



Contents lists available at ScienceDirect

Journal of Hand Therapy

journal homepage: [www.elsevier.com/locate/jht](http://www.elsevier.com/locate/jht)

## “It was like a bad dream”: Making sense of violent hand amputation and replantation in South Africa

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### ARTICLE INFO

#### Article history:

Received 10 May 2021

Revised 18 August 2021

Accepted 2 October 2021

Available online xxx

#### Keywords:

Violence

Hand Replantation and Rehabilitation

Qualitative

Ritual/Muti Murder

Psychosocial

Occupation-Based Hand Therapy

### ABSTRACT

**Background:** South Africa is faced with one of the highest rates of violent crime in the world. Accordingly, therapists treat high numbers of deliberate hand injuries. There is, however, a paucity of literature exploring the lived experiences of these survivors.

**Purpose:** The aim of this study was to describe and interpret the meaning of living through a violent hand amputation and replantation, the impact on occupational adaptation and to reflect on therapeutic intervention, within the context of South Africa.

**Study Design:** An exploratory embedded single case study using a qualitative approach.

**Methods:** Interpretative phenomenological analysis was used to analyze data from: 8 interviews with the primary participant, over a period of 33 months; an interview with his work colleague; interviews with 5 health professionals; a review of the occupational therapy rehabilitation file and a review of the audio-visuals, recorded over 2-years.

**Results:** This narrative reveals a man who understood his terrifying assault to be part of a southern African ritual of spiritual origin - using human body parts for traditional medicine (muti crime) or witchcraft. He perceived his expensive hand replantation and therapy as surreal and violence as normal. Challenges highlighted the importance of being attentive to the psychosocial sequelae of violence; and the most valuable part of therapy was perceived as occupational engagement.

**Conclusions:** The perception of attempted muti murder situates this extreme and unusual case study as a novel contribution to the medical and rehabilitation literature. South African therapists are urged to be actively involved in changing the culture of violence, and hand therapists are reminded of the importance of applying holistic and occupation-based intervention.

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### Introduction

South Africans are faced with one of the highest rates of violent crime worldwide, much of which spills over into the treatment of hand injuries by occupational therapists.<sup>1-3</sup> With an average of 58 murders every day, the homicide rate is more than 5 times the global average.<sup>4,5</sup> In fact, approximately 50% of injuries requiring health care in South Africa (SA) are caused by interpersonal vi-

olence.<sup>6</sup> Accordingly, South African therapists treat high numbers of deliberate hand injuries; the percentage sometimes reaching as high as 69%, as revealed by a recent study on extensor tendon repairs (n=75).<sup>3</sup> One such violent hand injury is an amputation or dismemberment, of which surgical reattachment or replantation has become a viable treatment option, under ideal circumstances, though mainly in developed countries.<sup>7-9</sup> Following hand replantation, therapy is essential to ensure optimal functional outcome, including a return to work.<sup>7-11</sup>

While there is extensive literature discussing the violence in SA,<sup>1,6</sup> (albeit very few authored by therapists)<sup>12</sup> - there appears to be a notable lack of literature exploring the lived experience of

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survivors.<sup>13</sup> By exploring the experience of those who have sustained hand injuries through violence, therapists can gain an in-depth understanding of how the condition is perceived, insights into the cause, challenges during recovery and contributors to success, whilst simultaneously acknowledging the client as the expert of their own story.<sup>14–16</sup> This can assist in improving future treatment and prevention strategies.<sup>12,15</sup> This study aimed to describe and interpret the meaning attributed to the experience of living through a violent hand amputation and replantation (VHAR) within the socioeconomic and spiritual context of SA.

## Research methods and design

### Research team and reflexivity

The research for this article was conducted by the first author under the guidance of the co-authors. As an occupational therapist and certified hand therapist, the first author directed a private practice in SA for twenty years and in this time worked with many clients who were violently injured. She reveals that her only personal experience with violence was when a family member was held at gunpoint during a hijacking, and this had significant long-term effects. The first author was the primary participant's treating hand therapist for twenty percent of his rehabilitation and discloses that she was both distressed by the nature of his assault and in awe at his emotional strength. The first author acknowledges her Christian faith and privileged socioeconomic background as a white English speaking South African. She condemns interpersonal violence but values forgiveness. The second and third authors are Indian South Africans who profess Christianity and Hinduism, respectively.

