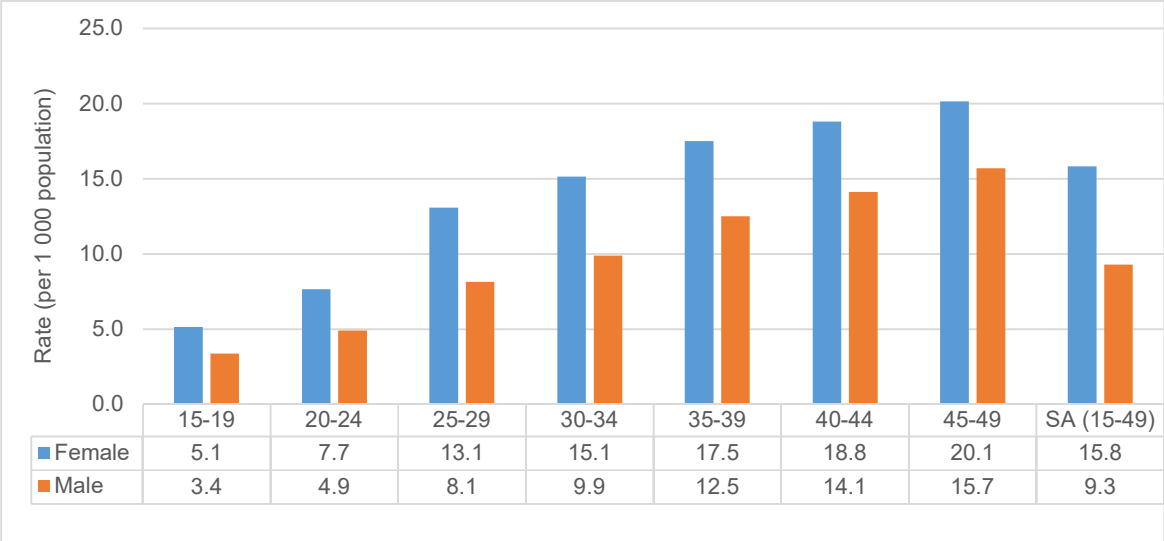
The first four main underlying natural causes of death among females were diabetes mellitus, hypertensive diseases, cerebrovascular diseases and other forms of heart disease. The analysis of risk behaviour indicates that the prevalence of obesity was among women aged 35–44, 45–54 and 55–64 whereas overweight women were among the age groups 25–34, 55–64 and 65+. Alcohol consumption was noticeable among women aged 20–24 and 25–29. On the other hand, the higher proportion of women who were currently smoking cigarette at the time of the survey were at age groups 25–29 and 30–34.

1.2 PATTERNS OF COVID-19 INFECTIONS, ADMISSIONS AND DEATHS BY AGE AND SEX ACCORDING TO NICD 2020 (10/8/2020)

1.2.1 Infection rates

The results in Figure 1.5 indicate an increasing rates of infection among males and females from the age group 15–19 to 45–49. A closer observation reveals that the female population has a higher rate of infection across all age groups compared to their male counterparts. The rate of infection began to be evident from women aged 25–29 (13,1) and gradually increased to those aged 45-49 (20,1) (rate per 1 000 population).

Figure 1.5: Infection rates by age and sex

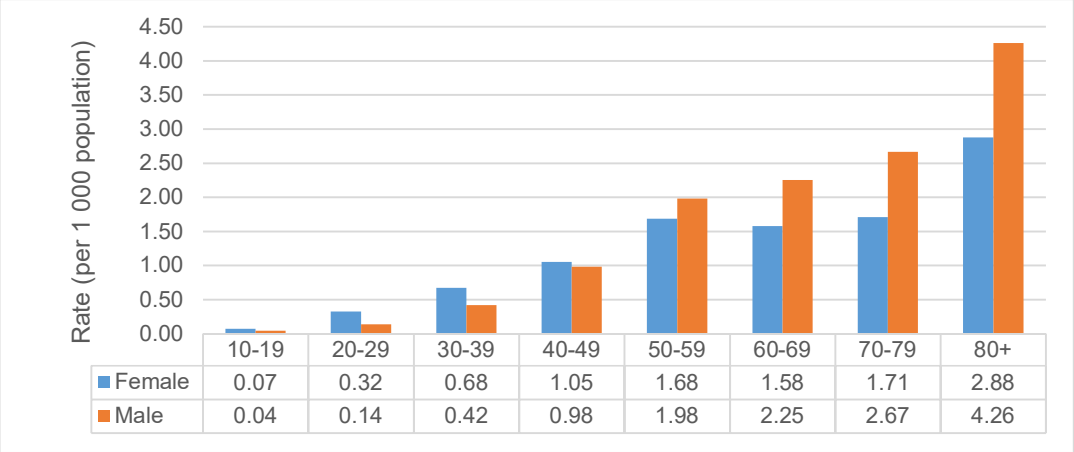


	15-19	20-24	25-29	30-34	35-39	40-44	45-49	SA (15-49)
Female	5.1	7.7	13.1	15.1	17.5	18.8	20.1	15.8
Male	3.4	4.9	8.1	9.9	12.5	14.1	15.7	9.3

1.2.2 Admission rates

Figure 1.6 shows the female population having a slightly higher admission rates among teens from age group 10–19 (0,07) to women aged 40–49 (1,05) compared to that of the male population. Male admission rates dominated female rates from elderly age group 50–59 (1,98) to 80+ (4,26) with the rate that increases as age increases (rate per 1 000 population).

Figure 1.6: Admission rates by age and sex

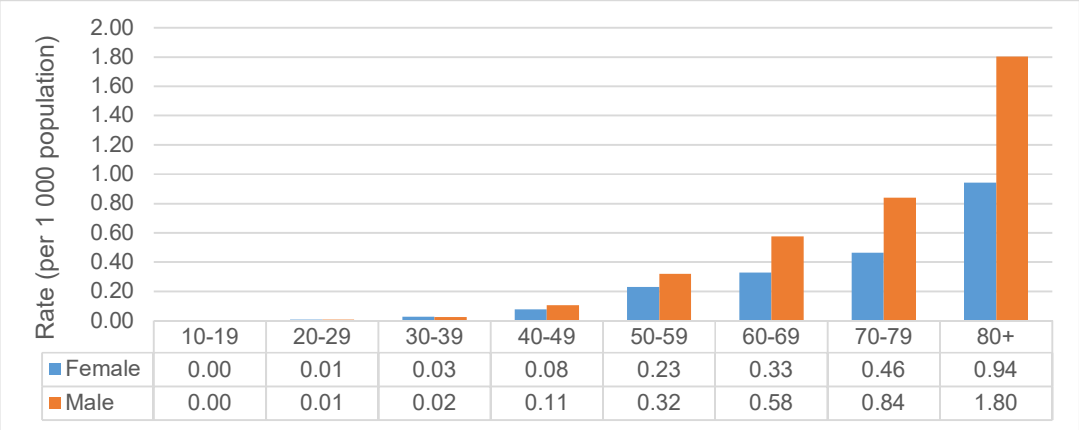


	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Female	0.07	0.32	0.68	1.05	1.68	1.58	1.71	2.88
Male	0.04	0.14	0.42	0.98	1.98	2.25	2.67	4.26

1.2.3 Death rates

The results presented in Figure 1.7 suggest that the rates of death among young male and female population from age 10–19 to 40–49 are low compared to elderly population. The rates of death started to show an increasing trajectory from male and female population aged 50–59 to 80+. Similarly to admission rates, death rates among male population are higher than female ones amongst older population. They increased from a rate of 0,32 (50–59) to (1,80) 80+ (rate per 1 000 population). .

Figure 1.7: Death rates by age and sex



	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Female	0.00	0.01	0.03	0.08	0.23	0.33	0.46	0.94
Male	0.00	0.01	0.02	0.11	0.32	0.58	0.84	1.80

The examination of Covid-19 indicators suggests that the female population has the highest rates of infection across all age groups compared to their male counterpart. Female population between the age group of 10–19 and 40–49 are likely to be admitted in hospitals. Compared to young female and male population, elderly population, including males and females seemed to die due to Covid -19.

1.3 CONCLUSION AND DISCUSSION

In South Africa, the situational analysis among women (15–49) suggests that they are more vulnerable to the pandemic due to risk behaviours particularly, alcohol consumption and smoking cigarette that lead to non-communicable diseases. The first four main underlying natural causes of death among females were diabetes mellitus, hypertensive diseases, cerebrovascular diseases and other forms of heart disease. These diseases are linked to Covid-19 infections and deaths (WHO, 2020). However, age-sex structure of death and admission data in South Africa indicates that the rates of admission and death are highest among the elderly women compared to the younger ones. In support of these observations, Aassve et al. (2020) wrote that unlike the 1918–1919 influenza, Covid-19 affects older people more than other age groups. Boberg-Fazlic et al. (2017) revealed that from a theoretical point of view, the fertility effects of pandemics vary with mortality and morbidity patterns and depend on the age distribution of deaths. Further, channels for adverse fertility effects include an increased mortality and morbidity of adults at their reproductive age and higher frequency of maternal and infant mortality. In South Africa, during the COVID-19 pandemic, child mortality and maternal mortality has been negligible and this has removed one of the main drivers of the fertility rebounds post pandemic.

In controlling for population of childbearing age, the study found that the female population has the highest rates of infection across all reproductive age groups compared to their male counterpart. The pattern of fertility in South Africa indicates that the age specific fertility rates increase from women aged 20-24 to those at 30-34 and begin to decline among women aged 35-39. Literature suggest that the higher rate of Covid-19 infections among the female population at these age groups is expected to result in demographic outcomes such as a fertility postponement or change in pregnancy plans (Aassve et al. 2020 and Luppi et al. 2020). South Africa is part of the global body and the only country that is hit hard by the pandemic across the African continent, these fertility developments may be relevant in the country as the pandemic unfold.

Studies have suggested that the adjustment of fertility will depend on the socio-economic conditions such as loss of jobs, income shocks resulting from the pandemic, future rates of infection and the level of demographic transition (Luppi et al., 2020). In terms of demographic transition it was mentioned that “the unfolding effect of the Covid-19 pandemic on fertility will depend on the ways in which societies have developed and at what stage they are with regard to demographic change, from regimes characterised by high birth rates and lack of contraception to controlled and low fertility rates”. What is known is that South Africa achieved fertility transition and has the lowest fertility rate in sub-Saharan countries (Moutrie and Timeaus, 2003; Stats SA, 2010; Palamuleni et al., 2007). The South African economy shrank further in the 4Q19. The gross domestic product (GDP) was recorded at -1.4%, following a decline of 0.6% in the 3Q19 and this lead the country to a technical recession (Stats SA, 2020b). Unemployment rates in South Africa has been in the rising upward trend for several years. The official unemployment rate increased by 1,0 percentage point from 29,1% in the fourth quarter of 2019 to 30,1% in the first quarter of 2020. Therefore, the impact of Covid-19 on fertility will be subject to the above expectations and conditions playing out in the country.

Studies have also argued that the impact of the pandemic on each country across the globe will depend on the development rating of each country, looking at the Human Development Index (HDI). In doing these, countries are classified as either underdeveloped, developing or developed nations. In this sense, it is argued that the Covid-19 pandemic may have a positive effect, lifting fertility rates in countries scoring below 0.85 in the HDI and not doing so in highly developed countries scoring above this value (Aassve et al., 2020). In relation to South Africa, available statistics places the country's HDI value at 0.705 (UNDP, 2018/9). Does this suggest a fertility transition due to Covid-19 in the country?

In their research of the impact of Covid-19 on fertility in Russia, Kazenin and Ranepa (2020) indicated that it is premature to study the subject in any country in order to confirm the actual impact on fertility. It is also difficult to make any forecasts because the number of pandemic-related factors that may be significant for population reproduction is yet unclear (ibid). Some of the factors, for example, the economic downturn and unemployment, are evident. Nonetheless, from international experience reviewed in the literature, it is apparent that economic and demographic features in the era of a pandemic in a country may change or postpone fertility intensions of individuals in the short term after the peak of the pandemic and in the long term after the pandemic is supressed, and can also make people to revise their fertility intensions. Secondly, the economic environment has the most impact on fertility under the conditions of the pandemic and people have to assess their prospects in the labour market.

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CHAPTER 2: COVID-19 MORBIDITY AND MORTALITY

2.1 Introduction and background

The global pandemic of coronavirus disease 2019 (COVID-19) was first reported on 31 December 2019 by the World Health Organization country office following a cluster of pneumonia cases in Wuhan City, Hubei Province of China. To date, COVID-19 has become a global pandemic and it is continuing to spread across the globe (WHO, 2020). In March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illnesses (WHO, 2019). At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

According to the World Health Organisation COVID-19 Dashboard, globally as 1 October 2020, there have been 33 842 281 confirmed cases of COVID-19, including 1 010 634 deaths, and 285 764 new cases reported to the World Health Organisation. South Africa remains the hardest hit country on the African continent, although with relatively low number of deaths. In South Africa, the first case of COVID-19 was confirmed on 5 March 2020 as reported by the Minister of Health. The pandemic reached South Africa later than most of the world, but despite the delay, it has still had a wide-reaching impact on all South Africans. President Ramaphosa declared a state of national disaster on 23 March 2020 and indicated that there would be a total national lockdown of the country starting on 26 March 2020 to curb new infections and flatten the curve of the virus.

