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Community caregivers' perspectives of community well-being in a mining community



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ABSTRACT

Mining communities throughout the Southern African Development Community are faced with numerous challenges impacting on their wellbeing. As part of an integrative multidisciplinary research project, this study sought to explore aspects that affect community wellbeing in the informal Bekkersdal mining community in South Africa from the perspective of local community caregivers. An explorative-descriptive qualitative study including 22 mainly female (91%) participants who were purposively sampled was conducted. As part of data collection, participants answered a series of open-ended questions in a questionnaire and kept journals. Thematic analysis was used to analyze that data. The results indicate aspects that either promote (contribute to) or hinder community wellbeing.

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1. Introduction

This study formed part of an Integrative Multidisciplinary (IMD) community engagement project, which has the following major objectives in mind: 1) Conducting IMD research on the Eco health and well-being status of communities – especially from a humanities and social sciences perspective; 2) Determining the broader Eco health and well-being status of the Bekkersdal community. In this article, the authors provide background information on community

well-being, the Bekkersdal mining community, the IMD project under which this research was conducted, and the present study. The main emphasis of the discussion to follow will be to reveal the perspectives of community caregivers of Bekkersdal with regard to the community's well-being.

1.1. Community well-being

Community well-being is defined as a combination of social-, economic-, environmental-, cultural-, and political conditions that a community identifies as necessary in order for them to

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fulfill their potential (Wiseman & Brasher, 2008). Well-being based on a sustainable livelihood perspective, includes the assets and strengths, as well as the vulnerability of people in coping with adversity and sustaining the quality of life that they have achieved (Rakodi, 2014). In addition, Keyes (1998) refers to social well-being as the ability to interact successfully or coexist peacefully in a community. This article focuses on the community well-being of Bekkersdal.

1.2. Bekkersdal

Bekkersdal is a township that has been in existence since 1949 within the present day Westonaria municipal region of the Gauteng Province, South Africa. Bekkersdal does not only face some unique historical complexities, but also has to address challenges similar to those that other local townships experience. These challenges include extensive urban development, complexities in asset management, soaring poverty rates, unemployment and concomitant escalating crime, as well as the culture of non-payment for services by the community (Statistics South Africa (Stats SA), 2011; Van Eeden, 2014; Westonaria Local Municipality, 2013). A growing flare of informal establishments around the original Bekkersdal gained momentum since the late 1960s and by the 1980s had extensively escalated to about 70,000 residents (Housing Development Agency (HDA), 2012; Van Eeden, 2014). Since then, the population has further increased to 94,000 as the 2011 census calculated (Institute of Race Relations (IRR), 2013; Stats SA, 2011). A declining mining sector, geo-technological complexities, unavailability of scarce resources, electricity tariff escalation, inadequate resources to deal with increasing demands (Westonaria Local Municipality, 2013), as well as social upheavals such as protests and boycotts (Aboobaker & Matlala, 2013; Poplak, 2014), also contribute to the difficulties that inhabitants of the township experience (Van Eeden, 2014). Evidence is also suggestive of the risks associated with rural-to-urban migration, including negative health outcomes (Gerritsen et al., 2013), poor mental health, the experience of stress, risky sexual behavior (Yu, et al., 2016) and criminal activity (Olufemi, 2011).

Rapid, uncontrolled, and unplanned growth of the informal settlement resulted in intense pressure on existing services. The government and local municipality initially designed those services for the limited population of the Bekkersdal formal settlement. Van Eeden (2014, 2015) indicates that these services currently have to attempt to meet the demands of the vastly expanding informal settlement, which may be defined as a colony of people on land which is unplanned and has not been surveyed or proclaimed as being suitable for residential purposes and which consists mainly of informal dwellings (HDA, 2013). These unauthorised dwellings, which are also known as shacks, are makeshift structures that are not intended as permanent dwellings and have not been approved by a local authority (HDA, 2013). As a result of this, the scenario in Bekkersdal is so precarious that one reporter recently labeled the township as one of the most controversial and violence-driven communities in South Africa (Poplak, 2014; Van Eeden, 2014).