### Study design and theoretical framework

This is an exploratory embedded single case study which used a phenomenological qualitative approach.<sup>14–16</sup> The theories underpinning this study are the Person-Environment-Occupation-Performance Model (PEOP), the Model of Human Occupation (MOHO), and the Canadian Model of Occupational Performance and Engagement (CMOP-E) since this model centralizes spirituality and emphasizes social justice.<sup>17</sup> The study is influenced by Heidegger's philosophy of interpretative phenomenology and Smith and Osborn's theory of interpretative phenomenological analysis (IPA).<sup>18,19</sup> The aim was to explore, describe and interpret how an extreme case made sense of his lived experience of a VHAR, the impact it had on his occupational adaptation, as well as to reflect on the therapeutic intervention. There was an attempt by the researcher to make sense of this experience by analyzing all additional data sources and through higher order interpretation.<sup>15,18,19</sup> The first author did not try to bracket out her own perceptions and beliefs, as this is a feature of Heideggerian phenomenology and IPA, which acknowledges that researchers always come with their own experiences and presuppositions.<sup>18,19</sup>

### Setting and participants

This study was conducted in the clinic where the primary participant received his rehabilitation, in the private health sector of KwaZulu-Natal, SA. The primary participant, who sustained the injury, was purposively selected. He is a young African man from the Nguni tribe whose home language is isiZulu. His occupation can be defined as semi-skilled light work (specifics are withheld to maintain confidentiality). Via snowball sampling, the primary participant selected one family member and one work colleague. His life partner cancelled when she had symptoms of COVID-19 and was

unwilling to reschedule. The work colleague, who has the same home language and occupation, was chosen based on him being present during the assault. The remainder of the sample were 5 purposively selected health professionals - the surgeon and 4 occupational therapists, who each provided the primary participant a minimum of 5 treatment sessions. These were male and female, white and Indian, English and Afrikaans speakers, and they had between 5 and 22 years of experience in their profession. All participants are given a pseudonym to protect their identities, and no identifying data are linked to any verbatim quotations. The primary participant's pseudonym is Bongani. His colleague's pseudonym is Mnqobi. Pseudonyms for health professionals are Ken, Sam, Tam and Max.

### Data collection and analysis

Retrospective and prospective data were utilized. Data were gathered retrospectively from 5 unstructured and one semi-structured interview with the primary participant over a 2-year period. These interviews were conducted at 2 weeks, 2 months, 5 months, 10 months, 12 months and 24 months after VHAR (refer to the supplemental file for interview questions). Further retrospective data were obtained from the occupational therapy file, videos and photographs taken during 2 years of rehabilitation and one health professional interview. This retrospective data were collated by the first author to increase familiarity with the data.

Data were obtained prospectively through individual semi-structured interviews with the primary participant, health professionals, and one dyad interview with the primary participant and his work colleague. All participants were asked similar questions regarding how they made sense of VHAR and their perception of the contributing factors to the primary participant's functional outcome (refer to the supplemental file for interview questions).

There were no non-participants present during any interviews, and most were held face-to-face (12/13), except for one digital interview. All interviews were conducted in English by the first author, audio-recorded and manually transcribed by same. Unstructured interviews were an average of 4 minutes and semi-structured interviews were an average of 52 minutes.

