Anthropology & Aging
Journal of the Association for Anthropology & Gerontology

Aging, Care, and Isolation in the Time of COVID-19

Lenore Manderson

University of the Witwatersrand
lenore.manderson@wits.ac.za

Susan Levine

University of Cape Town
susan.levine@uct.ac.za

Anthropology & Aging, Vol 41, No 2 (2020), pp. 132-140

ISSN 2374-2267 (online) DOI 10.5195/aa.2020.314

This work is licensed under a Creative Commons Attribution 4.0 International License.

This journal is published by the University Library System of the University of Pittsburgh as part of its
D-Scribe Digital Publishing Program, and is cosponsored by the University of Pittsburgh Press.

Aging, Care, and Isolation in the Time of COVID-19

Lenore Manderson

University of the Witwatersrand
lenore.manderson@wits.ac.za

Susan Levine

University of Cape Town
susan.levine@uct.ac.za

Introduction

South Africa's harsh lockdown was an urgent response to the virulence and capriciousness of SARS-COV-2. When it was introduced on March 26 2020, it was presented as a precautionary measure lest hospitals be overwhelmed with people requiring emergency and intensive care; restrictions were imposed for the public good until transmission abated. At this time, there was little opportunity to reflect on how else this pandemic might be managed, what else might need to be addressed, and what it might mean to live with a continuing threat of infection and/or extended lockdown. As these eventualities transpire, we see now the importance of examining the circumstances in which people live with multiple chronic health conditions, many of whom are aged and were, before lockdown, already struggling with limited mobility and contracted social interaction.

In this article, we focus on how the proxemics of the pandemic affect people with chronic conditions, including the impact of changed norms of engagement for self-care and chronic disease management for individuals and households. Among older people, COVID-19 can both directly and indirectly increase their isolation, load onto existing health problems, and add to the risks of depression and anxiety. While there is excess mortality among older people from COVID-19, the concomitant accumulating social and physical effects of changes to everyday lives may equally contribute to untimely death. With the spread of coronavirus, there has been growing concern for the vulnerability of older people to serious diseases for both biological and social reasons. Emerging data suggest that COVID-19 deaths and other acute conditions are increasingly unrelated to the virus itself, but born out of its social consequences (Delmas, Bouisset, and Lairez 2020; Manderson and Wahlberg 2020). There is concern regarding increasing suicides and (often interconnected) problems of gender-based violence and alcohol misuse (Al-Ali 2020; Gratz *et al.* 2020; Ramalho 2020; Troutman-Jordan and Kazemi 2020). The aptly named 'broken heart syndrome'– stress cardiomyopathy or Takotsubo cardiomyopathy – is also reported to have increased since the start of the pandemic, with the primary risk factor being age, along with anxiety and/or depression (Alharthy *et al.* 2020; Giustino *et al*. 2020; Jabri *et al*. 2020; Sattar *et al.* 2020). Well into the pandemic, we now need to consider its continuing direct and indirect effects on people's lives.

Below, we consider how housing, mobility, everyday functional activities, household composition, and underlying health conditions are all impacted by COVID-19. We draw on our ongoing work in medical

Vol 41 No 2 (2020) ISSN 2374-2267 (online) DOI 10.5195/aa.2020.314 http://anthro-age.pitt.edu

anthropology and public health in South Africa to highlight the ways in which COVID-19 amplifies the structural vulnerabilities of aging and frailty, of multiple physical and mental health debilities, and the capacity of others to provide care (Harling *et al.* 2020; Mkhwanazi and Manderson 2020). These vulnerabilities are largely not unique to South Africa. Rather, South Africa instantiates the manifold problems affecting older people in middle income countries, where epidemiological and demographic transitions have occurred in tandem with growing inequality. The introduction of state regulations in response to COVID-19 in local settings aggravates these social and physical vulnerabilities and inequalities. In this article, we highlight the interconnected, knock-on and accumulated impacts of the pandemic and its management.