As mentioned earlier, the Bekkersdal community relies heavily on the local goldmines to boost the area's economy,

but due to a decline in gold production and retrenchments in the past two to three decades, the community's well-being has been negatively impacted (News24, 2002; Van Eeden, 2014, 2015). Many mineworkers that live in the Bekkersdal community are currently unemployed and eke out an existence in environmentally polluted conditions (Van Eeden, 2008, 2011).

In general, research confirms that mining activities, amongst others, have contributed to environmental degradation and contamination, which in turn leads to different types of pollution and concomitant health problems (e.g. respiratory ailments) experienced by people who live in or near such areas (Edmeston, 2010; Radio Netherlands Worldwide, 2012; Utembe, Faustman, Matatiele, & Gulumian, 2015). Recent literature speculates on the possible effects of polluted water and mine drainage in the broader Upper-Wonderfonteinsspruit environment near which especially the Bekkersdal informal settlement is situated (Coetzee, Winde, & Wade, 2006; Environment News South Africa, 2010; Liefferink, 2015; Winde, 2009). The adjacent Donaldson Dam in the Upper-Wonderfonteinsspruit, for example, is known for the unacceptably high levels of radioactivity in its sediment (Liefferink, 2015; Winde, 2009).

Utembe et al. (2015) indicate that mining in South Africa is associated with various chemical and health hazards. Amongst others, the dust that is produced as a result of mining, can result in a variety of pathological effects and mining and processing of minerals can result in exposure to toxic substances such as platinum, chromium, vanadium, and so forth (Utembe et al., 2015). Other authors also point to the possible harmful effects of mining and report that when inhaled, the dust produced by mining can cause irritation of the upper respiratory tract and is an important risk factor for many respiratory diseases, such as silicosis, silico-tuberculosis, pulmonary tuberculosis, obstructive airways disease and asthma (Ross & Murray, 2004). Furthermore, the mining and processing of minerals is also found to be hazardous. Utembe et al. (2015) point out that the method used in South Africa for the purpose of processing utilizes cyanide and that the technique used can contaminate soil and water. Phakedi (2010) states that dispersion modeling suggests that as many as tens of thousands of residents in Johannesburg that live in areas adjacent to tailings may be exposed to atmospheric cyanide concentrations that are above international standards as a result of this mineral processing technique.

It was against this background that the IMD research team initially became interested in the Bekkersdal community since it made it apparent that research was required on the well-being of the informal Bekkersdal community in order to gain insight into the community's state of well-being. Preliminary literature searches by the team supported this need as research on community well-being within the context of the Bekkersdal community was very limited. The research team therefore aimed to investigate the condition of the informal community by means of themes such as local governance, community, economic, ecological, social, physical, and emotional well-being. Preliminary investigation in this project revealed an additional high-risk situation in the western parts of the informal section of Bekkersdal, namely the dwellings established on dolomite rock formations known

for their instability and, in addition to that dormant hazard, there is the possibility of dangerously large sink holes occurring unannounced. The Bekkersdal informal community seems reluctant to believe that any danger exists and therefore, in many ways, ignore research and warnings as an improbability (Van Eeden, 2014). Over and above all, the economic realities of mine closure and the physical environmental risks, the Bekkersdal community has also recently been very much in the news due to service-delivery protests that indirectly relate to the environmental and economic issues. Both local and national government are accused of failure to provide sufficient security in the form of housing and services (News24, 2013a, b; Paton, 2014).

