**Psychosocial impact of COVID-19 pandemic as perceived by Australian-based West Africans survived during Ebola epidemic (2014-2016)**

**Abstract**

**Background:** This qualitative study reports on an array of phenomena which includes, past trauma, strongest memory of events, the influence of surviving the EVD epidemic, social supports during both disease outbreaks, coping strategies during the EVD epidemic and COVID-19 pandemic, psychological distress during the COVID-19 pandemic and life satisfaction.

**Aim:** To determine the psychosocial impacts of the COVID-19 pandemic on West Africans who survived the 2014-16 Ebola epidemic and are residing in Victoria -Australia.

**Methods:** The method includes the five stages qualitative data analysis was utilised in analysing this research and findings were presented with supporting statements from participants which are assigned codes in the place of their names. Inclusion criteria were being 18 years and over, being in a 2014016 EVD affected country and resident in Victoria.

**Results:** Thirty-six individuals and 9 respondents took part in the survey and interviews respectively. About 52% were women and majority were within age range 18-40 years.

**Conclusion:** The study covered past trauma, social supports, influence of surviving the event, coping strategies, psychological distress and life satisfaction among participants. Symptoms of trauma, psychological distress were prevalent. Influence of EVD include fear related and health enhancing behaviors. They strongly recalled the impacts of travel limitations lockdowns, deaths and the consequent hardships that followed both disease outbreaks. Suboptimal supports in West Africa and the financial and professional supports were recalled. The implication of this study is the extent of the impacts of past traumatic events on the lives of EVD survivors living in Victoria-Australia.

*Keywords*: Trauma, memory, social supports, coping, psychological distress, satisfaction with life.

**Introduction**

This study covered seven research concepts which focused on, past trauma, the strongest memory of events, the influence of surviving the Ebola Virus Disease epidemic and the COVID-19 pandemic, social supports and coping strategies during both episodes of disease outbreaks, psychological distress and life satisfaction. Chapter five presented the quantitative results for this sequential exploratory mixed method research (Mandoh et al., 2025a).

This chapter 6 which is the qualitative aspect of the study focused on the concepts and utilised a two-pronged approach to collect data which included text based, and interview open ended questions. Textual data includes the use of letters, spoken words, phrases and sentences to express an opinion on a researchable topic (Birkenmaier et al., 2024). The text-based data was jointly collected in an online survey with the quantitative data. This data was carefully sorted and arranged before discourse and content-based analysis were done to arrive at the findings. The interview data were based on 13-item open-ended questionnaire (Table 1). Every participant’s response was initially electronically transcribed verbatim, and normal five stages of qualitative analysis was done to arrive at the findings (Bingham, 2023; Mandoh et al., 2024).

It is known that Verbatim transcript is superior to fair notes. The latter may be quicker, but it is not a preferred method (Hill et al., 2022). The verbatim transcripts, also known as ‘hard copy’ qualitative data is increasingly being required to be made available for public verification and possible re-analysis – re: “why not place our data in online repositories … for audit if required”? (Pool, 2017). Although, the ethical consideration of protecting participants’ identities may mean that the accessible data would not be accurately replicated (Khan et al., 2024). This provides the logical reasoning in reporting the verbatim transcripts of qualitative interview. Hence the interview data (hard copy) being analysed here is available online repository (Mandoh et al., 2025b).

Therefore, notes which were taken during the interviews were organised and added to the data. Both components of qualitative data were further screened amalgamated and triangulated before presenting the qualitative findings. Since the research topic focused on natural disasters that were also hinged on some social phenomena and health, this approach was considered pivotal in exploring the phenomena of interest in this topic.

Table 1: The qualitative interview questions

|  |  |
| --- | --- |
| Research objectives | Interview question |
| Trauma | Have you experienced difficult times in your life? |
| Would you give me examples of difficult times? |
| Strongest memory (EVD)† | Can you tell me about your experience of the Ebola epidemic? |
| Please describe your strongest memory, i.e. what you remember most, of the Ebola epidemic for [\*] |
| Strongest memory (COVID)‡ | Can you tell me about your experience with this pandemic? |
| Please describe your strongest feelings now, and what you are likely to remember most, of the COVID-19 pandemic for [\*] |
| Influence of surviving event\* | How do you think that surviving Ebola has changed your life? |
| Social support (EVD) | (EVD) Can you tell me about support during that time that helped you survive? |
| Social support (COVID) | (COVID-19) Do you have support that is helping you? |
| Coping strategies compared | What strategies did you use to cope during that epidemic? |
| What strategies are you using to cope with this pandemic? |
| Psychosocial distress | Are there times when you find it difficult to manage your distress? |
| Life satisfaction | Finally, please tell me how satisfied you are with life overall? |

Keys: Additional ‘open-ended’ questions from online survey

†Please describe your strongest memory, i.e. what you remember most, of the Ebola epidemic for:(i) Yourself (ii) Your family (iii) Your community.