Previous pandemics and their impact on mortality and morbidity

An article by Newman T, 2020 has shown that pandemics like COVID-19 have played a role in shaping human history throughout the ages and tracks the following previous pandemics, which had a major impact on mortality and morbidity: These are:

i. **The Black Death** – Peaking in Europe between 1347 and 1351, the Black Death was responsible for an estimated 75 to 200 million deaths. This pandemic was caused by a bacterium, called *Yersinia pestis*, rather than a virus. Epidemiologists believe that the Black Death also originated in Asia.

ii. **1918 Spanish flu** – From January 1918 to December 1920, the Spanish flu which appears to have moved from birds to humans infected an estimated 500 million people and killed approximately 50 million people worldwide. The Spanish flu had a mortality rate of around 2,5%.

iii. **Global HIV & AIDS statistics** – According the Global HIV & AIDS statistics 2020 fact sheet by UNAIDS, 38 million people globally were living with HIV in 2019, while 690 000 people died from AIDS-related illnesses in 2019. AIDS-related deaths have been reduced by 60% since the peak in 2004. This is largely due the increased access to antiretroviral therapy (UNAIDS, 2020). In South Africa, the 2020 Mid-year population estimates also showed that the total number of people living with HIV is estimated at approximately 7,8 million in 2020. For adults aged 15–49 years, an estimated 18,7% of the population is HIV positive (Stats SA, 2020).

iv. **Severe acute respiratory syndrome (SARS)** – In 2002, SARS became the first pandemic of the 21st century. Like COVID-19, SARS was due to a coronavirus, known as SARS-CoV. It also originated in China. Globally, SARS infected an estimated 8 000 people in 29 countries and had a mortality rate of around 10%. By most estimates, this is higher than the COVID-19 mortality rate. Both SARS and COVID-19 affect older people more severely than younger people. Surveillance, isolation of those who contracted it, and strict quarantine measures stopped the SARS pandemic.

v. **2009–2010 H1N1 swine flu** – According to the Centers for Disease Control and Prevention (CDC), between April 2009 and April 2010, the swine flu pandemic affected an estimated 60,8 million people. There were also around 274 304 hospitalisations and 12 469 deaths.

vi. **2014 – 2016 Ebola Outbreak in West Africa –** According to the WHO**,** the Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a rare but severe, often fatal illness in humans. The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission. The average EVD case fatality rate is around 50%, while Case fatality rates have varied from 25% to 90% in past outbreaks. The 2014–2016 outbreak in West Africa was the largest Ebola outbreak since the virus was first discovered in 1976. The outbreak started in Guinea and then moved across land borders to Sierra Leone and Liberia.

The impact of COVID-19 on child mortality is currently being assessed the UN Inter-agency Group for Child Mortality Estimation, led by UNICEF United Nations Children's Fund (UNICEF). The UNICEF has indicated that while available evidence indicates the direct impact of COVID-19 on child and adolescent mortality to be very limited, the indirect effects stemming from strained health systems, household income loss, and disruptions to care-seeking and preventative interventions like vaccination may be substantial and widespread (UNICEF, 2020). Experience with past epidemics like the 2014 West Africa Ebola outbreak and SARS has shown that indirect effects of an outbreak, e.g. medical supply chain disruptions, declining utilisation and provision of health services, healthcare resource and personnel reallocation can be severe, sometimes outpacing the direct impact of the outbreak itself (Elston JWT et al., 2017; Sochas L et al., 2017). Finally, a study Guillaume, et al, 2020 has indicated that if COVID-19 infection continues to grow, this could have an impact on life expectancy. A failure to contain the spread of the virus would result in a higher number of deaths and therefore lower life expectancy.

2.2 METHODOLOGY

Source of data

The report uses published information from the National COVID-19 daily report dashboard, death statistics as reported by the Minister of Health Media Release statements, published findings from the 2016 South Africa Demographic and Health Survey and the 2017 Mortality and causes of death statistical release.

The National COVID-19 daily report dashboard

The National Institute for Communicable Diseases is a national public health institute of South Africa, providing reference microbiology, virology, epidemiology, surveillance and public health research to support the government's response to communicable disease threats. The NICD serves as a resource of knowledge and expertise of communicable diseases to the South African Government, Southern African Development Community countries and the African continent. The institution assists in the planning of policies and programmes to support and respond to communicable diseases. During the COVID-19 pandemic, the NICD reports on COVID-19 testing data and releases various reports on COVID-19 disease epidemiological profile.

The South Africa Demographic and Health Survey, 2016

The aim of the South Africa Demographic and Health Survey (SADHS) is to provide an update of the demographic and health information of the population with the aim of assisting planners to design and monitor progress for development (National Department of Health (NDoH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC) and ICF, 2019; Department of Health, 1998). The SADHS 2016 published information on adult morbidity, which is related to COVID-19 comorbidities.

Mortality and causes of death, 2017

South Africa has had an inclusive vital registration of mortality data from 1997 and the collection of this information is continuous. Notice of Death/Stillbirth (DHA-1663) forms administered by the Departments of Home Affairs and Health and processed by Statistics South Africa and are used to capture all registered deaths (Stats SA, 2020). South Africa's vital registration data are detailed and in addition to the cause of death data are socio-demographic variables. The information on causes of death is published annually in the Mortality and causes of death release.

Limitations

i. The completeness of adult deaths in the 2017 statistical release (Stats SA, 2017), was estimated at 96% for adult deaths (15 years and older). Completeness level was reported for the 2011 to 2016 intercensal/survey period. Male adults had a completeness level of 97%, higher than the adult female completeness level of 95%.

ii. Limitations of the NICD data is related to coverage as data is based only on the tested population, which means that persons tested, may not be a representative sample of South Africa's population. The COVID-19 death statistics may also be an underestimate as deaths are more likely to be reported if a patient with COVID-19 died in hospital and deaths out of hospital may be missed.

iii. The long-term effects of COVID-19 on mortality and morbidity remains unknown as current causes of death data in South Africa is unavailable; however, the Medical Research Council (MRC) currently publishes weekly excess deaths in the absence of mortality and causes of death data using data from the National Population Register.

iv. Due to the rapidly changing nature of the outbreak globally and in South Africa, the COVID-19 statistics need to be updated regularly.

2.3 FINDINGS

This section presents the findings from the analysis and presents results on the distribution of COVID-19 testing data, age and sex distribution of confirmed cumulative COVID-19 cases, sex ratios, and confirmed cases by province. The section also presents information on COVID-19 reported death statistics and common COVID-19 comorbidities from the 2017 Mortality and causes of death release as well as the Demographic and health survey 2016.

2.3.1 COVID-19 testing data and confirmed cases as of 18 September 2020

Table 2.1 below illustrates COVID-19 testing data. As of 18 September 2020, a total of 3 961 179 COVID-19 tests have been conducted in South Africa, with 2 248 913 tests conducted in the private sector, while 1 712 266 were conducted in public-sector laboratories. Findings on testing data by case finding method, indicates that 3 153 766 were through passive case findings, and 807 413 tests were through community screening and testing. Currently, South Africa has had 653 444 confirmed COVID-19 cases. There were more female confirmed cumulative cases (377 687 or 57,8%) compared to 270 170 (41,3%) male cases. Unknown cases with regard to sex constituted 0,9% of the confirmed cumulative cases.

Table 0.1: COVID-19 testing data

COVID-19 testing data	Number of tests conducted	Per cent
Private sector	2 248 913	56,8
Public sector	1 712 266	43,2
Total	**3 961 179**	**100,0**
Case finding methods	**Number of tests conducted**	**Per cent**
Passive case finding	3 153 766	79,6
Community screen and test	807 413	20,4
Total	**3 961 179**	**100,0**
Sex	**Number of confirmed COVID-19 cases**	**Per cent**
Female	377 687	57,8
Male	270 130	41,3
Unknown cases	5 627	0,9
Total	**653 444**	**100,0**

Source: Covid-19 Dashboard (NICD)

2.3.2 Distribution of confirmed cumulative COVID-19 cases

Table 2.2 illustrates the age and sex distribution of confirmed cumulative COVID-19 cases in South Africa, and indicates that there were more female confirmed cases compared to males. The sex ratios show that males dominate in children aged 0–4, while there were more females per 100 males for the adult and older population.

Table 2.2: Age and sex distribution of confirmed cumulative cases

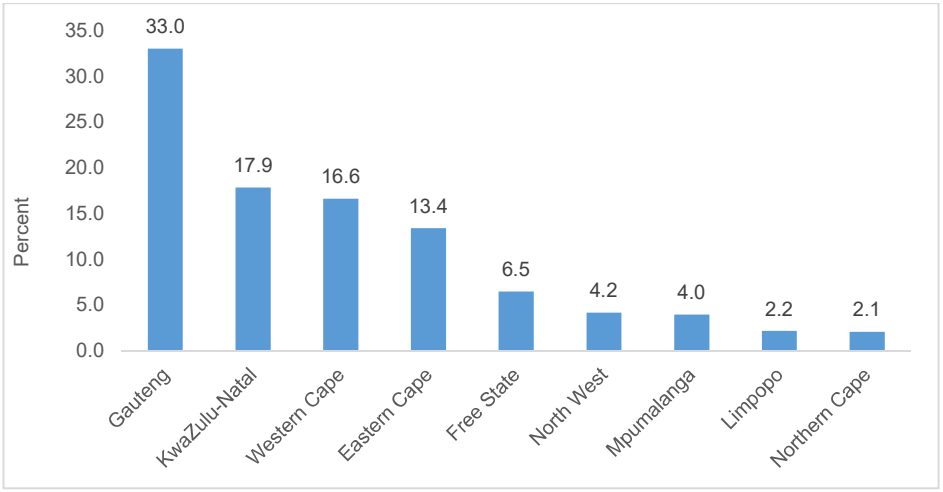
Age group	Male	Female	Total	Sex ratios
0–4	3 935	3 528	**7 463**	112
5–9	4 202	4 507	**8 709**	93
10–14	6 942	8 017	**14 959**	87
15–19	9 831	14 920	**24 751**	66
20–24	13 966	21 582	**35 548**	65
25–29	25 530	40 228	**65 758**	63
30–34	32 235	48 261	**80 496**	67
35–39	34 310	48 113	**82423**	71
40–44	29 674	40 962	**70 636**	72
45–49	27 920	37 771	**65 691**	74
50–54	24 590	33 311	**57 901**	74
55–59	20 238	26 999	**47 237**	75
60–64	13 515	16 880	**30 395**	80
65–69	8 363	10 351	**18 714**	81
70–74	5 769	6 974	**12 743**	83
75–79	3 507	4 856	**8 363**	72
80+	3 789	7 796	**11 585**	49
Total	**268 316**	**375 056**	**643 372**	**72**

Source: Covid-19 Dashboard (NICD)

2.3.3 Provincial distribution of confirmed cumulative cases

Figure 2.1 indicates the provincial distribution of confirmed COVID-19 cases, and shows that the highest proportion of confirmed COVID-19 cases were in Gauteng (33%), followed by KwaZulu-Natal (17,9%) and Western Cape (16,6%), and Eastern Cape (13,4%). Free State (6,5%), North West (4,2%), Mpumalanga (4,0%), Limpopo (2,2%) and Northern Cape (2,1%) have the lowest proportion of confirmed cumulative cases.

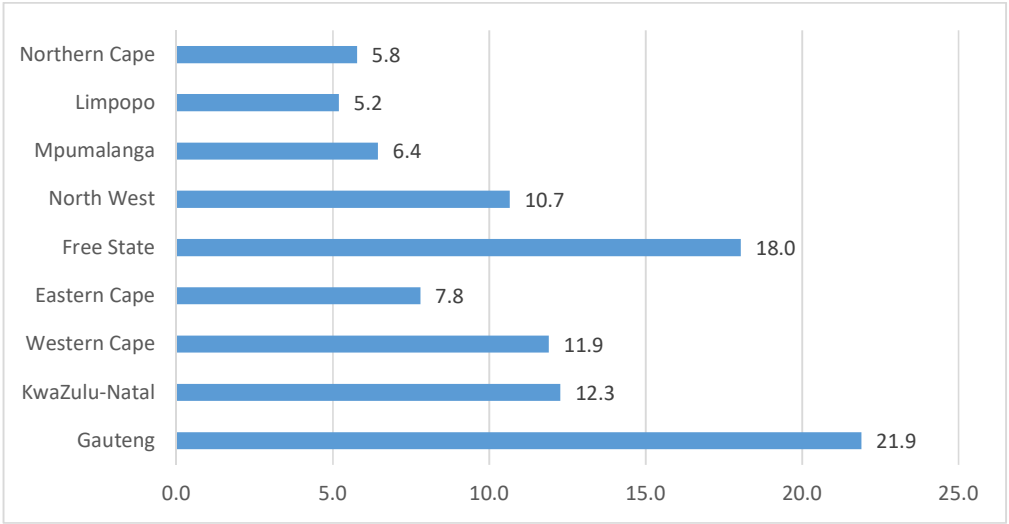
Figure 2.1: Provincial distribution of confirmed cumulative cases



Source: Covid-19 Dashboard (NICD)

Figure 2.2 below indicates the distribution in the proportion of new cases in the last 24 hours of 18 September 2020 by province, and shows that the highest proportion of new cases were reported in Gauteng (21,9%), followed by Free State (18,0%), KwaZulu-Natal (12,3%), and Western Cape (11,9%). Limpopo (5,2%) and Northern Cape (5,8%) reported the lowest proportion of new cases in the last 24 hours.

Figure 2.2: Distribution of new cases in the last 24 hours (18 September 2020)



Source: Covid-19 Dashboard (NICD)

2.3.4 Distribution of COVID-19 reported deaths

Table 2.3 and Table 2.4 below highlight information of cumulative COVID-19 deaths as reported in a report titled "*Covid-19 Sentinel Hospital Surveillance Update, Week 47 of 2020* by the National Institute of Communicable Diseases. The results indicate that the highest proportion of reported deaths due to COVID-19 were in Gauteng (25,0%), followed by Eastern Cape (22,4%). Limpopo (1,8%) and Northern Cape (1,7%) reported the lowest proportion of reported deaths due to COVID-19. By age group, deaths were high amongst persons aged 60–69.