Households and/of Care

While the earliest cases of COVID-19 reported in South Africa in March 2020 were among tourists, the first intense wave of infections occurred in old age homes in the provinces of Western Cape and Gauteng (Maree and Khanyile 2020). Influenced by the disproportionate death rate among older people in Europe and North America, these residential care homes and hospitals privileged both clinical care and containment of infection. As one measure, those managing these settings opted to isolate elders to prevent younger members from being with parents, grandparents, or great grandparents. The restrictions on contact with vulnerable elders may have slowed community transmission, but in clinical settings, they presaged high rates of infection, as hospital employees struggled to gain access to adequate supplies of personal protective equipment and to adhere appropriately to protection procedures and protocols. With social distancing, the affective and proxemic dimensions of care in hospitals and in aged care facilities also changed. Overnight, nurses on the frontlines, attempting to provide care through reassuring touch as much as medical attention, were draped in new protective gowns, masks, and gloves. They were asked to adopt a medical, more distanced form of care, which has been both reassuring and alienating to patients, nursing staff and their respective family members. People in residential care have faced months without face-to-face communication with loved ones, relying more and more on social media to stay connected.

However, a small minority of older privileged and mostly white people in South Africa live in residential care. The greater challenge to health and wellbeing is for the black and colored majority living alone or with family members in community settings (see also Maree and Khanyile 2020). Here, markers of vulnerability, limits to care and social isolation were already challenges to health before COVID-19. We turn now to elaborate on these structural challenges in households as settings of care and how they are aggravated by COVID-19. We then consider how embodied constraints can extend vulnerability, including declining physical health, mental illness and distress, opportunistic infection, and hunger in under-resourced households.

Households are neither homogenous nor stable; they vary significantly in size, capacity and relatedness of members, and while multigenerational households are common, this is not necessarily the case (Mkhwanazi and Manderson 2020). Households of one or two people only, and of seven, eight or more people, sometimes related only distantly, are both common. Household composition is often fluid, with temporary episodic changes occurring with seasonal labor and during holidays (Spiegel *et al*. 1996). This fluidity undermines the structures and reliability of care, including that provided at home for chronic conditions. A recent study in Gauteng Province, the most populous province of the country including both Johannesburg and Pretoria, showed that 74% of older people live in households of two or more people. Of these, 82% are reportedly head of household, and over half are the primary carers of dependent children (56%) and have at least one dependent child (65%) (De Kadt *et al*. 2020; Parker and

De Kadt 2020). These figures also mean that 26% of older people live alone, many lacking regular everyday interactions and access to personal assistance as needed.

In community settings, as these figures suggest, care is generally provided by older people to dependents, including grandchildren, great-grandchildren and other unemployed family members, as well as to other older frail members of households (see further below). One case illustrates how this transpires in the everyday. Thembisa Khwalo lost her job as a domestic worker in 2019, and now, at age 60, is without any future work prospects, pension, or savings (Levine, fieldnotes). Incapable of looking after herself or her children in Cape Town, she returned to her rural home in the Eastern Cape, a region in crisis from extreme drought, with health and educational infrastructures eviscerated through state corruption and the ongoing legacy of apartheid race policy (Magubane 1979). Neither of her children are working, and while her son was enrolled in college prior to the lockdown, there is no longer any family income from which to draw support. She suffers from chronic pain and limited mobility due to knee injury. Health care systems at all levels are insufficient and unable to cope with the high incidence of illness, which includes hypertension, cancer, TB, HIV/AIDS, and now, additionally, COVID-19. Yet, when asked about the presence of COVID-19 in her area, Thembisa responded: "Nobody is sick, only struggling with money and food." COVID-related unemployment and systemic race inequality, born out of racial capitalism, have already led to massive food scarcity (Amadasun 2020; Levine 2013; Phogole 2010). Early opinions on the impact of the pandemic in South Africa suggested that poor people would die of hunger before they died of COVID-19, and this is now increasingly likely for elderly people without any arable land to grow food. As Eggan (2020) reported, "behind… specific lockdown-related developments a great specter looms: hunger."