Data analysis began and occurred simultaneously with data collection and transcription.<sup>20</sup> All transcribed interviews were quoted verbatim to ensure there was no loss of rich meaning.<sup>20</sup> The first author read the transcriptions repeatedly for immersion. Researcher notes, reflexive statements, and analytic memos were recorded immediately after each prospective interview and throughout the research process.<sup>15,20,21</sup> All codes were created by the first author. The second and third authors reviewed the raw data and the preliminary coding prior to categorizing. The data were explored using IPA which included thematic analysis and an interpretation of themes.<sup>15,18</sup> A computer-assisted qualitative data analysis software, NVivo Pro Version 12, was used to help organize and merge all data sources. An inductive approach allowed ideas and themes to be generated by the data.<sup>18</sup> The categories were developed with the following guidelines: the frequency with which something was mentioned, the uniqueness of data, data of substantive significance rather than quantitative significance, and the intended audience.<sup>20</sup>

### Trustworthiness

The credibility of the research is enhanced by having triangulation in: data sources, methods of data collection, analysts, and theories.<sup>15,22</sup> A reflexive journal was kept by the first author and attended to frequently with intentionality which improved the rigor

of the research.<sup>15,21</sup> This case study has not attempted to generalize to others; instead, it has provided an in-depth insight into the phenomenon of VHAR.

### Ethics

The guiding principles of this research were beneficence and nonmaleficence. The dignity and welfare of the participants was the priority. The study was granted ethical approval (BREC/00001213/2020) from the Biomedical Research Ethics Committee at the University of KwaZulu-Natal. Written informed consent was received from the primary participant to use the therapy documentation, photos, videos, audio-recordings, and to interview his health professional team and work colleague. Written informed consent was also received from all other participants. A community representative from the same racial and cultural background as the primary participant discussed the risks and social value of the research prior to commencement. The first author had to strive towards cultural humility, self-awareness, and self-critique.<sup>23</sup> The authors are aware that most trauma survivors are grateful to be able to share their experience with a researcher who is non-judgmental; however, measures were in place to refer participants and first author for counselling if needed.<sup>24</sup> The community representative was also available to provide culturally appropriate support. Also, conducting trauma research in SA may be considered dangerous especially where participants have experienced life-threatening violence.<sup>24</sup> Hence, the authors needed to ensure there was no risk to participants for sharing sensitive information.<sup>24</sup> According to the community representative and an expert forensic psychologist, there was no danger to the authors or the participants.

### Results and discussion

To understand and interpret the experience and perceptions of Bongani and the other participants, the context where the VHAR occurred must also be understood – specifically that of the religious beliefs and socioeconomic climate in SA. As each theme is presented, a discussion of its link to literature, theoretical models and context is provided. This is illustrated in a narrative style in a single results and discussion section.<sup>16,18</sup>

#### *Theme one: It was like a bad dream; chopped to sell*

In this first major theme, the story begins with Bongani describing the assault at his workplace, and his thoughts, which include the initial meaning attributed to the experience.

*Bongani: So, the intruder ... order[ed] us to lay down. We do as the man asked us to do. After that, he tied us with some cable ties ... and so, inform[ed] me to wake up and collect everything he was looking for ... so he collect[ed] our stuff, our phone, everything ... And after that he also ask[ed] me to put my hands on the table. So, I ask[ed] him what he want[ed]. Repeat[edly] told me to put my hands on the table. There [are] lots of things that come ... in my mind and I think about the people who get ... chopped for their part of the body, in order to sell, to be sold, or for some different purposes. So, I thought maybe now this man is one of those guys who cut peoples parts, maybe for the purpose of selling it. So, instead of refusing and asking more questions, I do as the man demanded me to do. I put my hand on the table, and so I look aside. So, I thought it was a bad dream of my life or I thought maybe it is ... not happening ... So, the man chop[ed] my hand (monotone). Fortunately, my hand didn't come out ... my hand was hanging with [a] little piece of flesh to my arm. After that I begged for help. I even asked the man to give me the help because I was on my knees at that time. After he chopped me, I fell*

*with my side down, so the man realized that the hand didn't come out, and ... if I look[ed] at that man, I saw that he was shock[ed] by everything he saw... He was carrying [a] big bag. He never ... finish[ed] to chop off my hand. If I was [to] look at ... the body language, he was in shock mode ... after that he disappears. I try to walk on my knees to seek for help. So, I fail. After that I return where I was ... end up laying on my side with the other side of my hand. It was like a bad dream. So, even now I ask questions. How? What type of people can do such things to other people? But I thank God I am still alive. (Interview one: 2 weeks after VHAR)*