1.3. The present study

The present study was carried out as part of the IMD project discussed above and it seeks to explore and describe one aspect of the project's focus, namely community well-being. As mentioned in the discussion above, it is apparent that research is required on the well-being of the informal Bekkersdal community in order to gain insight into the community's state of well-being. In order to obtain an indigenous insider perspective on the well-being status of the community, the perspectives of community caregivers were considered important. The Department of Social Development (South Africa, 2014) defines a *community caregiver* as a practitioner who is the first line of support between the community and various health and social development government departments. Community caregivers provide services at community level to vulnerable groups, for example to individuals and families who are vulnerable due to chronic illnesses and indigent living circumstances. Their role is primarily to enable community members to make informed choices about their health and psychosocial well-being and to provide on-going care and support. Community caregivers are therefore familiar with the community they work in and, as a result, are in the ideal position to share knowledge and insight with regard to the well-being of a community. Community caregivers also have social service training, which is well-suited to provide more holistic information that can inform social work.

1.4. Goal and research question

Stemming from the above, our goal was to explore and describe aspects that influence community well-being in Bekkersdal from the perspective of community caregivers in order to obtain an indigenous insider perspective on the well-being status of the community. The authors asked the following research question: "What aspects, in the view of community caregivers, influence community well-being in Bekkersdal?"

2. Methodology

2.1. Research design

We implemented a qualitative, explorative-descriptive research design in this study. We chose this design based on

the lack of previous research with regard to the topic of inquiry. Our aim was to explore new data (Botma, Greeff, Maluadzi, & Wright, 2010) and to describe its varieties and aspects accurately (Terre Blanche, Durrheim, & Painter, 2006). The design was also chosen because of its appropriateness in order to answer the research question.

2.2. Unit of analysis and population

Purposive sampling was used and the unit of analysis included 22 community caregivers ($n = 22$) who resided in Bekkersdal themselves and who were initially identified by community gatekeepers. This study focused on community caregivers because their experience of the community is based on intimate and day-to-day engagement with individuals and family members in their home environments and they are in an ideal position to provide insight into the actual state of the well-being of the community. The community caregivers are also members of the community and since they have social service training, it was considered that they might be able to provide more holistic information that can inform social work. The selection criteria therefore included that the participants had to be adult community caregivers employed by the Westonia Municipality or the Department of Health, sufficiently literate in English and willing to participate. Apart from these inclusion criteria, not other exclusion criteria were implemented. Fig. 1 provides information on the demographic profile of the participants.

2.3. Data collection

The participants (community caregivers) in this study were recruited to act as fieldworkers for baseline data collection for the IMD project. The utilization of this participatory methodology was utilized to avoid ignorance of the reality of the Bekkersdal community and gave members of the community, namely the community caregivers, a sense of ownership with regard to the research. Since the community caregivers who made up the participants in this study were recruited to act as fieldworkers for baseline data collection for the IMD project, the participants had to complete the questionnaire that was used for the project's data collection as part of their training. The questionnaire included several open-ended, qualitative questions, which were used in conjunction with journals kept by participants during fieldwork as data for this study. In this article we focus on portions of the questionnaire that asked participants to elaborate on their perspectives of employment, income, housing, problems or risks in the community, poverty, health services, environmental aspects, mines, local municipality, provincial government, national government, family happiness, community achievements, and household contribution to the community. Example questions included: Elaborate on your own experiences on problems or risks in this community; In your view, name the most important signs of poverty in this community; Write down the most important reasons why your household visits the health services in this community; What are the most important environmental problems in this area?; How are you and your household affected by these environmental problems?; What is your understanding of the main causes of these environmental