Thembisa's garden has space enough for egg laying chickens and unlike in her densely populated township home in the city, she feels protected from COVID-19 in the Eastern Cape due to the distance between houses in this rural setting. Her house in Cape Town is sandwiched between informal shacks and semi-built houses with the close proximity between people difficult to avoid in a time of social distancing. But the political geography of greater space in her rural home also means that Thembisa has no contact with her neighbors. In a country already devasted by the impact of HIV and TB, the resistance to social distancing that has occurred in the United States and parts of Europe are nearly non-existent. The elderly are most at risk of infection, and their children and grandchildren, neighbors, and friends are staying away to protect them. The greater adherence to new public health protocols around social distancing has, however, simultaneously led to isolation and intensified feelings of loneliness among aging populations in both urban and rural contexts. The complexity of different affective and material dimensions of this differential proxemics requires the kind of ethnographic work currently prohibited along ethical and public health lines.

In contrast with Thembisa's isolation from younger family members, a notable effect of the HIV pandemic was the redistribution of care because of "skip generations" (Schatz and Madhavan 2011; Schatz, Madhavan, and Williams 2011; Schatz and Ogunmefun 2007). Nothemba Bhaxa's daughter died of an AIDS-related illness in 2012 in Zwelethemba township in the Western Cape (Levine 2013). She left behind a daughter aged six, and twin boys aged two. Nothemba, now in her seventies, is still the primary caretaker of all three grandchildren in this "skip generation" household. However, the roles of older women – especially in childcare and as household heads – predates HIV. The vital role of older women in caregiving is the result of male labor migration and apartheid era control over mobility and residence. It has continued as young parents seek employment as and where it is available. But while older women provide much of the care, the reverse is true. Younger people do provide care to their elders, and when this is compromised for a range of reasons, this impacts their own sense of wellbeing, connectedness, and their ideas of a future without fear.

This seems to be slighty different in townships on the margins of cities. In informal settlements at least, strict adherence to lockdown regulations is often impossible, and life continues relatively unchanged even under the harshest lockdown rules, with the exception of increasing police enforcement of isolation (Levine and Manderson 2020). The other exception is of massive unemployment, so that men and women of working age are home to a greater extent. When families live together along intergenerational lines, for some there is more, not less support for those who need it.

Data are not yet available on recent changes in household size and composition, including as a result of temporary changes associated with COVID-19 lockdown regulations. Householders often depend on the Older Person's Grant (Schatz *et al.* 2012; Schatz *et al.* 2015). This dependency has likely increased with the contraction of the economy and unemployment, including domestic work, laboring, gardening, recycling, and other informal work. While some temporary members of households are entitled to state support due to unemployment associated with COVID-19, the amount (c.US$20 per month) is insufficient to meet subsistence costs. Further, notwithstanding our comments above, greater numbers of people in households do not necessarily result in improved personal care and assistance. As we illustrate below, instead, concerns about infection and the management of risk further influence the care provided for other health conditions, such as cardiometabolic diseases and HIV. These conditions amplify COVID-19's lethality.

Syndemics and Recursivity

Public health measures, improved hygiene and sanitation, early diagnosis and surgical and medical interventions, have had a substantial effect on South Africa's demography and population aging. Associated with this, in South Africa and elsewhere in sub-Saharan Africa, there has been a significant increase in the absolute numbers and proportion of people living with cardiometabolic disease (obesity, heart disease and diabetes), cancers, arthritis and chronic obstructive pulmonary disease (Chang *et al.* 2019a; 2019b). These conditions may be unstable because of pathological changes, difficulties with medication supplies and the challenges of comorbidities. In addition, around 5 million out of 7.7 million people living with HIV receive antiretroviral (ARV) medication. Like others, they concurrently live with various chronic conditions. These conditions and their management are all affected by social circumstances, and both social and biological factors, in multiple ways – biological with biological, social with social, biological with social – interact to complicate, compound and exacerbate illness (Manderson and Warren 2016; Singer *et al.* 2017; Singer 2009). The syndemic effects of SARS-COV-2 and cardiometabolic conditions are still being identified (Singer 2020). While relatively low death rates have been reported in populations with high rates of HIV, prompting speculation of the protective effects of ARV medication, other chronic conditions are clearly implicated in poor outcomes for COVID-19 (Flaherty *et al*. 2020; Mahumud, Kamara, and Renzaho 2020).