Bongani sustained a violent amputation of his left non-dominant hand through his distal forearm, and he perceived himself as a victim of a southern African ritual of spiritual origin, known as ritual murder or muti murder.<sup>25,26</sup> Why does Bongani have this perception? While the PEOP includes spirituality as one of 5 intrinsic person factors, the CMOP-E places spirituality at the core of the person – claiming this is where meaning emanates.<sup>17</sup> Bongani's traditional African beliefs includes the veneration of ancestors and performance of rituals. He also professes Christianity. Although Bongani himself states this is an incongruity, for him having both beliefs work. Moreover, he fears witchcraft. This is not unlike many African people.<sup>27,28</sup> Bongani initially makes sense of his injury by believing someone tried to steal his hand to make powerful muti, ostensibly through witchcraft. He makes sense of his recovery by believing God gave him a second chance at life.

*Bongani: I believe in ... ritual things ... for ancestors. It's up to me to choose ... because sometimes the Christians don't mix these things of ancestors. But ... both work for me. (Interview 6: 2 years after VHAR)*

*Bongani: As a ... Christian ... [I] think God was playing ... a role ... 2 or 3 hours laying down in a pool of blood, but ... I managed to survive that! I think the only thing that [came to] my mind ... [was] to ... pray ... that ... I get [a] second chance in life. So, I believe ... God was with me. (Interview 7: 32 months after VHAR)*

What is muti murder? Firstly, 'muti' is derived from the isiZulu word 'umuthi', and this is an informal word for medicine in SA; however, this is not the same as 'muti murder', which is iniquitous.<sup>28</sup> Conversely, muti murder is a ritual where human body parts are stolen to make magical medicine, and the victim usually dies as a consequence.<sup>26</sup> Mutu murders have occurred in southern Africa for centuries, and historically they were accepted as a way of strengthening the village and their chief.<sup>26,29</sup> It was proclaimed to be acceptable in specific situations, only 3 decades ago: "In a definable part of southern African medical practice ... ethics permit a practitioner to recommend in certain special cases a ritual killing."<sup>30(p194)</sup> This ritual was labelled African traditional medicine: "Ritual homicide [carries] very high professional fees ... The inyanga [expert] who prescribes a muti homicide ... arrives at his advice ... within the ... worldview of African traditional medicine."<sup>30(p196)</sup> In the traditional African worldview, healers are usually closely interwoven with spirituality, for example, schizophrenia may be understood as a calling from the ancestors (which is required to become a traditional healer) or caused by witchcraft.<sup>31–33</sup> Ancestors are considered the 'living dead' who are venerated and through whom most healers communicate with God.<sup>31,33</sup> The African independent churches, such as the Zion churches, are the largest churches in SA, and they have Africanised Christianity, often combining the Christian Holy Spirit with the ancestral spirits.<sup>34</sup>

The use of body parts for muti is currently condemned and illegal in SA, with many referring to it as evil or witchcraft.<sup>25,26,28,35,36</sup> Despite this, muti murders continue,<sup>35,37</sup> however, the exact prevalence is unknown<sup>26</sup>; in the year 2001 there were almost 2500 people caught in SA with body parts in their possession.<sup>36</sup> Like Bongani, most victims are alive when their

body parts are removed, since the screams of the victim are believed to alert the ancestors, which supposedly increases the power of the medicine.<sup>26,28,30</sup> As in the case of Bongani, victims are often healthy young males or the young and vulnerable.<sup>26,28</sup> In contrast, the perpetrators are wealthy and educated, and the contemporary motive is said to be greed - an excessive love of money and power.<sup>25,28,30</sup>