Table 2.3: Observed COVID-19 death statistics by province

	Reported deaths	Per cent
Gauteng	4 398	25,0
KwaZulu-Natal	2 523	14,4
Western Cape	3 782	21,5
Eastern Cape	3 940	22,4
Free State	1 398	8,0
North West	529	3,0
Mpumalanga	385	2,2
Limpopo	324	1,8
Northern Cape	298	1,7
Total	**17 577**	**100,0**

Source: Covid-19 Sentinel Hospital Surveillance Update, Week 47 2020 (NICD)

Table 0.4: Observed COVID-19 deaths statistics by age

Age group	Female	Male	Total	Sex ratio at death
0-4	0,2	0,2	**0,2**	
5-9	0,1	0,0	**0,1**	
10-14	0,1	0,1	**0,1**	
15-19	0,3	0,2	**0,3**	
20-24	0,4	0,5	**0,5**	
25-29	0,7	1,3	**1,0**	
30-34	1,6	2,4	**2,0**	
35-39	3,1	3,4	**3,2**	
40-44	4,7	4,3	**4,5**	
45-49	6,7	6,3	**6,5**	
50-54	9,2	8,6	**8,9**	
55-59	13,0	12,2	**12,6**	
60-64	15,1	13,1	**14,1**	
65-69	13,2	13,0	**13,1**	
70-74	10,8	10,4	**10,6**	
75-79	8,7	8,7	**8,7**	
80+	10,7	14,1	**12,4**	
Unknown	1,4	1,3	**1,3**	

Source: Covid-19 Sentinel Hospital Surveillance Update, Week 47 2020 (NICD)

2.3.5 Tracking excess deaths in South Africa

In South Africa, the South African Medical Research Council's (SAMRC) Burden of Disease Research Unit has been reporting on the concept of excess deaths. The MRC uses data on deaths in the National Population Register obtained from the Department of Home Affairs on a weekly basis. The number of deaths are weighted upward to account for incomplete registration of deaths and those that do not have a South African ID number. The estimated number is then compared with forecast numbers based on historical data from 2018 and 2019 to allow for the trend in the numbers and seasonal variations – for metros and provinces. The number of deaths of persons aged 1 year and older are reported because birth registration was put on hold during lockdown stages 4 and 5, affecting the number of infant deaths recorded on the NPR system as well as the registration of new births during this time. Table 2.5 below shows the number of excess deaths from the period 6 May to 8 September 2020. The table indicates that South Africa has had 44 467 excess deaths by this date compared to the same date forecasted based on data from 2018 and 2019 (MRC, 2020).

Table 0.5: Excess deaths in South Africa

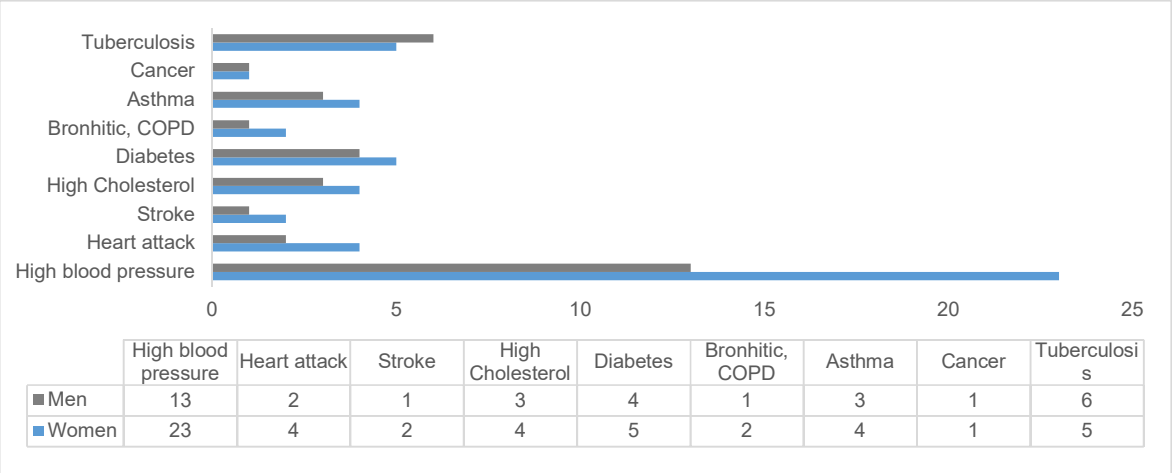
Region	Period	Excess deaths vs revised base
South Africa	6 May-8 September	44 467
Province		
Eastern Cape	3 June-8 September	10 120
Free State	24 June-8 September	3 371
Gauteng	10 June-8 September	11 796
KwaZulu-Natal	6 May -8 September	7 285
Limpopo	24 June-8 September	1 533
Mpumalanga	24 June-8 September	2 246
Northern Cape	14 July-8 September	920
North West	1 July-8 September	1 920
Western Cape	6 May-8 September	5 927
Metropolitan Municipality		
Buffalo City	3 June-8 September	1 175
City of Cape Town	6 May-8 September	4 517
Ekurhuleni	10 June-8 September	3 460
eThekwini	17 June-8 September	1 646
Johannesburg	10 June-8 September	3 833
Mangaung	25 June- 8 September	764
Nelson Mandela Bay	3 June -8 September	1 883
City of Tshwane	10 June -8 September	2 062

Source: Report on weekly deaths in South Africa (MRC)

2.3.6 Adult morbidities related to COVID-19 comorbidities

Figure 2.3 below presents the self-reported prevalence of nine chronic conditions as reported in the SADHS 2016 data. The results indicate that high blood pressure is the most common chronic condition reported among both women and men (23% and 13%, respectively), followed by tuberculosis (5% in women, and 6% in men). It should be noted, however, that chronic conditions are frequently under-reported or incorrectly reported by patients, and therefore the results should be interpreted with caution.

Figure 2.3: Percentage distribution of women and men aged 15+ with self-reported chronic conditions

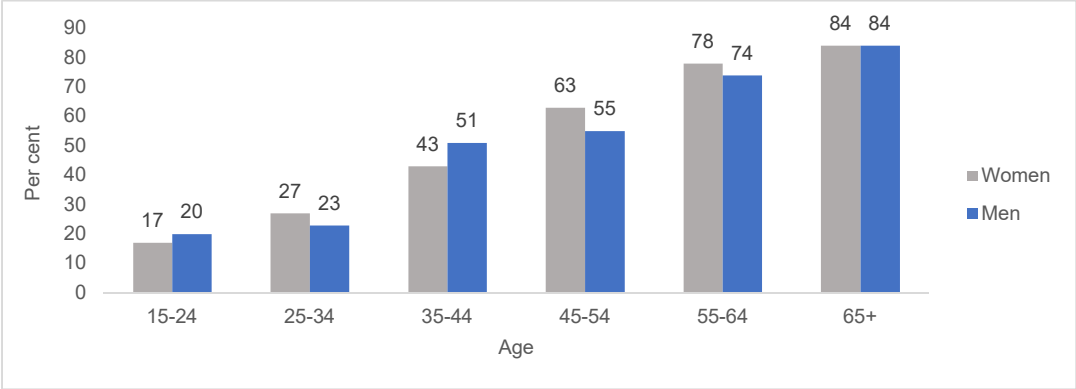


	High blood pressure	Heart attack	Stroke	High Cholesterol	Diabetes	Bronhitic, COPD	Asthma	Cancer	Tuberculosis
Men	13	2	1	3	4	1	3	1	6
Women	23	4	2	4	5	2	4	1	5

Source: South Africa Demographic Health Survey, 2016

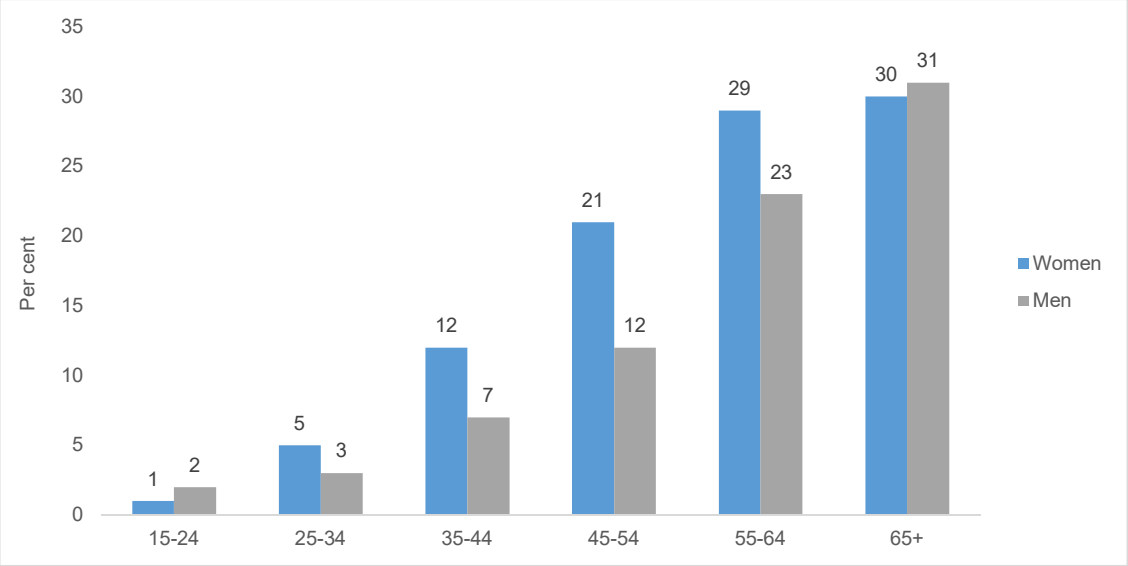
Figure 2.4 below shows the percentage distribution of women and men with hypertension in South Africa by age. According to SADHS 2016, the prevalence of hypertension rises steadily with increasing age, peaking at 84% among women and men aged 65 and older.

Figure 2.4: Percentage of women and men with hypertension



Source: South Africa Demographic Health Survey, 2016

Figure 2.5: Percentage of women and men with diabetes (adjusted HbA1c >6.5%)

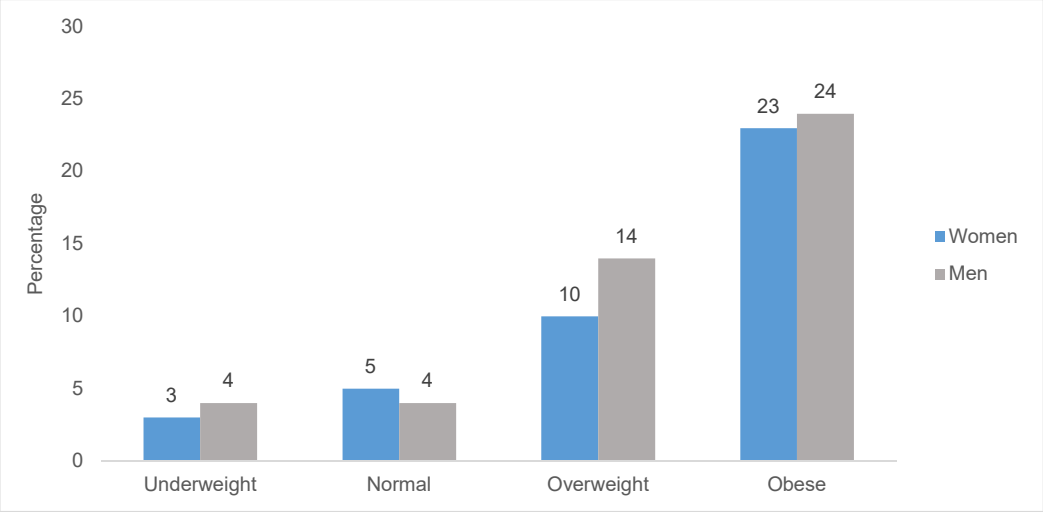


Source: South Africa Demographic Health Survey, 2016

The prevalence of diabetes (adjusted HbA1c level ≥6,5%) generally increases with age, reaching a peak of 30% among women aged 65 or older and 23% among men aged 55–64.

The prevalence of diabetes as shown in Figure 2.6 below (adjusted HbA1c level ≥6,5%) increases with increasing body mass index (BMI), peaking at 23% among obese women and 24% among obese men.