COVID-19, chronic conditions, and aging are linked in ways that stretch beyond clinical risk. Complications from various chronic conditions, typically exacerbated with aging, impair independent living. People with impairments and others who become more frail as they age may require extensive personal assistance, including help with what the International Classification of Functioning (ICF) identifies as "basic functional tasks": the ability to eat, toilet, dress, and bathe/shower, get in and out of bed or chairs, and walk (Warren and Manderson 2013; World Health Organization 2001). If a person with such limitations lives with others, assistance with everyday activities may need not to be impeded under lockdown restrictions, but where bathing facilities and toilets are shared beyond the household, people must move in and around the community in ways that contradict distancing strategies.Furthermore, loss of communication and/or sensory, cognitive, social and interactional skills

– as may occur with stroke and dementia – by default shrink people's social worlds and everyday living skills. More complex tasks of domestic, household and community life – managing money, shopping, preparing meals, undertaking housework, using a telephone – regarded as Instrumental Activities of Daily Living (IADLs) (Barberger-Gateau, Dartigues, and Letenneur 1993; Harling *et al.* 2020) – are harder to address when household size and economic resources are constrained. Further, while people who are frail and in poor health, aging and otherwise, depend on other householders for intimate care and other assistance with daily living, they also find relief from relative isolation through visits from other family members, neighbors, and, occasionally, community health workers. Physical distancing has introduced new constraints to the giving and receiving of care, particularly when caregiver(s) and care recipients live separately. Thus, the faltering rhythms of a predictable life, due to social constraints in response to the pandemic, are likely to reduce the provision of everyday care – and may well heighten confusion or add distress for people with cognitive decline.

Infrastructures of Care

COVID-19 has resulted in growing pressure on households through socio-economic constraints and the reduced capacity to provide care. In this paragraph, we illustrate how care infrastructures are specifically eroded with COVID-19, impacting negatively on the health of older peple with chronic conditions. Henriette Langstrup (2013) relates "care infrastructures" to a person's capacity to self-care and receive care: an assemblage of people, spaces and material items that link the home with external structures of care. These infrastructures include people (health professionals, social workers, taxi and bus drivers, families, neighbors and friends) and technologies (telephones, medicines and other items, such as a blood glucose meter and associated materials for its use as well as boxes, cupboards and fridges for safe keeping) (Langstrup 2013, 1018). In South Africa, however, although population-wide cell phone ownership is high, people cannot always afford data, and topping up data requires time and mobility. Furthermore, storage space is limited in small rural houses, cottages and peri-urban shacks where four, five or more people may live in one or two rooms and where people may keep drugs on the top of cupboards and wardrobes and in handbags to be out of reach of small children (Manderson 2020). The simple tasks of "homework" stretch logistics and resources in community settings, as care needs change (Manderson and Wahlberg 2020; Mattingly, Grøn, and Meinert 2011). Poverty already adds complexity to undertaking these tasks. The COVID-19 lockdown has further complicated this through declines in household income, changes of household composition and size, and limits to movement. Any single factor can unsettle home infrastructure and disrupt the critical consistency of care.

In poor households, people compete for care and resources. Moreover, there is rarely simply one care-recipient and one caregiver; rather, people provide and receive care depending on need, capacity, resources, proximity and availability to others (Manderson and Block 2016; Manderson, Block, and Mkhwanazi 2016; Schatz *et al.* 2018; Singer 2020). Caregivers can also simultaneously be care-recipients; caregiving is often mutual and at any point, a person with the predominant role of caregiver may be incapacitated and in need of care themselves (Nxumalo, Goudge, and Manderson 2016). In this syndemic context, couples are being reported to have died of COVID-19 on the same day. One can only imagine the agony, of not having been able to provide care for their beloved one, and the distress of their closest family members, unable to attend to them in the hospital or find solace in their grief at a family burial due to funerary regulations. There are other cases of asymmetrical outcomes, where only one partner survives. In both instances, the household becomes a space of debility. Under ordinary circumstances, a community health worker, an NGO activist, or a neighbor may step in if a primary caregiver is absent or without capacity to care. But with shifting proxemics and explicit emphasis on physical distance and likely social withdrawal, it is possible, without intentional programs, to overlook

the evolving care needs from conditions other than COVID-19 when people lose the care which they had relied on.