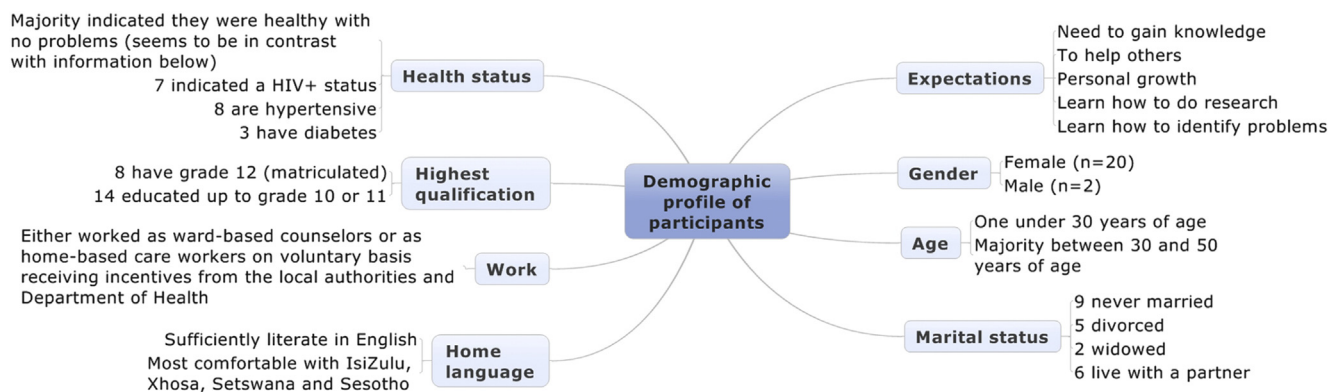


Fig. 1 – Demographic profile of participants.

problems?; How do you feel about the mines as your neighbors?; How do you feel about the local municipality as your service provider?; Do you feel that the national government is aware of your situation and has assisted you in any way in the past? Please explain; and Identify community achievements that you are proud of.

2.4. Data analysis

Thematic analysis (Braun & Clarke, 2006) was used to analyze the data. According to Clarke and Braun (2013), thematic analysis consists of identifying, analyzing, and reporting patterns within data in order to organize and describe the data in rich detail. For these reasons, thematic analyses were applied as analyzing technique in this research. Six steps, as proposed by Braun and Clarke (2006), were followed to conduct the analyses, namely 1) Familiarization: Data were read several times. 2) Coding: Data were analyzed and codes were assigned to text. 3) Theme exploration: Similarities in the data were identified and grouped through the development of themes. 4) Theme review: Characteristics of themes and interconnectedness were defined either to group them together or to split them. 5) Theme naming: The details of each theme were written down to evaluate the way they fitted into the data. 6) Writing: The data were used to draw a comparison with the literature and to discuss the findings. We followed the code-recode procedure to ensure trustworthiness with regard to data analysis. With the use of a work protocol for data analysis, three of the authors manually (without the use of a computer program for analyses) analyzed the data independently from one another. Afterward they had a consensus discussion to identify the central themes.

2.5. Ethical considerations

Institutional ethical permission was received for the research from the Health Research Ethics Committee of the Faculty of Health Science of the relevant institution. Ethical issues were considered in order to ensure that the rights of participants were duly observed, namely anonymity, respect for the dignity of persons, non-maleficence and confidentiality (Botma et al., 2010; Terre Blanche et al., 2006).

2.6. Trustworthiness

Lincoln and Guba (1985) indicate that trustworthiness involves establishing credibility, transferability, dependability and confirmability. In this case, we ensured credibility through the application of reflexivity and by being honest and critical throughout the research process. Literature integration was conducted to link the findings to other research. In an attempt to meet the gold standard of qualitative research, member checking was implemented and participants and other community members confirmed the results after the first author presented these findings at a community workshop held on the 23rd of October 2014 in order to provide community members with feedback on the larger research project's progress. Transferability and dependability were ensured through the provision of dense and detailed description of all procedures in the publication of the research. Dependability was further ensured through the application of the code-recode procedure that is described under data analysis. Lastly, confirmability was ensured through the application of reflexivity and by staying neutral and viewing information in an objective manner.

3. Results

Participants identified some aspects (4 themes) that contribute to the well-being of the informal Bekkersdal community, but mostly identified hindering aspects to the community's well-being (9 themes). An overview of these themes is illustrated in Fig. 2.