Reports of survivors are scarce; there may be only one who shared her experience.<sup>25,26,38</sup> Based on a perusal of available literature, the authors are unaware of any survivors of a muti crime involving hand amputation, nor reattachment of severed parts. In addition, there is a paucity of academic literature detailing the health consequences or treatment of survivors or families traumatized by ritual murder.<sup>25</sup> Rather, the limited amount of literature on this subject is found in anthropologic, forensic, legal, investigative, and tribal journals.<sup>26</sup>

#### *Theme two: You only see it in the movies*

In a country such as SA, where there is extreme poverty and inequality,<sup>39</sup> it is no surprise that surgical replantation of a severed hand (bony fixation, repair of all flexor tendons, all extensor tendons, all vessels, median, radial, and ulnar nerves)<sup>7,10</sup> is perceived as surreal by Bongani and Mnqobi, who work and reside in low-income areas. Bongani has experienced something bizarre, something only seen in movies; 'his hand was chopped off and is now on again!' The poverty and violence are contrasted with the 'expensive' microsurgical and therapeutic treatment that enabled Bongani to keep his hand.

*Bongani: They ... put my hand back. It's an unbelievable thing! Even other people, if I explain about my hand, they don't believe [it]. You only see it in the movies, but ... it's happening in my life. (Interview 4: 10 months after VHAR)*

*Mnqobi: I saw the hand. It's off. Complete[ly] off in front of me ... I didn't even understand ... how they ... put it on again ... I wasn't expecting that ... [could] happen! (Work colleague: 33 months after VHAR)*

#### *Theme three: I'm not behaving normal*

This theme illustrates Bongani's mental and emotional strength yet highlights the importance of remaining vigilant of the likelihood of psychosocial sequelae following violence. Many authors have confirmed that violence not only leads to death or physical disability but often results in long term ill health, including psychosocial complications.<sup>2,40</sup> Bongani received only one pro bono session of counselling because there were no private psychologists prepared to bill the Compensation Fund for injured workers. However, a review of the subjective comments recorded by Bongani's occupational therapists in the first year after VHAR, reveals him as a motivated and resilient man - he was rarely recorded as sharing emotional distress. Instead, he reported physical symptoms such as pain, cold intolerance and fatigue. The health professional interviews and most of Bongani's interviews revealed his optimism, compliance and gratitude in the first year. Additionally, he managed to return to work 6 months after injury, and his stoic resilience is seen through his acceptance of the constant visual reminder of the traumatic event; he sat at the same table where the dismemberment occurred, with the 'cut mark' being clearly visible.

*Bongani: Part of my experiences ... since the table is there, I don't put all ... my focus on to it ... I just take it as [if] it is not there ... because if I focus on the scar on the table, I think I won't be able to ... perform my duties one hundred percent.*

*First author: And the table isn't covered?*

*Bongani: No. [pause] My manager tried to ... remove the table. But I think because it's not a small table. It is a big ... heavy, expensive table and I think it is installed there ... so it is hard to remove.*

*First author: And can you still see the mark where [your hand was chopped off]?*

*Bongani: Yes, I am working on that table every day.*

*First author: You are working on the same table every day [shock]?*

*Bongani: Yes, the same table ... but ... there is nothing I can do. I have to survive and I don't have to put my focus and everything on that mark. So, I just ignore it.*

*First author: How big is the mark?*

*Bongani: I think it's fifteen centimeters. (Interview 4: 10 months after VHAR)*

*Ken: I do think sometimes he would brush it under the carpet and say that he was fine and it doesn't matter because he was afraid to cause any kind of ... disruption. (Health professional interview)*

Despite demonstrating considerable mental strength, the injury did affect Bongani's psychosocial behavior. A difference was noted between the rehabilitation chart and the in-depth interviews. During the interviews he shared some fears, anger and behavioral changes when questioned explicitly. He mentioned that he was more verbally aggressive with both his family and work colleagues after the injury.