In South Africa, governmental health support supplements home care through a model of Integrated Chronic Care that is delivered through community clinics (Limbani *et al.* 2019). Chronic conditions require that patients adhere to medication at home and attend clinics for monitoring. This requires that they can walk to a clinic, or that transport is affordable and accessible. The older the person, the more likely she or he depends on at least one other person to assist with these tasks within the home and in relation to clinic visits. If the caregiver is a paid worker, then he or she needs to negotiate time and to ensure good enough care for a household member with care needs through facilitating a visit to the clinic. If the caregiver has children, cares for other older people or grandchildren, for instance – then someone else needs to care for them at the moments of clinic visits. For these and other reasons, people in rural areas and in townships have poor access to health facilities even under ordinary circumstances. COVID-19 constraints only further limit access to medical care, and thus increase the social and physical vulnerabilities that derive from this lack.

Concluding remarks

COVID-19 has amplified tensions between formal clinical care, state care, and inter- and intra-household care for the aged, who as a population are rendered more or less vulnerable along the deep systemic cleavages of class, race, and gender that impact generations. There is another ordinary story of aging, not unique to South Africa, where elderly people fear that they will not again be able to hug their children, nor travel to them if they live overseas, and where deep depression is settling in. COVID-19 has exacerbated isolation and loneliness, again sadly revealing how inequality tailors living circumstances and political response. A father died at an old age home alone, not because he was sick but because he decided life was no longer worth living under COVID-19. His wife was in a hospital, seriously ill after an extended period of suffering from Alzheimer's disease. He was unable to visit her, and their children and his other daughter lived at a distance. He was despondent. He could hear his children's concern. He did not die an assisted death, nor did he die from COVID-19, but his daughter believes that he died a "COVID death" due to isolation and the lack of care that he might have been provided under other circumstances. Other friends and colleagues have lost parents and other older relatives as a direct result of COVID-19, and equally, they have been trapped by the demands of isolation from providing them with the personal care that might make all the difference to ways of dying, and from farewelling them (Kaufman 2009; Kaufman and Morgan 2005). This has slightly changed in South Africa, as interprovince travel has opened up, enabling some people to travel to be with elderly family members, particularly when dying of causes other than COVID-19. But this assumes that travel is logistically and economically possible.

We have, throughout this article, showed how COVID-19 amplifies and exploits household fragility in different ways, producing social isolation in wealthier households and heightening dependency and vulnerability in poorer households (Cox 2020). Yet, as Thembisa's story indicates, even this is an uneven balance, and domestic violence, depression from isolation, and emerging fears of dying alone and being buried without a funeral, clearly cut across class, race, and geographical division.

Caregiving continues in environments of lack. The networks of care shrink in some cases, while blowing out in others. Those whose incomes derive from providing others with personal care and domestic work are affected economically. Most people who care for others at home in South Africa – and worldwide – cannot afford masks and gloves, and necessarily breach guidelines to continue to provide intimate

bodily care. Similarly, those without household members to assist them face particular risk, not from COVID-19 but from neglect.

References

Al-Ali, Nadje. 2020. "Covid-19 and Feminism in the Global South: Challenges, Initiatives and Dilemmas." *European Journal of Womens Studies.* https://doi.org/10.1177/1350506820943617.

Alharthy, Abdulrahman, Fahad Faqihi, Ziad A. Memish, and Dimitrios Karakitsos. 2020. "Fragile Endothelium and Brain Dysregulated Neurochemical Activity in COVID-19." *ACS Chemical Neuroscience* 11(15): 2159-2162.