3.1. Contributing aspects

The aspects that contribute to community well-being include community involvement, community achievements and/or resources, having mines in adjacent areas as well as income initiatives. These aspects are discussed below.

3.1.1. Community involvement

Participants indicated that constructive involvement in the community contributed to the community's well-being by giving involved community members a sense of responsibility

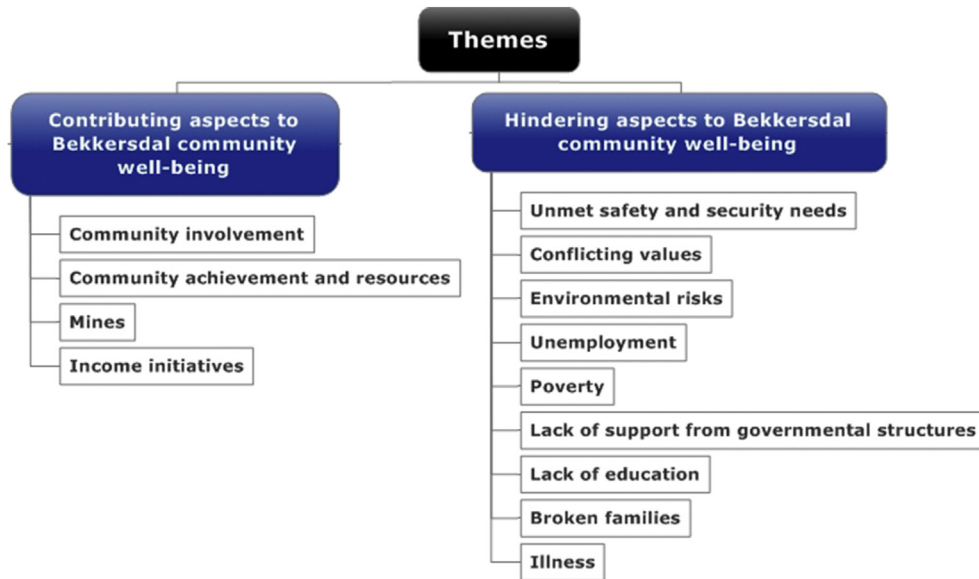


Fig. 2 – Overview of themes.

towards others in the community and by engaging with and being available for other members of the community. This theme is illustrated by a participant who shared:

“If you are not engaging yourself...involving your own community...you have to take charge...be available in community...”

3.1.2. Community achievements and resources

Some participants felt proud of community infrastructure and resources such as the community hall, schools, clinics, the cleaning project and home-based care organization. They regarded these resources as achievements and symbols of a functional community. Participants wrote:

“Cleaning project has a garden of veggies so they help sick people and needy people...”

“[T]here is a park, the wonderful one made by the Serete people in my section.”

It should be noted, however, that the resources identified by participants refer mostly to resources in the formal Bekkersdal settlement and do not all refer to the informal settlement, which is the focus of this study. This could be an indication that members of the informal community make use of and have the advantage of the formal community's resources and infrastructure, but may also be an indication of the need for such resources in the informal community.

3.1.3. Mines

Some participants felt that the mines contributed to the community's well-being as they provided employment opportunities for community members. Another reason is that the mines contribute in the field of education in the community by building schools and giving bursaries to children, which can have a positive influence on the community's well-being. A recurring statement echoed by participants was:

“...mines provide jobs...”

“...[j]ob opportunities...”

3.1.4. Income initiatives

As a mining community, the Bekkersdal community's well-being has been negatively impacted by the decline in gold production and retrenchments in the past two to three decades, which resulted in an increase in unemployment and poverty. Participants indicated that members of the community used their own initiative as a strategy to survive and enhance their well-being despite a lack of steady income. Some of these initiatives include growing and selling their own products (e.g. fruit and vegetables) and opening “spazas” (home-based shops) to sell products. Participants wrote:

“There is a food garden...spinach, beetroot, onion...”