Figure 2.6: Percentage of women and men aged 15+ with diabetes (adjusted HbA1c >6,5%), by nutritional status



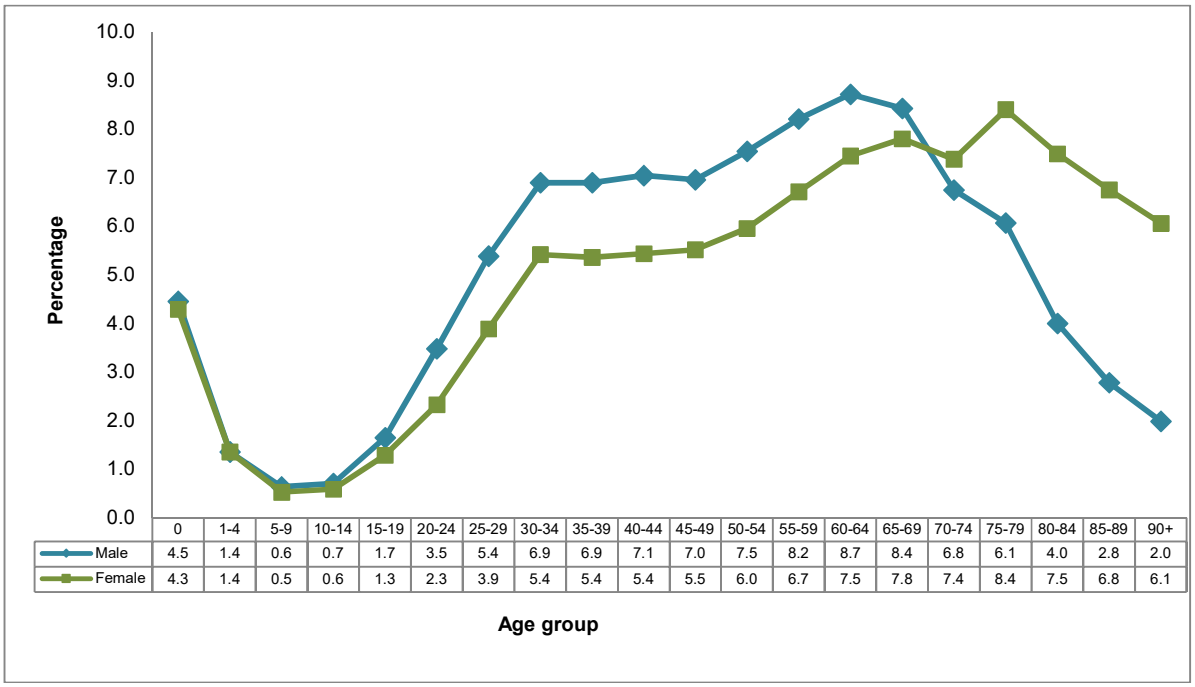
Source: South Africa Demographic Health Survey, 2016

2.3.7 Mortality and causes of death in South Africa, 2017

Distribution of death by age and sex

Figure 2.7 below shows the age and sex distribution of death for 2017. It shows that the percentage distribution of deaths for males and females were both lowest and somewhat similar for the age groups 5–9 and 10–14. Overall, male death exceeded those of female deaths from age group zero up to 65–69 years. From ages 70 years and above there were slightly more female than male death. The gap in the proportion for male and female death was highest between age groups 75–79 up to 90 years and above, where female death surpassed male deaths by 3,5% at age group 80-84 and by 4,0% at age groups 85-89 and 90 years and above (Stats SA ,2017).

Figure 2.7: Distribution of deaths by age and sex, 2017



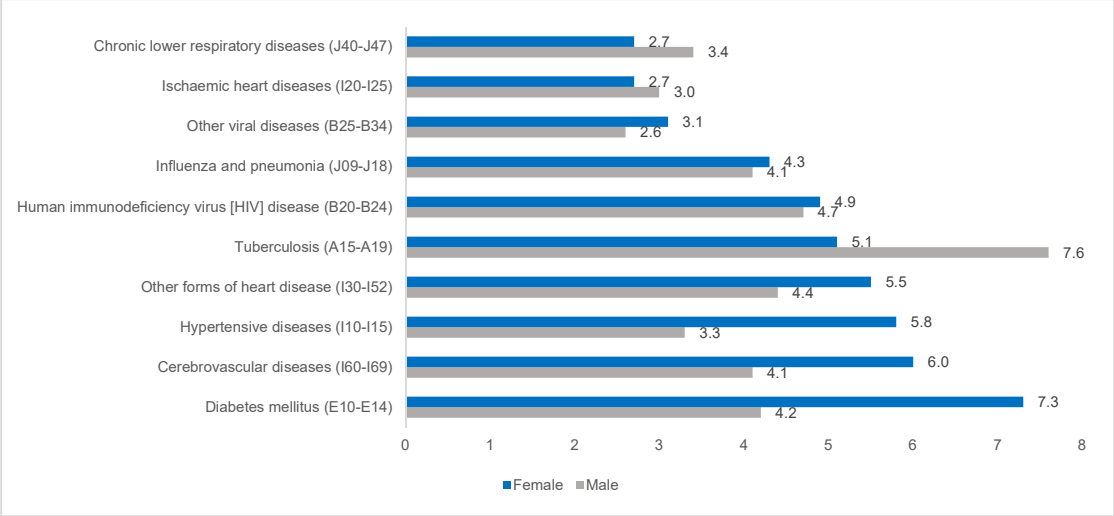
	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90+
Male	4.5	1.4	0.6	0.7	1.7	3.5	5.4	6.9	6.9	7.1	7.0	7.5	8.2	8.7	8.4	6.8	6.1	4.0	2.8	2.0
Female	4.3	1.4	0.5	0.6	1.3	2.3	3.9	5.4	5.4	5.4	5.5	6.0	6.7	7.5	7.8	7.4	8.4	7.5	6.8	6.1

Source: Mortality and causes of death in South Africa: Findings from death notification, 2017

Leading underlying natural causes of death by sex, 2017

Figure 2.8 below shows the percentage distribution of the ten leading causes of death by sex from the 2017 mortality and causes of death data. For females, diabetes mellitus was the leading underlying cause of death, while for males, tuberculosis was the leading underlying natural cause of death.

Figure 2.8: The ten leading underlying natural causes of death for males and females



Source: Mortality and causes of death in South Africa: Findings from death notification, 2017

The leading underlying natural causes of death by age and province

Appendices A and B show the published leading underlying natural causes of death by age and by province. The leading underlying cause of death for infant deaths (age 0) was *respiratory and cardiovascular disorders specific to the perinatal period,* responsible for 16,2% deaths at this age. The leading underlying cause of death for age group 1–14 years was *influenza and pneumonia*, responsible for 7,1% deaths, followed by *intestinal infectious diseases* with 6,2% deaths in this age group. For persons aged 15–44 and 45–64 years, *tuberculosis was the leading underlying natural cause of death,* constituting 11,3% and 7,9% of deaths, respectively. *Diabetes mellitus* was the leading cause of death for those aged 65 and older (9,0%).

Tuberculosis was the leading cause of death in six of the nine provinces. The exceptions were Western Cape, Gauteng and Limpopo. *Diabetes mellitus* was the leading cause of death (accounting for 7,5% of deaths) in Western Cape; in Gauteng it was *other forms of heart diseases* (accounting for 5,6% of deaths), while *influenza and pneumonia* was the leading cause of death in Limpopo (accounting for 7,0% of deaths). According to the Global Burden of Disease, all of the nine provinces had at least five non-communicable diseases among the ten underlying causes of death in each province.

2.4 SUMMARY OF FINDINGS

The purpose of the report was to profile the impact of COVID-19 pandemic on mortality and morbidity using existing data sources in South Africa. The long-term effects of COVID-19 on mortality and morbidity in the South African population, however, remain unknown due to the unavailability of current data on causes of death.

Findings from this chapter indicate that as of 18 September 2020, a total of 3 961 179 COVID-19 tests have been conducted in South Africa, with 2 248 913 tests conducted in the private sector, while 1 712 266 were conducted in public-sector laboratories. Findings on testing data by case finding method, indicate that 3 153 766 tests were through passive case findings, and 807 413 tests were through community screening and testing. As of 18 September 2020, South Africa has had 653 444 confirmed COVID-19 cases. Testing data by sex indicates that there were more female confirmed cumulative cases (377 687 or57,8%) compared to 270 170 (41,3%) male cases. Unknown cases constituted 0,9% of the total number of confirmed cumulative cases by sex.

The sex ratios show that male cases dominate in children aged 0–4, while there were more female cases per 100 males for the adult and older population. The highest proportion of confirmed COVID-19 cases were in Gauteng (33,0%), followed by KwaZulu-Natal (17,9%), Western Cape (16,6%), and Eastern Cape (13,4%). Free State (6,5%), North West (4,2%), Mpumalanga (4,0%), Limpopo (2,2%) and Northern Cape (2,1%) have the lowest proportion of confirmed cumulative cases. The proportion of new cases in the last 24 hours of 18 September 2020 by province shows that the highest proportion of new cases were reported in Gauteng (21,9%), followed by Free State (18,0%) and KwaZulu-Natal (12,3%), as reported by the National Department of Health. The results indicate that the highest proportion of reported deaths due to COVID-19 were in Gauteng followed by Eastern Cape.

Information on self-reported prevalence of nine chronic conditions as reported in the SADHS 2016 data shows that high blood pressure is the most common chronic condition reported among both women and men (23% and 13%, respectively), followed by tuberculosis (5% in women and 6% in men). According to SADHS 2016, the prevalence of hypertension rises steadily with increasing age, peaking at 84% among both women and men aged 65 years and older. The prevalence of diabetes (adjusted HbA1c level ≥6,5%) generally increases with age, reaching a peak of 30% among women aged 65 or older and 23% among men aged 55–64. The prevalence of diabetes (adjusted HbA1c level ≥6,5%) increases with increasing body mass index (BMI), peaking at 23% among obese women and 24% among obese men.

The age and sex distribution of observed deaths from the 2017 mortality and causes of death data indicates that male deaths exceeded those of females from age group 0 up to 65–69 years. From age 70 years and above there were slightly more female than male deaths. The proportion of deaths due to communicable diseases (TB, HIV, chronic lower respiratory diseases) were higher amongst males. Deaths due to non-communicable diseases (hypertension, diabetes, cardiovascular diseases, obesity) were higher amongst females and mostly amongst the elderly population and in more urbanised provinces.

Appendix A: The ten leading underlying natural causes of death for broad age groups

Causes of death (based on ICD-10)	0			1–14			15–44			45–64			65+		
	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%
Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	1	3 165	16,2	…	…	…	…	…	…	…	…	…	…	…	…
Influenza and pneumonia (J09-J18)	2	1 518	7,8	1	817	7,1	4	4 645	3,8	7	4 893	3,8	7	6 894	4,2
Disorders related to length of gestation and fetal growth (P05-P08)	3	1 270	6,5	…	…	…	…	…	…	…	…	…	…	…	…
Intestinal infectious diseases (A00-A09)	4	1 186	6,1	2	722	6,2	9	1 494	1,2	…	…	…	…	…	…
Other disorders originating in the perinatal period (P90-P96)	5	1 156	5,9	…	…	…	…	…	…	…	…	…	…	…	…
Infections specific to the perinatal period (P35-P39)	6	1 133	5,8	…	…	…	…	…	…	…	…	…	…	…	…
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	7	1 079	5,5	…	…	…	…	…	…	…	…	…	…	…	…
Congenital malformations of the circulatory system (Q20-Q28)	8	515	2,6	…	…	…	…	…	…	…	…	…	…	…	…
Malnutrition (E40-E46)	9	462	2,4	4	400	3,5	…	…	…	…	…	…	…	…	…
Other congenital malformations (Q80-Q89)	10	410	2,1	…	…	…	…	…	…	…	…	…	…	…	…
Tuberculosis (A15-A19)	…	…	…	3	446	3,9	1	13 957	11,3	1	10 083	7,9	9	3 997	2,5
Cerebral palsy and other paralytic syndromes (G80-G83)	…	…	…	5	280	2,4	…	…	…	…	…	…	…	…	…
Human immunodeficiency virus [HIV] disease (B20-B24)	…	…	…	6	279	2,4	2	13 081	10,6	3	6 889	5,4	…	…	…
Other forms of heart disease (I30-I52)	…	…	…	7	262	2,3	6	3 392	2,7	5	6 337	5,0	4	11 841	7,3
Other viral diseases (B25-B34)	…	…	…	8	229	2,0	3	7 253	5,9	10	4 183	3,3	…	…	…
Inflammatory diseases of the central nervous system (G00-G09)	…	…	…	9	185	1,6	…	…	…	…	…	…	…	…	…
Episodic and paroxysmal disorders (G40-G47)	…	…	…	10	175	1,5	…	…	…	…	…	…	…	…	…
Certain disorders involving the immune mechanism (D80-D89)	…	…	…	…	…	…	5	4 227	3,4	…	…	…	…	…	…
Cerebrovascular diseases (I60-I69)	…	…	…	…	…	…	7	1 788	1,4	4	6 447	5,0	2	13 893	8,5
Renal failure (N17-N19)	…	…	…	…	…	…	8	1 629	1,3	…	…	…	10	3 530	2,2
Diabetes mellitus (E10-E14)	…	…	…	…	…	…	10	1 474	1,2	2	9 207	7,2	1	14 605	9,0
Hypertensive diseases (I10-I15)	…	…	…	…	…	…	…	…	…	6	5 212	4,1	3	13 622	8,4
Chronic lower respiratory diseases (J40-J47)	…	…	…	…	…	…	…	…	…	8	4 619	3,6	6	7 453	4,6
Malignant neoplasms of digestive organs (C15-C26)	…	…	…	…	…	…	…	…	…	9	4 380	3,4	8	5 118	3,1
Ischaemic heart diseases (I20-I25)	…	…	…	…	…	…	…	…	…	…	…	…	5	7 763	4,8
Other natural		6 985	35,7		4 492	38,8		37 683	30,5		56 341	44,1	50	69 539	42,7
Non-natural		670	3,4		3 281	28,4		32 973	26,7		9 134	7,2	51	4 509	2,8
All causes		**19 549**	**100,0**		**11 568**	**100,1**		**123 596**	**100,0**		**127 725**	**100,0**		**162 764**	**100,1**

*Including deaths due to *MDR-TB* and *XDR-TB*.

… Category not in top ten.