Amadasun, Solomon. 2020. "From Coronavirus to 'Hunger Virus': Mapping the Urgency of Social Work Response amid COVID-19 Pandemic in Africa." *International Social Work.* https://doi.org/10.1177/0020872820959366.

Barberger-Gateau, Pascale, Jean François Dartigues, and Luc Letenneur. 1993. "Four Instrumental Activities of Daily Living Score as a Predictor of One-year Incident Dementia." *Age and Ageing* 22(6): 457-463.

Chang, Angela Y., Francesc Xavier Gómez-Olivé, Collin Payne, Julia K Rohr, Jennifer Manne-Goehler, Alisha N. Wade, Ryan G Wagner, Livia Montana, Stephen Tollman, and Joshua A Salomon. 2019a. "Chronic Multimorbidity among Older Adults in Rural South Africa." *BMJ Global Health* 4(4): e001386. https://doi.org/10.1136/bmjgh-2018-001386.

----.2019b. "Multimorbidity and Care for Hypertension, Diabetes and HIV among Older Adults in Rural South Africa." *Bulletin of the World Health Organization* 97(1): 10-23.

Cox, Carole. 2020. "Older Adults and Covid 19: Social Justice, Disparities, and Social Work Practice." *Journal of Gerontological Social Work.* https://doi.org/10.1080/01634372.2020.1808141.

De Kadt, Julia, Graeme Götz, Christian Hamann, Gillian Maree, and Alexandra Parker. 2020. "Mapping Vulnerability to COVID-19 in Gauteng." *GCRO Map of the Month, March*. Johannesburg, South Africa: Gauteng City-Region Observatory.

Delmas, Clement, Frédéric Bouisset, and Olivier Lairez. 2020. "COVID-19 Pandemic: No Increase of Takotsubo Syndrome Occurrence Despite High-stress Conditions." *ESC Heart Failure.* https://doi.org/10.1002/ehf2.12871.

Egan, Anthony. 2020. "Hunger Begins to Replace Covid-19 as Existential Fear in South Africa." *americamagazine.org* April 28, 2020. https://www.americamagazine.org/voices/anthony-egan.

Flaherty, Gerard Thomas, Paul Hession, Chee Hwui Liew, and Bryan Chang Wei Lim. 2020. "COVID-19 in Adult Patients with Pre-existing Chronic Cardiac, Respiratory and Metabolic Disease: A Critical Literature Review with Clinical Recommendations." *Tropical Diseases Travel Medicine and Vaccines* 6(1). https://doi.org/10.1186/s40794-020-00118-y.

Giustino, Gennaro, Lori B. Croft, Connor P. Oates, Karishman Rahman, Stamatios Lerakis, Vivek E. Reddy, and Martin Goldman. 2020. "Takotsubo Cardiomyopathy in COVID-19." *Journal of the American College of Cardiology* 76(5): 628-629. https://doi.org/10.1016/j.jacc.2020.05.068.

Gratz, Kim L., Matthew Tull, Julia R. Richmond, Keith A. Edmonds, Kayla M. Scamaldo, and Jason P. Rose. 2020. "Thwarted Belongingness and Perceived Burdensomeness Explain the Associations of COVID-19 Social and Economic Consequences to Suicide Risk." *Suicide and Life-Threatening Behavior.* https://doi.org/10.1111/sltb.12654.

Harling, Guy, Collin F. Payne, Justine Davies, Francesc Xavier Gomez-Olivé, Kathleen Kahn, Lenore Manderson, Farrah J. Mateen, Stehen M. Tollman, and Miles D. Witham. 2020. "Impairment in Activities of Daily Living, Care and Unmet Need in an Older Rural South African Population: Findings from the HAALSI Study." *Journal of Aging and Health* 32(5-6): 296-307. https://doi.org/10.1177/0898264318821220.