“[O]thers have garden of veggies.”

3.2. Hindering aspects

Hindering aspects include unmet safety and security needs, conflicting values, environmental risks, unemployment, poverty, lack of support from governmental structures, lack of education, broken families, and illness. These aspects are discussed in detail below.

3.2.1. Unmet safety and security needs

Participants indicated that some of the community members' most basic needs, such as safety and security, were not met. Participants shared that there was a lot of crime in Bekkersdal and that temporary housing and a lack of adequate lighting outside in the evenings made them feel unsafe. One participant wrote:

“...high rate of crime, house break-ins, robbery and murder...”

Participants indicated the constant presence of stress and fear because of their feeling unsafe all the time. The main reasons indicated behind this were that they were constantly worried about their possessions, but were also afraid of illness, fires and crime (specifically rape). These fears were illustrated by participant statements such as:

“...high rate of rape, shacks are never safe ... There is much violence and people are too scared to walk in streets.”

A resident living in Bekkersdal for 47 years confirmed the above finding in an interview with *The Citizen* during which he indicated that the reality of crime had become a serious problem in the community (Tau, 2014).

3.2.2. Conflicting values

Some of the participants experienced a sense of inner conflict due to their own values and contrasting trends such as promiscuity and irresponsibility in the community. Participants wrote:

“...community does not take care of taps.”

“[A] 22-year-old girl putted her child (baby) in the toilet.”

This last statement refers to an abandoned infant at an unsafe site – which is quite a familiar phenomenon in South Africa. A review of reported abandonments provided by the [National Adoption Coalition of South Africa \(NACSA\) \(2014\)](#), for instance indicates that 65% of abandoned babies are new born and that 70% of frequently used abandonment sites are considered to be totally unsafe. Abandonment sites used most often include toilets, drains, sewers, gutters and rubbish sites, including dustbins and landfills (NACSA, 2014).

3.2.3. Environmental risks

Participants identified various environmental risks, including air pollution due to mining activities and a lot of dust, noise (mainly due to the large number of taverns in the community), land pollution (waste, litter, irresponsibility of community, over-population, untreated sewerage), and water pollution (open canal, wasted water). A participant shared an often mentioned statement:

“...environment is dirty, smelly and full of flies.”

There appears to be an ongoing debate regarding whether the responsibility for the informal settlement rests with local or with district municipalities (Van Eeden, 2014, 2015). These uncertainties leave informal settlements, such as Bekkersdal, vulnerable.

3.2.4. Unemployment

Although informal economic activity (income-generating initiatives) was reported as contributing to community well-being in this particular community, participants identified unemployment (being excluded from the formal economy) as

a hindering factor to their well-being. A participant shared another recurring theme:

“...really not (happy) because of no one working...”

It was reported by the [HDA \(2013\)](#) that the unemployment rate in the Westonaria Local Municipality settlements, including Bekkersdal, was 15,20% during 2011 and the municipality's Chief Financial Officer stated that the area faces an unemployment rate of 35% (Phagane, 2014).

3.2.5. Poverty

Reflecting on signs of poverty in the community makes it evident that the participants notice one another's financial suffering and meager subsistence. They notice especially the suffering and vulnerability associated with these conditions. They identified starvation and/or diseases such as tuberculosis. Others identified social problems such as the large number of teenage pregnancies, substance abuse and prostitution as a way to cope with poverty or to generate income in an impoverished environment. One participant wrote:

“(Poverty) do[es] play big part to those who are vulnerable...”

3.2.6. Lack of support from governmental structures

Some of the participants felt that they were not getting adequate support from governmental structures. Examples of this included poor service delivery, poor management, they (governmental structures) do not acknowledge the community's voice, they thrive on corruption, and nepotism. These participants' views can be reflected in a single statement:

“The government is doing nothing.”