*Bongani: There [were] some ... flashbacks ... when I'm alone ... make me ... [have a] lot of questions ... but it was before. I ... have some kind of moods to the people I was working for. People told me ... I'm not ... behaving normal ... kind of like aggressive to them. I'm harsh to them. Sometimes become shouting. (Interview 7: 32 months after VHAR)*

Only 2 of 4 occupational therapists affirmed that they had addressed Bongani's fears and encouraged him to share, which supports the statement that many hand therapists may be focusing on the biomechanical approach and neglecting psychosocial aspects.<sup>41</sup> This is concerning, especially considering that in a systematic review it was concluded that psychosocial factors are more important than physical impairments in determining functional outcome and disability after hand injury.<sup>42</sup>

*Tam: I think it's very important for the patient to get heard, and unfortunately not many health professionals seem to have the time to do so, so I am quite happy to be that listening ear. (Health professional interview)*

#### *Theme four: It's part of life*

Bongani's perception is that violence is normal and a part of life, which is not unlike the perceptions of some of his health professionals. Fifteen months after VHAR, Bongani was held up again, hands tied, while thieves stole their bounty. Moreover, Bongani reported strikes and petrol bombing at his workplace before his injury. He also rescued a work colleague who was beaten with a 16-pound hammer, and he has lost a relative due to violence. Despite what Bongani has endured, he perceives himself as 'lucky', and remarks that his injury was 'not that bad'. This narrative gives a glimpse into the lives of those afflicted by the violence which is prevalent in SA.<sup>1,40,43</sup>

*Bongani: It's ... part of life. My injury is better [than what] happen[ed] to the other guy. Sometimes they torture ... They hammer[ed] him with a 16-pound hammer before they put him inside [a] container and tied him. I was the one who called ... [for] help ... I heard the man screaming. Terrible thing[s] happening ... So, I was ... very lucky. Because you never know ... what those people [are] going to do to you ... Either they beat you horrible (voice raises as if angry) or ... they ... bring the pangas (bladed African tool) ... some of them got guns. (Interview 6: 2 years after VHAR)*

*Sam: The violence ... has become part and parcel of our practice in many ways so ... when we get a patient like this who has had an amputation ... because someone wielded a bush knife ... it no longer comes as a surprise. (Health professional interview)*

South Africa's murder rate ranked fifth globally in 2018 when there were 36.4 homicides annually per 100 000 people,<sup>5,43</sup> and for every murder, twenty to forty times more people are violently injured.<sup>1,2</sup> Both Bongani's violent assault and his prompt return to work were indirectly seen as resultant of the socioeconomic milieu of SA. The unemployment rate of 32.6% in SA means Bongani does not have the luxury of choice when it comes to career.<sup>44</sup> Once he could return to work, he had to put his fears aside, to protect his family from the ravages of poverty. The history of SA is also a significant determinant of the issues facing the country today.<sup>45</sup> 300 years of colonization leading up to the injustice of apartheid - a government-enforced racial segregation which benefitted the white minority,<sup>43</sup> has had severe effects.<sup>45</sup> While there has been economic growth since the beginning of democracy in 1994, SA has always had a highly unequal society.<sup>43</sup> The Gini coefficient of income inequality, which ranges from 0 to 1, with 0 being total equality and 1 being maximal inequality, increased from 0.6 in 1995 to 0.65 in 2015.<sup>39,46</sup> Racial discrimination, the migrant labor system (which broke the family unit), unemployment and extreme violence has characterized SA's history.<sup>45</sup> More recently, on 12th July 2021, President Ramaphosa addressed the nation due to the worst outbreaks of civil unrest and violence in over 2 decades.<sup>47</sup> The CMOP-E highlights the importance of therapists being advocates for social justice especially when this impacts occupation, as in this case.<sup>17</sup> Health promotion and prevention is considered extremely important, and hand therapists believe they have a role to play, yet this is not given sufficient attention.<sup>12,48,49</sup> Therapists should not accept violence as normal and just another traumatic event - they should be actively involved in changing the culture of violence.