Source: Mortality and causes of death in South Africa: Findings from death notification, 2017

Appendix B: The ten leading underlying natural causes of death for province

Causes of death (based on ICD-10)	Western Cape			Eastern Cape			Northern Cape			Free State			KwaZulu-Natal			North West			Gauteng			Mpumalanga			Limpopo		
	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%
Diabetes mellitus (E10-E14)	1	3 434	7,5	2	3 488	5,4	8	529	4,2	5	1 654	5,3	2	5 207	6,8	5	1 536	4,7	3	4 280	4,6	2	1 566	5,3	2	2 682	6,1
Ischaemic heart diseases (I20-I25)	2	2 829	6,2	…	…	…	9	425	3,4	…	…	…	8	2 181	2,8	…	…	…	7	2 994	3,2	9	915	3,1	…	…	…
Human immunodeficiency virus [HIV] disease (B20-B24)	3	2 585	5,7	3	3 411	5,2	2	758	6,0	3	1 809	5,8	4	4 955	6,5	6	1 435	4,4	8	2 828	3,1	7	1 286	4,4	7	1 554	3,6
Cerebrovascular diseases (I60-I69)	4	2 514	5,5	4	3 060	4,7	6	555	4,4	6	1 576	5,0	5	4 545	5,9	7	1 373	4,2	5	3 759	4,1	5	1 528	5,2	3	2 545	5,8
Chronic lower respiratory diseases (J40-J47)	5	2500	5,5	7	2570	3,9	5	609	4,8	9	816	2,6	…	…	…	10	872	2,7	9	2489	2,7	…	…	…	…	…	…
Tuberculosis (A15-A19)**	6	2 196	4,8	1	5 379	8,3	1	951	7,5	1	1 949	6,2	1	5 663	7,4	1	2 408	7,4	2	4 338	4,7	1	2 363	8,1	4	2 408	5,5
Malignant neoplasms of digestive organs (C15-C26)	7	2 167	4,7	10	1 623	2,5	…	…	…	…	…	…	10	1 543	2,0	…	…	…	10	2 381	2,6	…	…	…	…	…	…
Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	8	2038	4,5	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Hypertensive diseases (I10-I15)	9	1 818	4,0	6	2 884	4,4	4	638	5,0	2	1 846	5,9	6	3 070	4,0	2	1 897	5,8	6	3 216	3,5	4	1 538	5,2	5	2 328	5,3
Other forms of heart disease (I30-I52)	10	1 437	3,1	5	2 954	4,5	3	672	5,3	7	1 395	4,5	3	5 204	6,8	3	1 791	5,5	1	5 210	5,6	8	1 151	3,9	8	1 418	3,2
Influenza and pneumonia (J09-J18)	…	…	…	8	1 969	3,0	7	532	4,2	4	1 725	5,5	7	2 540	3,3	4	1 647	5,1	4	4 161	4,5	3	1 545	5,3	1	3 067	7,0
Other viral diseases (B25-B34)	…	…	…	9	1 690	2,6	…	…	…	8	1 225	3,9	9	2 087	2,7	8	1 225	3,8	…	…	…	6	1 299	4,4	6	1 634	3,7
Certain disorders involving the immune mechanism (D80-D89)	…	…	…	…	…	…	10	397	3,1	10	719	2,3	…	…	…	9	916	2,8	…	…	…	…	…	…	…	…	…
Intestinal infectious diseases (A00-A09)	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	10	700	2,4	9	1269	2,9
Renal failure (N17-N19)	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	10	1016	2,3
Other natural		16 307	35,7		28 388	43,6		5 233	41,4		13 297	42,6		29 939	39,1		14 514	44,7		45 973	49,7		12 023	41,0		19 721	45,1
Non-natural		5 890	12,9		7 746	11,9		1 339	10,6		3 197	10,2		9 671	12,6		2 859	8,8		10 894	11,8		3 386	11,6		4 065	9,3
All causes		**45 715**	**100**		**65 162**	**100**		**12 638**	**100**		**31 208**	**100**		**76 605**	**100**		**32 473**	**100**		**92 523**	**100**		**29 300**	**100**		**43 707**	**100**

Source: Mortality and causes of death in South Africa: Findings from death notification, 2017

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CHAPTER 3 MIGRANTS IN THE INFORMAL SECTOR IN SOUTH AFRICA: FINDINGS FROM THE 2017 QUARTERLY LABOUR FORCE SURVEY

3.1 INTRODUCTION AND BACKGROUND

In the time of the Covid-19 pandemic, the South African government has imposed a nationwide lockdown as of 27 March 2020. As a result of this, non-essential services were not allowed to open during Level 5 of the lockdown, with restrictions easing with each subsequent level of the lockdown. This has led to many businesses and industries not being able to operate. The informal sector consists of many types of work, such as domestic work, gardening, the taxi industry, and street vending, amongst others. The informal sector is an unprotected sector with little to no safety nets. This industry has been largely affected as people were either completely denied any participation or allowed only minimum participation in this sector, especially during the fifth level of lockdown. Consequently, those in the informal sector who are employed by others may not be paid during this period. Employers may apply the “no work, no pay” principle. Hence, many in the informal sector are left with no income at this time. Additionally, whilst businesses in the formal sector may urge their employees to claim from UIF (Unemployment Insurance Fund), this does not extend to the informal sector, as the informal sector is not covered by UIF.

A South African identity number or relevant documentation is often required to access social grants. Unable to access welfare from the state adds to the vulnerability of an already vulnerable group. The South African government has imparted a welfare roll-out across the provinces to assist the most vulnerable. However, this mechanism does not necessarily reach all migrants. South Africa is a receiving country of mixed-migration flows, e.g. economic migrants, asylum seekers, refugees, those who are stateless, as well as those who are undocumented. This therefore has consequences on those migrants who are not able to access the grants they do not have the appropriate documentation.

Migrants in South Africa have been highlighted in the media during the Covid-19 pandemic in instances such as occupying and the associated eviction from the Church in Cape Town, unrest in the Lindela Repatriation Centre, opening of migrant-owned Spaza Shops and investigation into the reinforcing of the fence erected between the Zimbabwean and South African border, which was damaged in some parts, amongst other news stories. There has been little focus on how this group is affected during a pandemic such as Covid-19.

3.2 PURPOSE AND OBJECTIVES

The purpose of the report is to provide insight into the characteristics related to migration, labour and the informal sector and to profile migrant groups who are of working age, using data collected from Statistics South Africa (Stats SA). Focus on labour force participation is integral, as it is the main route through which migrants improve their socio-economic status. This report will examine migrants working in the informal sector in South Africa. The report will compare migrants (foreign-born population) to non-migrants (South African-born population). As the welfare roll-out is at provincial level, the report will also examine trends at sub-national level. Sustainable Development Goal 17.18 highlights the need for the availability of “timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.”[2]

[2] International Labor Organization. 2018. Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators. Geneva: International Labor Organization.

The report addresses the following objectives:

1. To determine the sub-national distribution of migrants in South Africa;
2. To determine the employment and labour market status of migrants;
3. To investigate migrant involvement in the informal sector;
4. To determine recipients of UIF; and
5. To analyse involvement in contract work.

3.3 DATA AND ANALYSIS

Source of data

The Quarterly Labour Force Survey (QLFS) is a household-based sample survey conducted by Stats SA. It collects data on the labour market activities of individuals aged 15 years and older who live in South Africa. This report presents the key findings related to migration from the QLFS conducted from October to December 2017 (Q3: 2017), and will focus on the age group 15–64. The QLFS questionnaire is answered by the usual residents of the household only. A usual resident is defined as a person who had stayed in the households in selected dwelling units at least four nights a week in the four weeks prior to the interview. Those who were not household members (those who had not spent at least four nights per week during the last four weeks) were excluded from completing the survey.[3]

Migration schedule of questions

The migration schedule of questions is not a permanent feature in the QLFS. Stats SA included questions on migration in the QLFS for the first time in the third quarter of 2012 and thereafter in the third quarter of 2017. The data used in this report is from the third quarter of 2017.[4] The volume of migration is often estimated directly from two questions in censuses and surveys, namely:

- Where (province, country) were you born? This provides a measure of lifetime migration.
- Were you living here five years ago? This provides a measure of recent (period) migration.

Lifetime migration

Lifetime migration, which is based on place of birth, is a useful measure of migration. Its merit lies in the definition as it ascribes a migrant as an individual who has moved from their place of birth at any time during his or her lifetime. This definition, however, treats all people originating from outside the country/province of usual residence as being a migrant without consideration of the timing of their move. Information on migrant stock is important for understanding the long-term effects of migration and the characteristics of migrant populations. All that is known is that the migrant moved sometime in their life. As a result, little is known about the number of moves or the timing of the last move, other than that lifetime migrants moved at least once.

[3] Statistics South Africa. 2018. Labour Market Dynamics in South Africa 2017. Pretoria: Statistics South Africa.
[4] Ibid

Categorisation of migrant groups

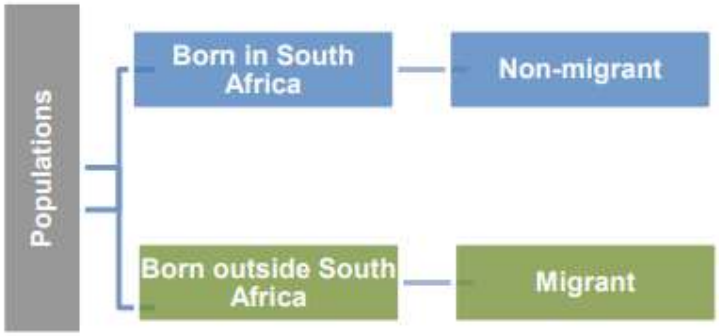
In this report, two populations are analysed, as illustrated in Figure 3.1:

- Non-migrant: a person who indicated that s/he was born in South Africa; and
- Migrant: a person who was enumerated in South Africa, but who indicated that they were born outside South Africa (in another country).

Citizenship

Whilst the categorisation of migrant groups is based on lifetime migration, it is important to note that this is a different classification to citizenship. A person born outside South Africa, is defined as a migrant in this report, however, that person may be a South African citizen. Hence, the two migrant groups, can be further disaggregated by Citizenship status. However, this variable is not available in the QLFS 2017, Q3 dataset that was analysed in this report.

Figure 3.1: Categorisation of the population by migration status



Labour force framework

The backbone of labour statistics and their analysis is the labour force framework, which divides the population into categories that thereafter can be examined in more detail.[5] The population can be divided into populations below and above the working age. The minimum age limit for defining the working age varies among countries and depends on national circumstances such as the compulsory schooling age, and the minimum age for admission to employment.[6] It is common to define the working-age population as the population aged 15 and older. In South Africa, 'working age' refers to the ages 15–64. The working-age population is broken down into those in the labour force and those not in the labour force. The labour force comprises the employed and the unemployed, while the remainder of the working-age population is comprised of discouraged job-seekers and the not-economically active population.[7]

[5] Pietschmann, I. et al. 2016. Key Labor Market Data: Analysis with Household Survey Data. Geneva: International Labor Organization, World Bank Group.
[6] Ibid
[7] Pietschmann, I. et al. 2016. Key Labor Market Data: Analysis with Household Survey Data. Geneva: International Labor Organization, World Bank Group.

3.4 FINDINGS

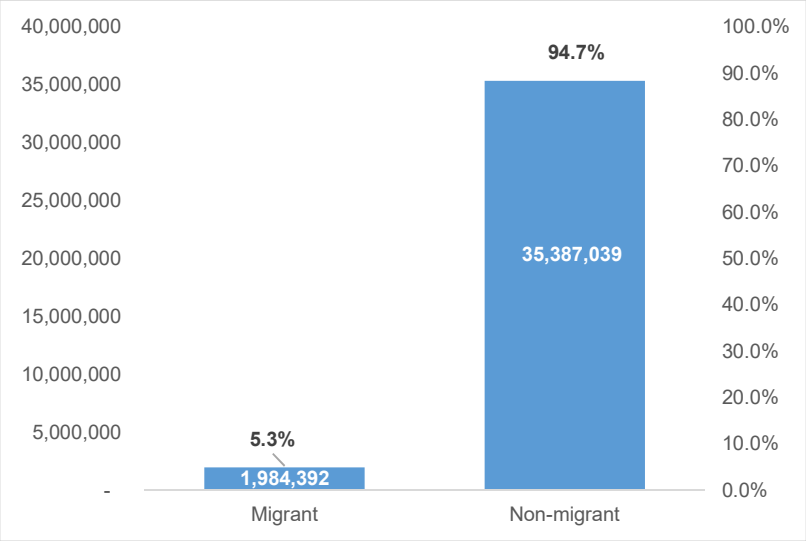
This section presents the findings from the analysis and presents results on distribution of population by migration status, sex, province, metro and non-metro area, employment status, labour market status, employment sector, informal employment, contribution to UIF and job security.

POPULATION DISTRIBUTION

Distribution of population by migration status

The QLFS 2017, Quarter 3 indicated that the population aged 15–64 was approximately 37,3 million. Migrants constituted about 1,9 million (5,3%) and non-migrants about 35,3 million (94,7%) (Figure 3.2).

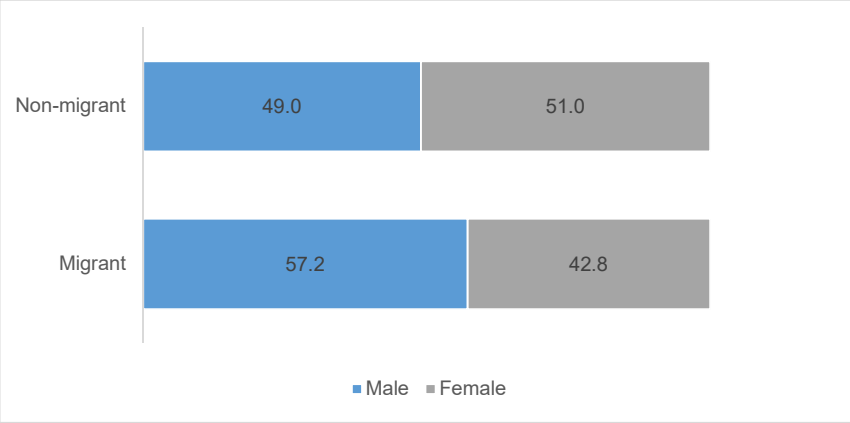
Figure 3.2: Distribution of the population by migration status, ages 15–64, QLFS Q3: 2017



Distribution of population by migration status and sex

Figure 3.3 illustrates the migrant and non-migrant population by sex, and indicates that the migrant population constituted more males (57,2%) than females (42,8%), whilst non-migrants were almost equally distributed (Figure 3.3). This is indicative that migrant males are dominating slightly in the working ages in South Africa.