Jabri, Ahmad, Ankur Kalra, Ashish Kumar, Anas Alameh, Shubham Adroja, Hanad Bashir, Amy S. Nowacki, Rohan Shah, Shameer Khubber, Anmar Kanaa'N, David P. Hedrick, Khaled M. Sleik, Neil Mehta, Mina K. Chung, Umesh N. Khot, Samir R. Kapadia, Rishi Puri, and Grant W. Reed. 2020. "Incidence of Stress

Cardiomyopathy During the Coronavirus Disease 2019 Pandemic." *JAMA Network Open* 3(7): e2014780. https://doi.org/10.1001/jamanetworkopen.2020.14780.

Kaufman, Sharon R. 2009. *And a Time to Die: How American Hospitals Shape the End of Life.* Chicago, Il: University of Chicago Press.

Kaufman, Sharon R. and Lynn M. Morgan. 2005. "The Anthropology of the Beginnings and Ends of Life." *Annual Review of Anthropology* 34: 317-341.

Langstrup, Henriette. 2013. "Chronic Care Infrastructures and the Home." *Sociology of Health and Illness* 35(7): 1008-1022.

Levine, Susan. 2013. *Children of A Bitter Harvest*. Cape Town, South Africa: HSRC Press.

Levine, Susan and Lenore Manderson. 2020. "The Militarisation of the COVID-19 Response in South Africa." *#Witnessing Corona*. August 24, 2020. https://boasblogs.org/witnessingcorona/the-militarisation-of-the-covid-19-response-in-south-africa/.

Limbani, Felix, Margaret Thorogood, Francesc Xavier Gomez-Olivé, Chodziwadziwa Kabudula, and Jane Goudge. 2019. "Task Shifting to Improve the Provision of Integrated Chronic Care: Realist Evaluation of a Lay Health Worker Intervention in Rural South Africa." *BMJ Global Health* 4(4): e001084.

Magubane, Bernard. 1979. *The Political Economy of Race and Class in South Africa.* New York: Monthly Review Press.

Mahumud, Rashidul A., Joseph K. Kamara, and Andre M. N. Renzaho. 2020. "The Epidemiological Burden of and Overall Distribution of Chronic Comorbidities in Coronavirus Disease-2019 among 202,005 Infected Patients: Evidence from a Systematic Review and Meta-analysis." *Infection.* https://doi.org/10.1007/s15010-020-01502-8.

Manderson, Lenore. 2020. "Prescribing, Care and Resistance: Antibiotic use in Urban South Africa." *Humanities & Social Sciences Communications* 7: 77. https://doi.org/10.1057/s41599-020-00564-1.

Manderson, Lenore and Ayo Wahlberg. 2020. "Chronic Living in a Communicable World." *Medical Anthropology* 39(5): 428-439.

Manderson, Lenore and Ellen Block. 2016. "Care Arrangements, Disability and Family Contingencies in Solomon Islands: A Comparative Example." *Social Dynamics – A Journal of African Studies* 42(2): 335-351.

Manderson, Lenore, Ellen Block, and Nolwazi Mkhwanazi. 2016. "Fragility, Fluidity, and Resilience: Caregiving Configurations Three Decades into AIDS." *AIDS Care* 28(Supp. 4): 107.

Manderson, Lenore and Narelle Warren. 2016. "'Just One Thing After Another': Recursive Cascades and Chronic Conditions." *Medical Anthropology Quarterly* 30(4): 479-497.

Maree, Gillian and Samkelisiwe Khanyile. 2020. "The Impact of COVID-19 on Long Term Care Facilities." *GCRO Map of the Month*. Gauteng City-Region Observatory, September 2020.

Mattingly, Cheryl, Lone Grøn, and Lotte Meinert. 2011. "Chronic Homework in Emerging Borderlands of Healthcare." *Culture, Medicine, and Psychiatry* 35(3): 347-375.

Mkhwanazi, Nolwazi and Lenore Manderson. 2020. *Connected Lives: Families, Households, Health and Care in Contemporary South Africa*. Cape Town, South Africa: HSRC Press.

Nxumalo, Nonhlanhla, Jane Goudge and Lenore Manderson. 2016. "Community Health Workers, Recipients' Experiences and Constraints to Care in South Africa – A Pathway to Trust." *AIDS Care* 28(Supp. 4): 61-71.