#### Theme five: doing was very helpful

In this major theme, Bongani perceived his engagement in meaningful activities as the most valuable part of therapy. Review of the rehabilitation file confirmed Bongani's participation in 123 sessions of occupational therapy over 2 years. Treatment started 3 days after VHAR with an early controlled active motion protocol.<sup>7,9,11</sup> He was fitted with 12 orthoses over 2 years, and he participated in more than 17 different goal-directed meaningful activities (see Figs. 1-4) in a client-centered program, which included work hardening. The set-up of functional activities in a communal therapy room also facilitated interaction between clients. Other biomechanical intervention included strengthening, therapeutic exercises and sensory re-education. Prior to discharge he had achieved 234<sup>0</sup> total mean active motion of his fingers (87% of normal; see Fig. 2); 35lbs grip strength; diminished protective sensation on thumb, index, and middle fingertips; return of lumbricals and thenars; and he could complete the Nine Hole Peg test in 38 seconds. Bongani remembered 'doing' as the most valuable part of therapy and he found his return to work was beneficial (albeit difficult and dangerous) which aligns with the underlying theoretical models emphasizing the importance of occupational performance or 'doing' for optimal health.<sup>17</sup>

*First author: Were there things in therapy that you found very helpful?*

*Bongani: Lot[s] ... of thing[s] ... handwork, artwork ... woodwork or painting 'cos those are the things ... I was supposed to perform ... to give ... strength to my injured hand ... I think all those things were very helpful. (Interview 7: 32 months after VHAR)*



**Figs. 1-4.** Bongani using his left replanted hand in a therapeutic woodwork activity demonstrating gross grasp, tip pinch and finger extension.

*Tam: With the paintings [and] the woodwork projects ... he would always mention ... his family, how amazed they were at what he was able to do ... "You must do more for us!" That obviously had an impact on his sense of motivation ... kept him going and obviously wanted to impress and make them happy ... and show them his worthiness. (Health professional interview)*

*Max: We were ... negotiating with the employer and ... pushing for 3 to 4 months return to work, so, I think that has a huge part to play. (Health professional interview)*

The MOHO defines people as occupational beings and is concerned with understanding and improving a person's motivation for occupation, leading to a positive identity.<sup>17</sup> Bongani was intrinsically motivated by his successful participation in woodwork and other occupation-based intervention (OBI). He was further encouraged by his family who praised his successful end results. He was able to see the long-term value of having a functional hand, so he could return to work. A strong relationship exists between occupation and health.<sup>50</sup> Despite therapeutic activity and 'competency through occupation' being a defining feature of occupational therapy,<sup>17,50-52</sup> as well as OBI producing superior outcomes in hand rehabilitation,<sup>51,53</sup> many hand therapists need to be reminded of the value of OBI, over and above simply using exercises and orthoses.<sup>52,54</sup>

#### Theme six: here I am thinking about the future

Bongani thought he was a victim of an attempted muti murder moments before his assault and for 2 years thereafter.

*First author: Do you still think they were trying to take your hand ... for muti?*

*Bongani: (laughs) Ja ... African man, we ... hear about some incident using ... human parts ... This [is] ... the way things happen. I thought that if my hand was totally off, maybe they would [have] ... cause the way the man look[ed], he was ... looking for it. (Interview 6: 2 years after VHAR)*

It is reported that muti crime is seldom in the media since many are afraid to speak out, fearing negative consequences from their ancestors or traditional healers.<sup>26,28,29</sup> This may have been the case with Bongani, who changes his story and finally refers to muti crime as 'gossip'. In the dyad interview, where Mnqobi was

present, Bongani appeared uncomfortable and declared, *'those muti thoughts have faded away'*. Had Bongani become fearful of speaking about muti crime, or had he decided to put it all behind him and focus on the future?

In the last interview, held 33 months after VHAR, Bongani was hopeful, and he was thinking about how he could *'do different to the people he is living with'*. In contrast, Bongani reported that his colleague had not dealt with his post-traumatic anger. Unlike himself, Mngqobi had not received any attention. He felt his colleague needed to talk, and hence he encouraged his attendance at the interview, since he was initially reluctant. This interview revealed that Bongani was not the only one who had been physically assaulted on that *'terrible'* day - Mngqobi had had his head kicked in and his hands cable tied. Nevertheless, he managed to conquer a hopeless situation - he freed himself and called for back-up, which likely saved Bongani's life. During the interview, Bongani was able to show appreciation and build up his colleague.