Figure 3.3: Distribution of the population by migration status and sex, ages 15–64, QLFS Q3: 2017



Provincial distribution of the population by migration status

Table 3.1 indicates the provincial distribution of migrants and shows that the highest proportion of migrants of working age (15–64) live in Gauteng (9,1%), followed by North West (6,8%) and Limpopo (6,5%). Northern Cape (1,1%), KwaZulu-Natal (1,5%) and Eastern Cape (1,9%) have the lowest proportion of migrants of working age in a province (Table 3.1).

Table 3.1: Provincial distribution of the population by migration status, ages 15–64, QLFS 2017

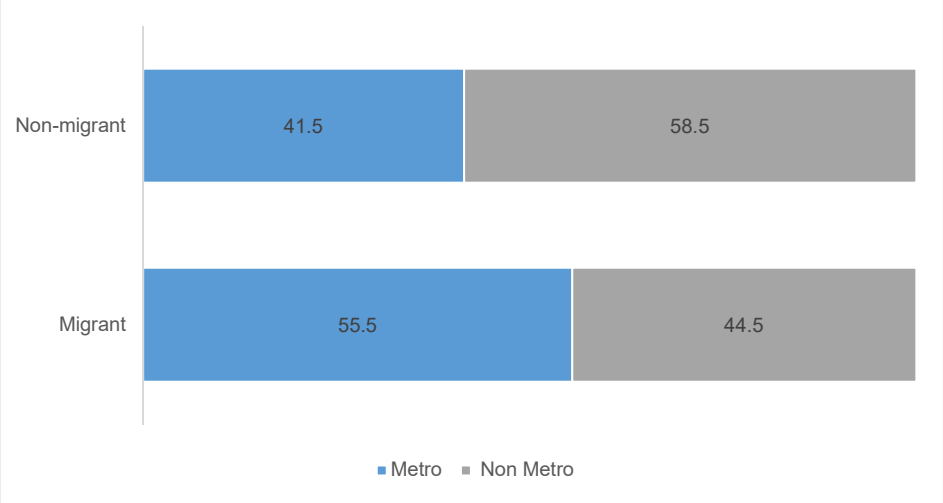
Province	Migrant	Non-migrant	n
Western Cape	4,8	95,2	4 483 010
Eastern Cape	1,9	98,1	4 202 990
Northern Cape	1,1	98,9	786 936
Free State	4,2	95,8	1 889 883
KwaZulu-Natal	1,5	98,5	6 920 964
North West	6,8	93,2	2 523 128
Gauteng	9,1	90,9	10 007 239
Mpumalanga	6,1	93,9	2 865 557
Limpopo	6,5	93,5	3 691 725
South Africa	**5,3**	**94,7**	**37 371 431**

n= population

Metro and non-metro distribution of the population by migration status

Figure 3.4 indicates the metro/non-metro distribution of migrants of working age, and shows that the majority of migrants live in metro areas (55,0%), whilst the majority of non-migrants (of working age), live in non-metro areas (58,5%).

Figure 3.4: Metro and non-metro distribution of the population by migration status, ages 15–64, QLFS 2017



Sub-provincial distribution of the population by migration status

Considering the sub-provincial distribution, Table 3.2 indicates the metro/non-metro distribution of migrants and shows that the highest proportion of migrants of working age (15–64) in a metropolitan area (metro) live in the City of Johannesburg (12,0%), Ekurhuleni (8,6%) and the City of Tshwane (6,8%). All three of these metros are in Gauteng. The highest proportion of migrants residing in non-metro areas are in North West non-metro area (6,8%), Limpopo non-metro area (6,5%) and Gauteng non-metro area (6,2%).

Table 3.2: Metro and non-metro distribution of the population by migration status, ages 15–64, QLFS 2017

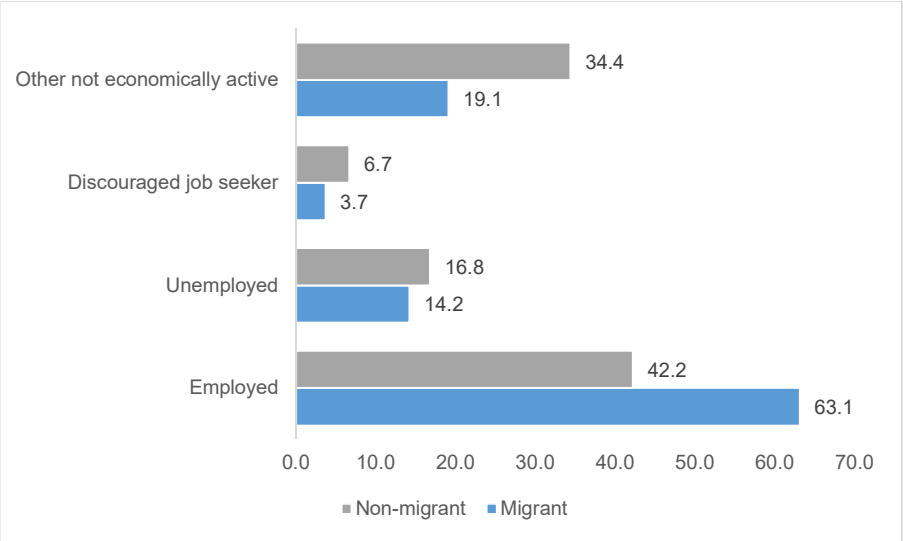
Metro/ non-metro area	Migrant	Non-migrant
WC – Non-metro	3,0	97,0
WC – City of Cape Town	5,8	94,2
EC – Non-metro	1,7	98,3
EC – Buffalo City	1,9	98,1
EC – Nelson Mandela Bay	2,4	97,6
NC – Non-metro	1,1	98,9
FS – Non-metro	3,4	96,6
FS – Mangaung	6,3	93,7
KZN – Non-metro	1,4	98,6
KZN – eThekwini	1,8	98,2
NW – Non-metro	6,8	93,2
GP – Non-metro	6,2	93,8
GP – Ekurhuleni	8,6	91,4
GP – City of Johannesburg	12,0	88,0
GP – City of Tshwane	6,8	93,2
MP – Non-metro	6,1	93,9
LP – Non-metro	6,5	93,5

THE LABOUR MARKET

Employment activity

Figure 3.5 provides a breakdown of the employment activity for the working-age population by migration status. This breakdown considers the working-age population broadly in the categories of (i) Employed, (ii) Unemployed, (iii) Discouraged job-seeker and (iv) Not economically active populations. A higher proportion of migrants (63,1%) are employed as compared to non-migrants (42,2%). Non-migrants accounted for the highest proportion in both the 'Not economically active' (34,4%) and 'Discouraged job-seeker' (6,7%) categories. This indicates that non-migrants are largely not economically active and are discouraged job-seekers, as compared to migrants, and are not a part of the labour market (Figure 3.5).

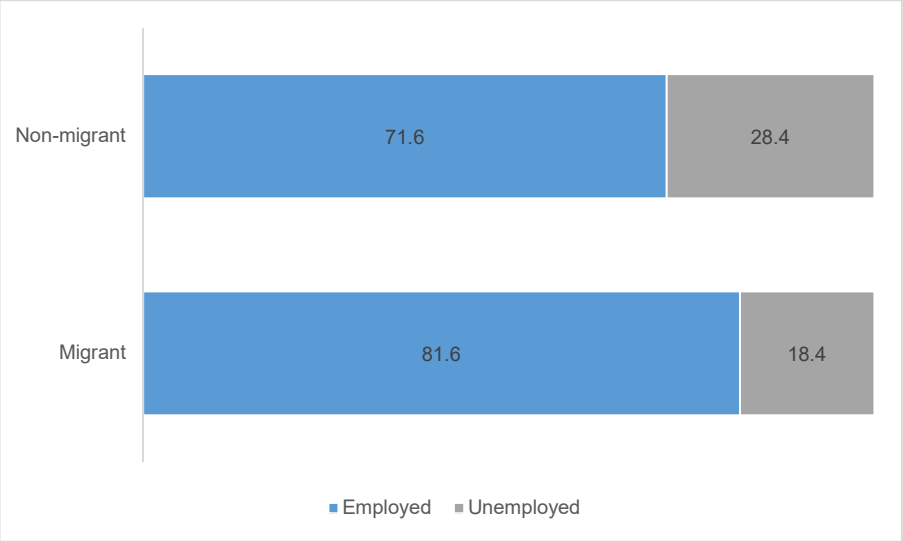
Figure 3.5: Distribution of population by migration status and employment status, ages 15–64, QLFS Q3: 2017



Labour force status

Figure 3.6 illustrates the employment and unemployment rate for the population by migration status, using the official definition of employment. The non-migrant population experienced higher unemployment (28,4%) in 2017 as compared to the migrant population (18,4%).

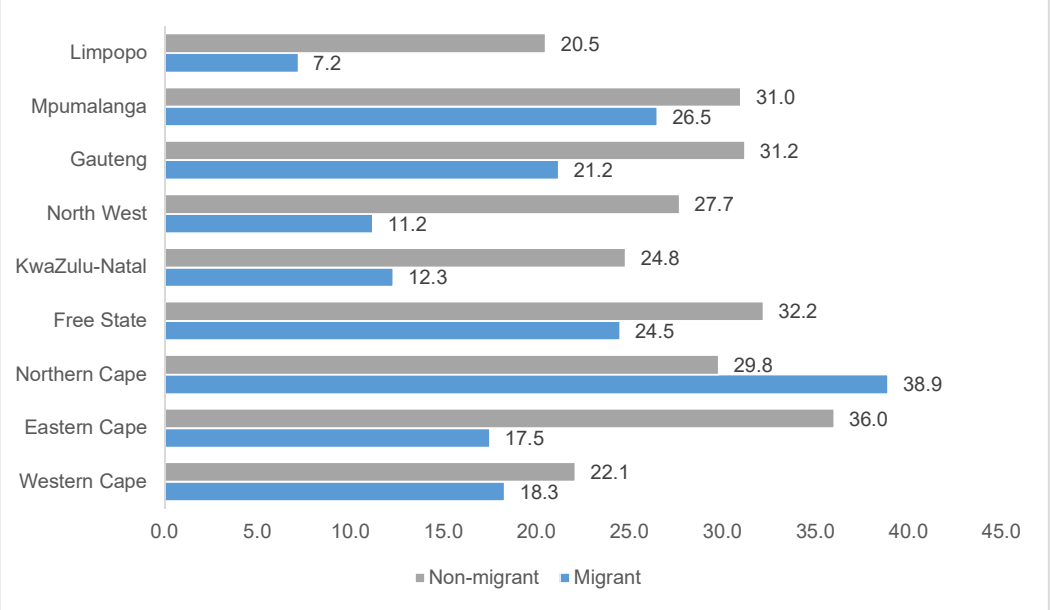
Figure 3.6: Distribution of the population by migration status and by labour market status, ages 15–64, QLFS Q3: 2017



Provincial distribution of the population by migration status and unemployment status

Levels of unemployment are higher for the non-migrant population in all provinces, except for Northern Cape. This indicates that a higher level of the migrant population than the non-migrant population is employed in eight out of the nine provinces in South Africa. Northern Cape is also the province with the lowest proportion of migrants in South Africa (Table 3.1). The most noticeable percentage point differences within a province between the migrant and non-migrant population is in Eastern Cape, KwaZulu-Natal and North West, where the unemployment level is almost two times higher for the non-migrant population than the migrant population. For Limpopo the unemployment level is almost three times higher for the non-migrant population than the migrant population (20,5% vs 7,2%) (Figure 3.7).

Figure 3.7: Provincial distribution of the population by migration status and unemployment status, ages 15–64, QLFS 2017

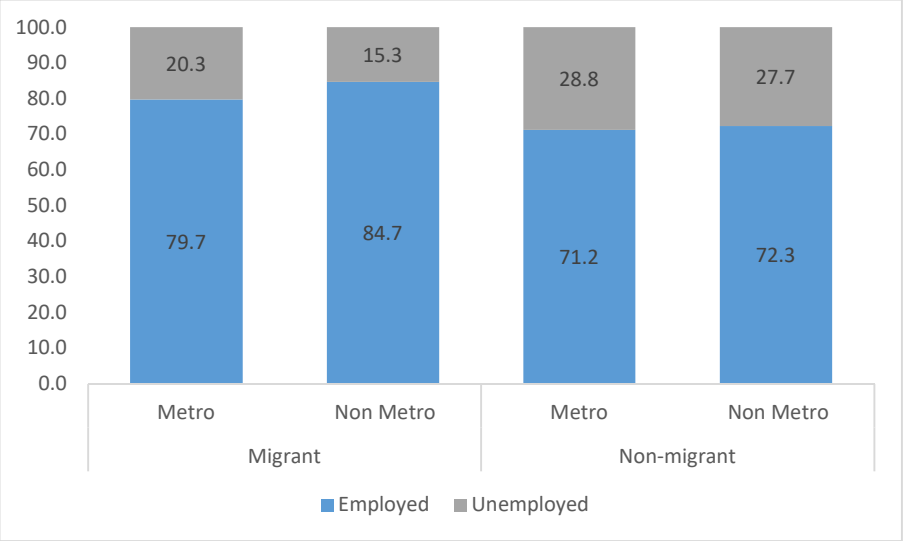


EMPLOYMENT IN THE INFORMAL SECTOR

Metro and non-metro distribution of the population by migration status and employment in the informal sector

Figure 3.8 indicates the metro and non-metro distribution of the population by migration status and labour force status. A higher proportion of both migrants and non-migrants who live in non-metro areas reported to be employed.