The service delivery concerns in Bekkersdal clearly demonstrate a broken and uncondusive relationship between local government and the community (Heese & Allan, 2013). These participants' views are confirmed by numerous media reports (News24, 2013a, b) during the 2013 service-delivery protests and are indicative of the extreme pressure on the community's well-being status.

3.2.7. Lack of education

Participants felt that the lack of education, knowledge, skills, and experience among residents was detrimental to the well-being of the community. A participant stated:

“...lack of school facilities...no continuation of school.”

3.2.8. Broken families

Participants indicated that broken families such as single-parent households (especially single mother-headed households), child-headed households and orphans are an equally detrimental factor regarding community well-being. A participant shared:

“...there are orphans...they are living with their grandmother who is not working...”

3.2.9. Illness

Another aspect that is an obstacle to the community's well-being was found to be illness. A participant stated:

“People here are sick; most of them are HIV positive...”

Participants reported that they themselves were diagnosed with hypertension (36%), diabetes (14%) and an HIV-positive status (32%).

4. Discussion

The participants identified both contributing and hindering factors to community well-being. The hindering factors that have been identified are all aspects that the participants view as having a negative impact on the health of the community and that can subsequently contribute to a lower experience of community well-being. In contrast to this, the contributing aspects identified by the participants are viewed by them as positively influencing the community's general state of health and well-being. The results are therefore indicative that the Bekkersdal community's well-being, as regarded by the participants, is viewed neither entirely negatively nor entirely positively. There is, however, a clear indication that the community's well-being is under extreme pressure and strongly linked to survival and fulfillment of basic needs at this stage. In support of this, the [United States Institute of Peace \(2014\)](#) indicates that the well-being of a population or community is closely related to the fulfillment of the basic needs of its members, such as adequate food, water, safety, etcetera. Research indicates that community satisfaction and/or attachment, which may be related to need fulfillment, can influence individual well-being and that higher levels of community satisfaction and attachment are related to higher perceived levels of well-being in individuals and in community members ([Theodori, 2001](#)). [Moller and Theuns \(2012\)](#) identify several factors that relate to the perceived well-being of people who reside in townships and that share similarities with this study's findings, namely a steady income and/or financial security, education, housing, and improved living conditions such as access to clean water, toilets, electricity and other non-negotiable services.

5. Conclusion, limitations and recommendations

The experiences of this group of community caregivers illustrate their recognition that the structures, processes and relationships needed in the community to increase and sustain well-being are currently insufficient. Although they may not completely understand the macro dynamics and the physical environmental risks, they do, however, understand that in order to increase well-being, their basic human needs have to be met and their socioeconomic rights protected. Even though sufficient macro-mechanisms to protect and enable this community's well-being are largely absent, the community nevertheless does rely on its own survival strategies in order

to deal with day-to-day difficulties. Even so, this is not enough. The findings support and echo the discussed literature on the well-known and identified challenges that mining communities face. The literature discussed indicates that these challenges are not unique to the Bekkersdal mining community in South Africa or to South Africa in general. The findings of this study serve as confirmation of the impact of such challenges on the well-being of the informal settlement in the Bekkersdal community and fills a research need by identifying the aspects that community caregivers view as necessary in order for the community to fulfill their potential, which can be used to inform future research and programs or interventions in this regard.

As the participants consisted of community caregivers, one has to bear in mind that their personal character traits as well as their involvement in the community may possibly have influenced their views either positively or negatively. Moreover, they share certain characteristics with the Bekkersdal informal settlement, yet are also a group with certain characteristics that are specific to them. The plan to do a follow-up on the collected data was thwarted by the service-delivery protest. For an extended time, it was impossible for the researchers to enter the community and for the participants to meet with the researchers. The authors nevertheless conclude that the reporting of the available data creates a platform for a community group to share their experiences from which valuable insights can be gained of which the research community in the field of well-being studies needs to take note. Similar studies on experiences and perspectives based on intimate and day-to-day engagement with individuals and families in their home environment are essential.

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