Bongani's perception of the treatment he had been given was that it was beyond what anyone from *'his world'* would normally expect to receive. Although he never actually stated that he had forgiven his perpetrators, by the last interview, Bongani was no longer disclosing fear as he did at the 2-year interview, nor was he showing signs of anger. Bongani was still working in his pre-injury occupation, and he was studying towards furthering his career. He was grateful and hopeful for the future, and he attributed much of this to the care he had received. This case study demonstrates that the private health sector in SA not only benefits the privileged minority but also the less privileged if they are injured at work and covered by the Compensation Fund. These benefits may filter into the poverty-stricken areas.

*Bongani: The therapists ... motivated me very, very much ... in a case of just bringing the hope ... The time I [came] here, I was hopeless; every time I look[ed] at my hand, I see that this hand is dead. I think they [are] gonna take it off again ... the recovery was ... slowly, slowly. To me it was a dead, dead hand. Yes ... the way they perform their professionalism, the way they treated me ... I don't understand ... [made] me feel comfortable and ... it was motivating ... and I [felt] ... welcome. End up feel[ing] like it's home here (laughs). So, I even forget that I'm a patient. (Interview 8: 33 months after VHAR: dyad interview)*

*Bongani: I was really, really lucky to receive the kind of help ... and now is where I am. Here I am thinking about the future instead of thinking about the disability ... how I can grow myself, how I can do different to the people I'm living ... Yes. Means this ... injury never destroyed me. (Interview 7: 32 months after VHAR)*

## Conclusion and recommendations

The theme of perceived attempted muti murder - a southern African ritual that uses of human body parts for traditional medicine or witchcraft, situates this qualitative case study as a novel contribution to the medical and rehabilitation literature. A confluence of violence, poverty and spirituality in SA is evident through the exploration of Bongani's unique experience and perception. Many articles discuss the socioeconomic, political and historical influences on violence in SA, however, only a few mention the impact of the spiritual realm. Continued interdisciplinary research into the spiritual influences on violence in SA is recommended. Furthermore, the authors hope to inspire South African therapists to listen to the voices of the vulnerable victims of violence as part of a preventative effort and to be actively involved in changing the culture of violence.

From a therapeutic perspective, this study draws attention to some of the core principles of occupational therapy. Firstly, *'doing'* for optimal health - Bongani perceived his engagement in

meaningful activities as the most valuable part of the hand therapy programme, and although his early return to work was challenging, this had a long-term beneficial result. Secondly, offering *'holistic'* treatment - hand therapists are urged to be attentive to psychosocial needs, perhaps more so after violence, even if clients appear emotionally resilient. For example, relatives, and especially witnesses of violence, should be included in treatment plans, and hand therapists should not underestimate the hope they can instil in their clients. In addition, investigation into psychology coverage by the Compensation Fund for injured workers in SA is essential.

Bongani described his assault as *'the worst day of his life'* and that it was *'like a bad dream'*. He may only be the second survivor of a muti crime who sustained a bodily dismemberment to share his terrifying reality. This is undoubtedly an extreme and unusual case since he also had his hand replanted, which appears uncommon in SA, and he regained a positive occupational identity and *'hope to grow himself'*.

## Study limitations

The primary participant and his colleague were interviewed in their second language. This likely led to limitations in the depth and complexity of responses to abstract questions. Limitation also exists around the sensitivity of the subject which may have contributed to the declined family interview. In addition, the interview with the colleague may have restricted his freedom to speak since he was in the presence of the primary participant.

Figure 1-4

## Acknowledgements

All the participants are thanked, and the first author acknowledges the University of KwaZulu-Natal for the remission of fees towards a master's degree which culminated in this article.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## Conflict of Interest

The authors declare that there is no conflict of interest.

## Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.jht.2021.10.006](https://doi.org/10.1016/j.jht.2021.10.006).

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