Figure 3.8: Labour force status of the population, ages 15–64, by migration and labour force status



Sub-provincial distribution of the population by migration status and unemployment status

Table 3.3 indicates the sub-provincial distribution of the population by migration status and unemployment status. Not all provinces in South Africa have metropolitan areas. There are eight metros in South Africa that are concentrated in five provinces (Western Cape, Eastern Cape, Free State, KwaZulu-Natal and Gauteng). The highest level of unemployment for the migrant population is in Northern Cape, which is a non-metro province (38,9%), followed by Buffalo City (28,9%) (metro in Eastern Cape) and Mangaung (28,2%) (metro in Free State). The lowest level of unemployment for the migrant population is in Limpopo (7,2%) (which is a non-metro province), North West (11,2%) (a non-metro province), eThekwini Metro (11,2%) (metro in KwaZulu-Natal) and Eastern Cape non-metro area (11,2%).

The highest level of unemployment for the non-migrant population is in Eastern Cape non-metro area (36,3%). This is in direct contrast to the situation of the migrant population which has one of the lowest unemployment rates in the same area. Other areas where unemployment is high for the non-migrant population is in the Nelson Mandela Bay Metro (36,3%), as well as the Buffalo City Metro. All three areas in Eastern Cape (two metros and one non-metro area) have the highest unemployment rate. The lowest unemployment rate of the

non-migrant population is in Western Cape non-metro area (19,5%), Limpopo (20,5%) (which is a non-metro province) and the City of Cape Town Metro (23,5%). Similar to the provincial trend (Figure 3.6), the levels of unemployment are higher for the non-migrant population in all metro and non-metro areas, apart from Northern Cape.

Table 3.3: Sub-provincial distribution of the population by migration status and unemployment status, ages 15–64, QLFS 2017

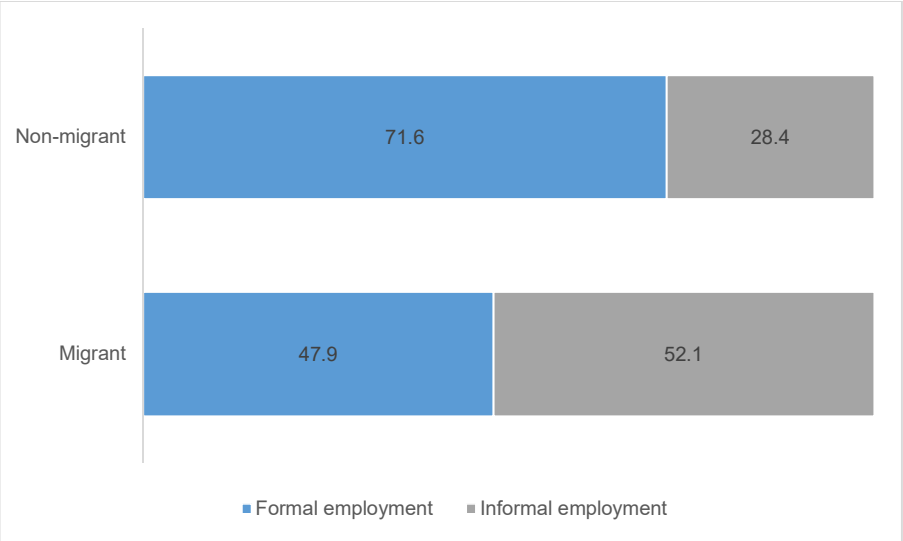
Metro/non-metro area	Migrant	Non-migrant
WC – Non-metro	14,1	19,5
WC – City of Cape Town	19,5	23,5
EC – Non-metro	11,2	36,4
EC – Buffalo City	28,9	34,2
EC – Nelson Mandela Bay	26,2	36,3
NC – Non-metro	38,9	29,8
FS – Non-metro	21,2	32,2
FS – Mangaung	28,2	32,2
KZN – Non-metro	13,1	25,8
KZN – eThekwini	11,2	23,6
NW – Non-metro	11,2	27,7
GP – Non-metro	26,2	32,9
GP – Ekurhuleni	23,7	33,1
GP – City of Johannesburg	19,3	31,1
GP – City of Tshwane	20,6	28,5
MP – Non-metro	26,5	31,0
LP – Non-metro	7,2	20,5

Employment sector

In many countries, informal employment represents a significant part of the economy and labour market, and thus plays a major role in production, employment creation and income generation.[8] The informal employment sector is not a protected sector, in the sense that there are no adequate social safety nets (for example, unemployment insurance and other social protection benefits). Wages may also be low and hours not regulated.[9] Figure 3.9 illustrates the involvement of persons by migration status by employment sector. The employment sector is broadly divided into formal employment and informal employment. Figure 3.9 indicates that the majority of the migrant population works in the informal sector (more than half), whilst only about a third (28,4%) of the non-migrant population works in the informal sector. This indicates that the majority of the migrant population works in an unprotected sector with little to no safety nets.

[8] Cohen, T. & Moodley, L. 2012. Achieving "decent work" in South Africa. Potchefstroom Electronic Law Journal, 15(2), pp. 320-344.
[9] International Labour Organization. 2011. Decent Work Country Profile: South Africa, Geneva: International Labour Organization.

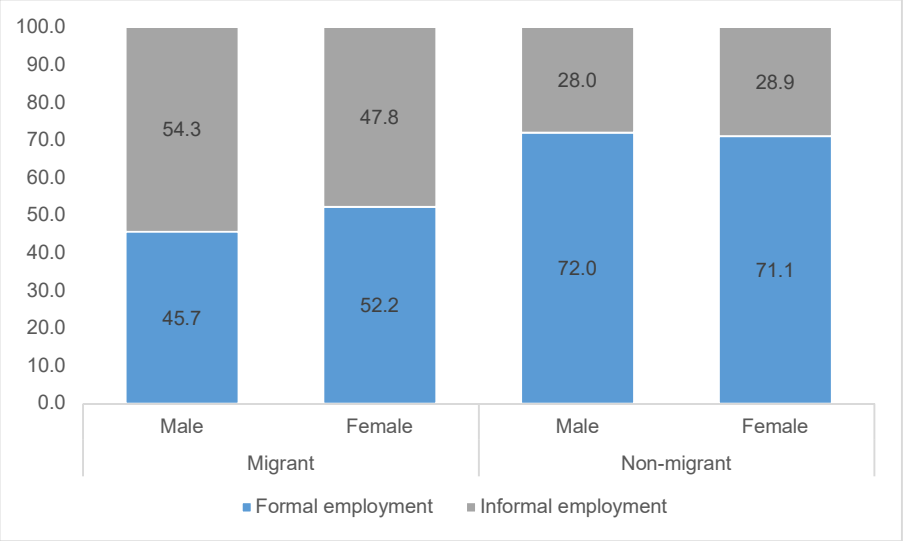
Figure 3.9: Distribution of the population by migration status and employment sector, ages 15–64, QLFS 2017



Sector of employment: Sex

Figure 3.10 shows a gendered perspective on the distribution of migrants and non-migrants by sex distribution and employment sector. It illustrates that there are more male migrants who work in the informal sector (54,3%) than female migrants (47,8%). The sex distribution for non-migrants in the informal and formal sector is relatively equal.

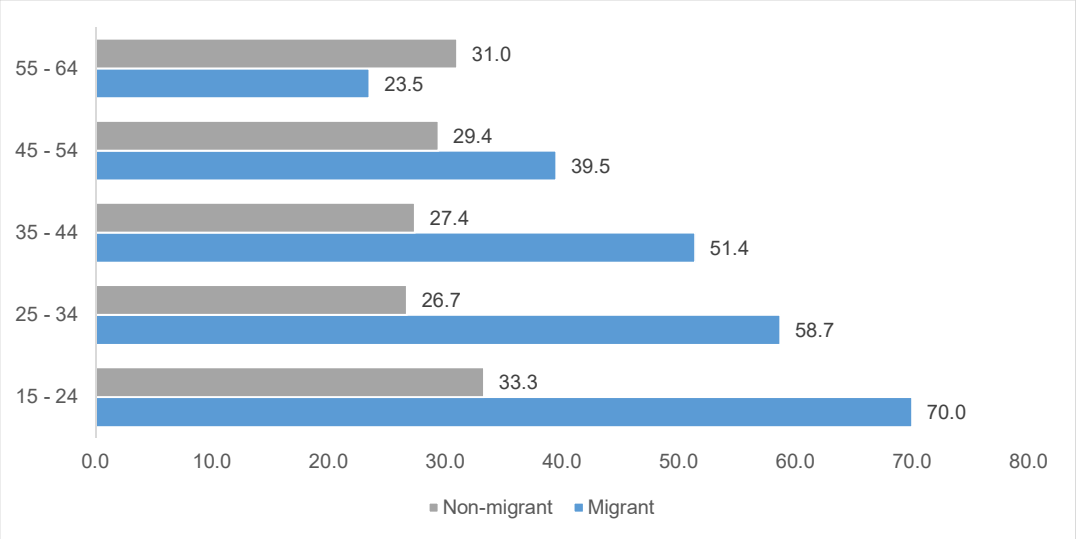
Figure 3.10: Distribution of the population by migration status, sex and employment sector, ages 15–64, QLFS 2017



Informal employment: Age

Figure 3.11 shows the distribution of the population who work in the informal sector by age group and migration status. The migrant population in the adolescent to early youth group (age group 15 to 24) shows the highest proportion of those who are employed in the informal sector (70,0%). The highest proportion of non-migrants who are working in the informal sector also belong to this age group.

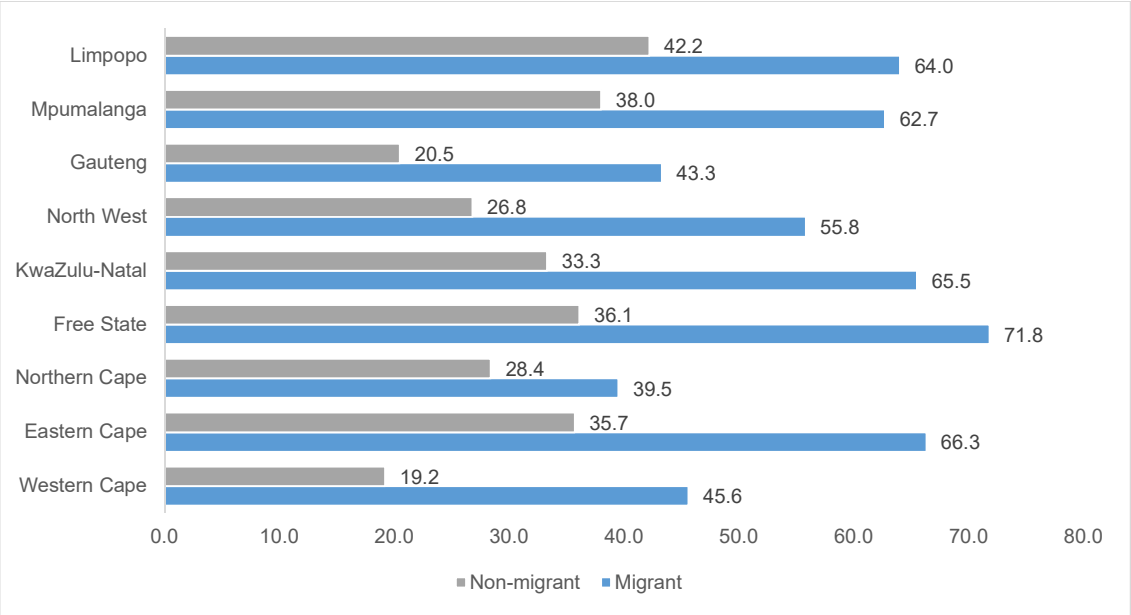
Figure 3.11: Distribution of the population who works in the informal sector by migration status and age, ages 15–64, QLFS 2017



Informal employment: Province

Figure 3.12 illustrates the distribution of the population working in the informal sector by province and migration status. Considering the spatial distribution, at a provincial level, the highest proportion of migrants who work in the informal sector are in Free State (71,8%). This is followed by migrants in Eastern Cape (66,3%) and KwaZulu-Natal (65,5%). The highest proportion of non-migrants who work in the informal sector are in Limpopo (42,2%), Mpumalanga (38,0%) and Free State (36,1%).

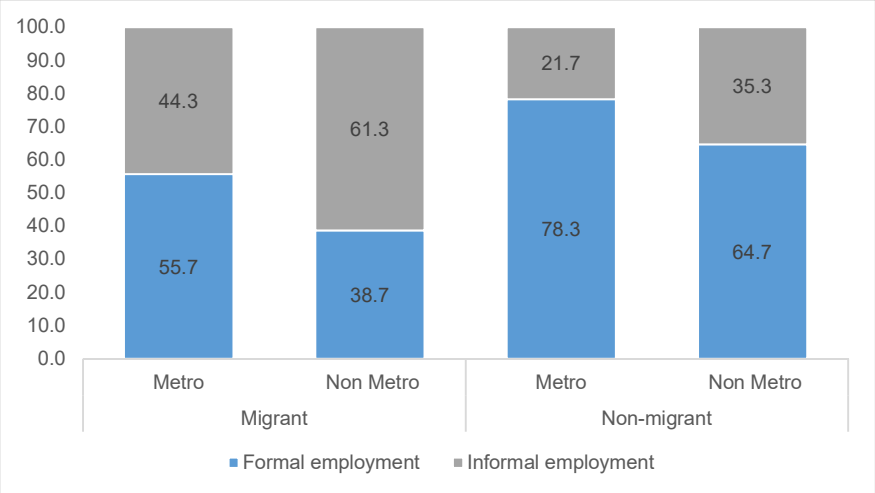
Figure 3.12: Distribution of the population in the informal sector by migration status and province, ages 15–64, QLFS 2017



Informal employment: Metro and non-metro

Figure 3.13 illustrates the distribution of the population by metro/non-metro area and type of employment sector. Considering the spatial distribution, at the metro/non-metro level, the majority of migrants who live in metro areas work in formal employment (55,7%), whilst the majority of migrants who live in non-metro areas work in the informal sector (61,3%). The majority of non-migrants in both metro and non-metro areas work in formal employment.