Parker, Alexandra and Julia De Kadt. 2020. "Household Characteristics in Relation to COVID-19 Risks in Gauteng." *GCRO Map of the Month, June.* Johannesburg, South Africa: Gauteng City-Region Observatory.

Phogole, Mmafale. 2010. "Issues of Increasing Levels of Poverty and Hunger in Africa, with Specific Reference to South Africa." *AISA POLICY* brief 8, February. Pretoria, South Africa: Africa Institute of South Africa.

Ramalho, Rodrigo. 2020. "Alcohol Consumption and Alcohol-related Problems During the COVID-19 Pandemic: A Narrative Review." *Australasian Psychiatry* https://doi.org.10.1177/1039856220943024.

Sattar, Yassar, Michael Connerney, Wagas Ullah, Alicia Philippou, Daniel Slack, Beth McCarthy, Samantha Kroll, Stephen Luddington, Tania Ruiz Maya, and M. Chadi Alraies. 2020. "COVID-19 Presenting as Takotsubo Cardiomyopathy Complicated with Atrial Fibrillation." *IJC Heart & Vasculature* 29. https://doi.org/10.1016/j.ijcha.2020.100580.

Schatz, Enid and Catherine Ogunmefun. 2007. "Caring and Contributing: The Role of Older Women in Rural South African Multi-generational Households in the HIV/AIDS Era." *World Development* 35(8): 1390-1403.

Schatz, Enid, Franscesc Xavier Gomez-Olivé, Margaret Ralston, Jane Menker, and Stephen Tollman. 2012. "The Impact of Pensions on Health and Wellbeing in Rural South Africa: Does Gender Matter?" *Social Science & Medicine* 75(10): 1864-1873.

Schatz, Enid, Mangheeta Madhavan, Mark Collison, Francesc Xavier Gomez-Olivé, and Margaret Ralston. 2015. "Dependent or Productive? A New Approach to Understanding the Social Positioning of Older South Africans Through Living Arrangements." *Research on Aging* 37(6): 581-605.

Schatz, Enid, Margaret Ralston, Sangeetha Madhavan, Mark A. Collinson, and Francesc Xavier Gomez-Olivé. 2018. "Living Arrangements, Disability and Gender of Older Adults Among Rural South Africa." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 73(6): 1112-1122.

Schatz, Enid and Sangeetha Madhavan. 2011. "Headship of Older Persons in the Context of HIV/AIDS in Rural South Africa." *African Population Studies* 25(2): 1-16.

Schatz, Enid, Sangeetha Madhavan, and Jill Williams. 2011. "Female-headed Households Contending with AIDS-Related Hardship in Rural South Africa." *Health & Place* 17(2): 598-605.

Singer, Merrill. 2009. *Introduction to Syndemics: A Critical Systems Approach to Public and Community Health.* Chichester, UK: John Wiley & Sons.

Singer, Merrill. 2020. "Deadly Companions: COVID-19 and Diabetes in Mexico." *Medical Anthropology* (39)8.

Singer, Merrill, Nicola Bulled, Bayla Ostrach, and Emily Mendenhall. 2017. "Syndemics and the Biosocial Conception of Health." *Lancet* 389(10072): 941-950.

Spiegel, Andrew, Vanessa Watson, and Peter Wilkinson. 1996. "Domestic Diversity and Fluidity among Some African Households in Greater Cape Town." *Social Dynamics-A Journal of African Studies* 22(1): 7-30.

Troutman-Jordan, Meredith, and Donna M. Kazemi. 2020. "COVID-19's Impact on the Mental Health of Older Adults: Increase in Isolation, Depression, and Suicide Risk. An Urgent Call for Action." *Public Health Nursing.* https://doi.org/10.1111/phn.12774.

Warren, Narelle and Lenore Manderson, eds. 2013. *Reframing Disability and Quality of Life: A Global Perspective.* Dordrecht, The Netherlands and New York: Springer Publishing Company.

World Health Organization. 2001. "International Classification of Functioning, Disability and Health: ICF." Geneva, Switzerland: World Health Organization.