Figure 3.13: Distribution of the population by migration status, metro/non-metro area and type of employment sector, ages 15–64, QLFS 2017



Informal employment: Sub-provincial distribution

Table 3.4 indicates the sub-provincial distribution of the population by migration status and informal employment. The majority of migrants in EC: non-metro area, FS: non-metro area, FS: Mangaung, KZN: non-metro, KZN: eThekwini, NW: non-metro, MP: non-metro and LP: non-metro work in the informal employment sector. The majority of non-migrants in all areas work in the formal sector. The highest proportion of non-migrants who work in the informal sector are those who live in EC: non-metro, FS: non-metro and KZN: non-metro.

Table 3.4: Distribution of the population by migration status, metro and non-metro area and informal employment, ages 15–64, QLFS 2017

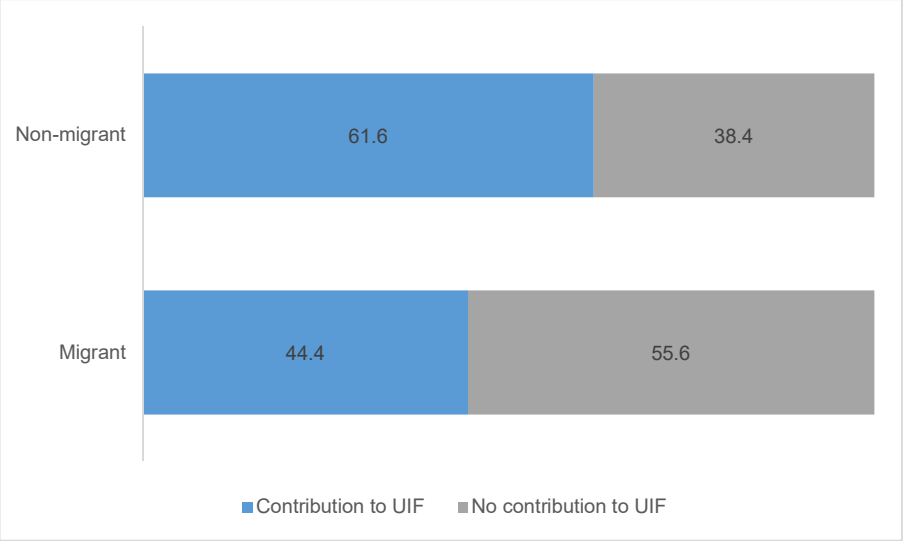
Metro/non-metro area	Migrant	Non-migrant
WC – Non-metro	42,0	22,4
WC – City of Cape Town	46,8	17,3
EC – Non-metro	81,9	42,5
EC – Buffalo City	43,6	28,7
EC – Nelson Mandela Bay	34,7	25,0
NC – Non-metro	39,5	28,4
FS – Non-metro	79,6	38,0
FS – Mangaung	63,2	32,1
KZN – Non-metro	74,1	37,5
KZN – eThekwini	55,5	28,3
NW – Non-metro	55,8	26,8
GP – Non-metro	45,7	25,5
GP – Ekurhuleni	37,5	18,6
GP – City of Johannesburg	45,1	22,2
GP – City of Tshwane	44,8	17,4
MP – Non-metro	62,7	38,0
LP – Non-metro	64,0	42,2

STABILITY AND SECURITY OF WORK

Contribution to UIF

The Unemployment Insurance Act, 2001 offers some protection to employees who lose their jobs. This was a crucial safety net to those who lost their jobs during the pandemic. However, UIF is only paid by employers in the formal sector. Respondents were asked if their employers pay a UIF contribution for them. Figure 3.14 illustrates the proportion receiving a UIF contribution from their employer. The majority of migrants (55,6%) do not work for an employer who contributes to the UIF scheme. The majority of non-migrants (61,6), however, do work for an employer who contributes to the UIF scheme.

Figure 3.14: Distribution of the population by migration status and UIF contribution by employer



Stability and security of work

Job security is regarded as a fundamental component of decent work. Job loss involves not only the loss of income but has far-reaching consequences for the dignity of employees and their family. Stability and security of work can be measured by (i) having an established employment contract in place and by (ii) the duration of employment contract (Table 3.5).

Employment contract

Having an employment contract is another measure of job security, irrespective of the position being temporary or permanent. Table 3.5 illustrates the proportion of persons who did/did not have an employment contract and indicates that only around sixty per cent of migrants had an employment contract, which signifies that migrants had the lowest job security from this perspective (Table 3.5).

Duration of employment

Stability and security of work are an important concern, as job security is essential for being able to plan one's financial situation. Research confirms that employees employed by limited (temporary) employment services are generally paid considerably less and receive fewer benefits than permanent employees performing the same work. The question that deals with duration of employment in the QLFS questionnaire is asked to establish the degree of job security, i.e. the duration of the contract. Table 3.5 disaggregates the duration of employment by (i) Unspecified duration (person's employment could end at any time), (ii) Permanent duration (person's employment is permanent), and (iii) Limited (temporary) duration (person's employment is fixed for a specific period). Unspecified and limited (temporary) employment services contribute significantly towards

insecure working conditions. Having a position of unspecified duration leads to no job security or stability, which is the scenario that more than forty per cent of immigrants reported in 2017. A quarter of non-migrants also work in employment that has an unspecified duration.

Table 3.5: Distribution of the population by migration status, type and duration of employment contract, ages 15–64, QLFS 2017

		Migrant	Non-migrant
Employment contract	Yes	59,5	81,6
	No	40,5	18,4
Duration of contract	Limited duration	8,9	13,6
	Permanent nature	49,9	62,3
	Unspecified duration	41,3	24,1

3.5 SUMMARY OF FINDINGS

The purpose of the report was to provide insight into the characteristics related to migration, labour and the informal sector and to profile migrant groups who are of working age, using data collected from Stats SA. Focus on labour force participation is integral, as it is the main route through which migrants improve their socio-economic status. The report examined migrant participation in the informal sector, and compared migrants (foreign-born population) to non-migrants (South African-born population). As the welfare roll-out during the Covid-19 pandemic was at provincial level, the report also examined trends at sub-national level. Sustainable Development Goal 17.18 highlights the need for the availability of "*timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts*."[10]

The informal economy is made up of many types of work, such as domestic work, gardening, the taxi industry, and street vending, amongst others. The informal economy is an unprotected sector with little to no safety nets. This industry has been largely affected as people were either completely denied any participation or allowed only minimum participation in this sector, especially during the fifth level of lockdown. Consequently, those in the informal sector who are employed by others may not be paid during this period. Employers may apply the *"no work, no pay"* principle. Hence, many in the informal sector are left with no income at this time. Additionally, whilst business in the formal sector may urge their employees to claim from UIF, this does not extend to the informal sector, as the informal sector is not covered by UIF. In many countries, informal employment represents a significant part of the economy and labour market, and thus plays a major role in production, employment creation and income generation.[11] The informal employment sector is not a protected sector, in the sense that there are no adequate social safety nets (for example, unemployment insurance and other social protection benefits). Wages may also be low and hours not regulated.[12]

[10] International Labor Organization. 2018. Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators. Geneva: International Labor Organization.
[11] Cohen, T. & Moodley, L. 2012. Achieving "decent work" in South Africa. Potchefstroom Electronic Law Journal, 15(2), pp. 320-344.
[12] International Labour Organization. 2011. Decent Work Country Profile: South Africa, Geneva: International Labour Organization.

In consideration of the population distribution, results from the QLFS 2017, Quarter 3, indicated that the population aged 15–64 was about 37,3 million. Migrants constituted about 1,9 million (5,3%) and non-migrants about 35,3 million (94,7%) (Figure 3.2). The migrant population constituted more males (57,2%) than females (42,8%), whilst the non-migrants were almost equally distributed (Figure 3.3). With regards to the spatial distribution, the highest proportion of migrants of working age (15–64) live in Gauteng (9,1%), followed by North West (6,8%) and Limpopo (6,5%). Northern Cape (1,1%, KwaZulu-Natal (1,5%) and Eastern Cape (1,9%) have the lowest proportion of migrants of working age (Table 3.1). The majority of migrants live in metro areas (55,0%), whilst the majority of non-migrants (of working age), live in non-metro areas (58,5%) (Figure 3.4). The highest proportion of migrants of working age (15–64) in a metro area, live in the City of Johannesburg. The highest proportion of migrants residing in non-metro areas are in North West non-metro area (6,8%) (Table 3.2).

Considering the labour force, the non-migrant population experienced higher unemployment (28,4%) in 2017 as compared to the migrant population (18,4%) (Figure 3.6). Levels of unemployment are higher for the non-migrant population in all provinces, except for Northern Cape (Figure 3.7). A higher proportion of both migrants and non-migrants who live in a non-metro area reported to be employed (Figure 3.8). The highest level of unemployment for the migrant population is in Northern Cape, which is a non-metro province (38,9%), followed by Buffalo City (28,9%) (metro in Eastern Cape), and Mangaung (28,2%) (metro in Free State) (Table 3.3). The lowest level of unemployment for the migrant population is in Limpopo (7,2%) (which is a non-metro province), North West (11,2%) (a non-metro province), eThekwini Metro (11,2%) (metro in KwaZulu-Natal) and Eastern Cape non-metro area (11,2%). The highest level of unemployment for the non-migrant population is in Eastern Cape non-metro area (36,3%). (Table 3.3) This is in direct contrast to the situation of the migrant population which has one of the lowest unemployment rates in the same area. Other areas where unemployment is high for the non-migrant population is in the Nelson Mandela Bay Metro (36,3%), as well as the Buffalo City Metro. All three areas in Eastern Cape (two metros and one non-metro area) have the highest unemployment rate. The lowest unemployment rate of the non-migrant population is in Western Cape non-metro area (19,5%), Limpopo (20,5%) (which is a non-metro province) and the City of Cape Town Metro (23,5%) (Table 3.3).

With regards to work in the informal sector, the majority of the migrant population work in the informal sector (more than half), whilst only about a third (28,4%) of the non-migrant population work in the informal sector (Figure 3.9). This indicates that the majority of the migrant population work in an unprotected sector with little to no safety nets. There are more male migrants who work in the informal sector (54,3%) than female migrants (47,8%). The sex distribution for non-migrants in the informal and formal sector is relatively equal (Figure 3.10). The migrant population in the adolescent to early youth group (age group 15 to 24) shows the highest proportion who are employed in the informal sector. The highest proportion of non-migrants who are working in the informal sector also belongs to the same age group (Figure 3.11). Considering the spatial distribution, the highest proportion of migrants who work in the informal sector are in Free State (71,8%). This is followed by migrants in Eastern Cape (66,3%) and KwaZulu-Natal (65,5%). The highest proportion of non-migrants who work in the informal sector are in Limpopo (42,2%), Mpumalanga (38,0%) and Free State (36,1%) (Figure

3.12). Considering the spatial distribution at metro/non-metro level, the majority of migrants who live in a metro area work in formal employment (55,7%), whilst the majority of migrants who live in a non-metro area work in the informal sector (61,3%). The majority of non-migrants in both the metro and non-metro areas work in formal employment (Figure 3.13). The majority of migrants in EC: non-metro area, FS: non-metro area, FS: Mangaung, KZN: non-metro, KZN: eThekwini, NW: non-metro, MP: non-metro and LP: non-metro work in the informal employment sector. The majority of non-migrants in all areas work in the formal sector (Table 3.4).

In consideration of UIF and job security and stability, the majority of migrants (55,6%) do not work for an employer who contributes to the UIF scheme. The majority of non-migrants (61,6), however, do work for an employer who contributes to the UIF scheme (Figure 3.14). Only around sixty per cent of migrants had an employment contract, which signifies that migrants had the lowest job security from this perspective (Table 3.5). Having a position of unspecified duration leads to no job security or stability, which is the scenario that more than forty per cent of immigrants reported in 2017. A quarter of non-migrants also work in employment that has an unspecified duration (Table 3.5).

The analysis indicates that migrants, whilst having a higher level of employment than non-migrants, work predominantly in the informal sector in South Africa (more than half). This means that more than half of migrants of working age in South Africa, work in an unprotected job sector, with little to no safety nets. Regarding migrants, more male than female migrants work in the informal sector, and the majority of migrants in the 15-44 year age group, work in the informal sector. To note, seventy per cent of migrants in the early youth category (15-24) work in the informal sector. The majority of migrants in Free State, Eastern Cape and KwaZulu-Natal, work in the informal sector. The majority of migrants in a non-metro area, work in the informal sector. If the principle of *"no work, no pay,"* is to be applied, the majority of migrants do not work for employers who contribute to UIF, meaning that these migrant employees will most likely be left immediately with no wage or salary. Job stability and security is an integral aspect as it is essential for an individual to plan their financial situation. However, more than forty per cent of migrants work in a job which has an unspecified duration, meaning that the job can end at any time. These results highlight the situation that many to most of migrants in South Africa find themselves working in. Whilst the media and public often highlight the notion that a higher proportion of migrants than non-migrants (those born in South-Africa) are employed, quality and stability of employment is not taken into account.

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