‡Please describe your strongest feelings now, and what you are likely to remember most, of the COVID-19 pandemic for:(a) Yourself (b) Your family (c) Your community

\*Please describe how surviving the Ebola epidemic has impacted on your life since coming to Australia

[\*]: :(a) Yourself (b) Your family (c) Your community

Though the text-based data included a larger study population (36) out of which the 9 that provided interview data added more depth to the results. This is because one of the strengths of qualitative data is its ability to take note of respondent’s nuances and provide deeper meanings of words, facial expressions and emotions (Lindsey & Rathbone, 2022). Moreover, Lindsey & Rathbone,(2022) maintains that because of the depth of qualitative investigations and the depth of understanding qualitative research provides, its validity is good. Therefore, the integrated and summarised findings will be presented with the aid of participants’ statements in the paragraphs that follow. Participants’ identities are protected with both alphabetical and numerical codes such as SQP, and IP. The former means survey questionnaire participant and the latter is interviewing participant.

**Method**

The five stages of qualitative data analysis were utilised in analysing this research and findings were presented with supporting statements from participants which are assigned codes in the place of their names. Themes and subthemes from textual and interview data were integrated to form major themes.Participants should be 18 or over and was in a 2014-16 Ebola epidemic affected country and at the time for data collection was based in Victoria-Australia.

**Results of the analysis**

**Difficult times in participant’s life**

Qualitative data shows that some of those who survived the EVD epidemic had encountered difficult times before the epidemic. Most of their experiences which were narrated were centered mainly on the period covering the past civil wars that affected Liberia and Sierra Leone mainly.

*In my country, the eleven years rebel war we had and …. we had Ebola which killed so many people and … other natural disasters as well. …there is lockdown most times there is no work and there is no support. …especially when it seems like the lockdowns will not end (SQP, 1)*

Others reported that their experiences while living as refugees in camps were hard to forget such as what this participant said:

*Like for me we were living in refugee camp, so we have to work for people like sometimes before we eat stuff like that. So, all those experiences and during the war even though I was small I can still experience how my parents were taking me this way, this how I was struggling I can still picture that in my head and stuff like that. (IP, 002)*

Additionally, participants reported that they witnessed many deaths during the 2014-16 Ebola epidemic, which is mentioned in participants statements:

*Yes, I have experienced the ten-year civil war in Sierra Leone and also the Ebola epidemic which at least started around 2014 and went sometime in 2016 where people were dying, so, I have experienced so many difficulties in my life. (IP, 006)*

To further assess the evidence of past trauma, participants were asked whether they would provide evidence of difficult times that traumatised them.

**Participants’ examples of difficult times**

Qualitative results indicated that participants encountered some difficult times which caused them to engage in other labour-intensive jobs.

*So it was through farming, through other menial work that one would ordinarily not do that we had to I was engaged in, in order to take care of myself and young family (IP, 003)*

A few dwelled on their experiences during the Liberia and Sierra Leone civil wars, and the majority were on the period during the 2014-16 EVD epidemic. Examples of such difficult times included participants fleeing their homes and living in refugee camps.

*I would say may be growing up as a child we had the civil war that extended for a long time throughout my childhood and we moved to a different country as refugee, that was quite disruptive to my childhood.* *Experiencing violence at large scale, witnessing family members being shot or being amputated you know I would consider that a difficult a very difficult time in my life. (IP,004)*

More findings included the fear of EVD infection and avoidance of people and public places especially when treatment options for the EVD were limited.

*It was a situation where everybody scared of the infection people were scared to go out people were apprehensive of what to do when to go and all of that. And it did affect everybody not just the ones who were infected but the community in general. Because everybody was more or less confined in their homes for fear of contacting Ebola outside. (IP, 009)*

*Ebola experience was really not a good one, it was a very traumatic experience and at that time, I was in complete fear and ...it was really scary because people were dying around me. I lost family members; I lost colleagues and co-workers and some of my students. (IP,010)*

Another example of difficult time was when community lockdowns and harassment from security personnels were introduced, the period of EVD when communities were devastated accompanied by the high levels of hardship was also mentioned.

*But generally, we were in lockdown for a longer period and that impacted on our social and economic lives. (IP,003)*

One participant reported suffering racial discrimination which he described as difficult.

*Being judged by people because of my skin colour or of my language, my cultural orientation. So that in itself was a suffering. (IP, 005)*

Evidence of difficult times was further explored by probing the experiences of participants during the EVD epidemic.

**Experiences of the EVD epidemic**

The qualitative data showed that participants recounted mixed responses while community members in an area mobilised to support each other, and a participant maintained that the EVD epidemic experience was not as bad as it was for other areas. Other experiences included participants witnessing the death of loved ones; fear of the EVD infection and fear related behaviors including stigmatisation; psychosocial impacts of the EVD epidemic; experiences during restrictions and lockdowns; destruction of EVD victims’ homes; and the financial impacts and hardship. These findings were evidenced when participants commented that:

*With Ebola you see people dying every day. They are dying like animals I can say that people die every day like you go outside on the street you see dead body lying down it was really bad like I can say a lot of family lost their family even friends of mine during the Ebola she lost all her family she is the only one she is the only survivor of her family, everyone was, Ebola take the away, it was yeah it was really bad.(IP, 002)*

Accordingly, Fear of EVD infection and fear related behaviors were associated to witnessing the level of devastation the 2014-16 EVD epidemic which caused people to worry, but the worst issue was the fear of catching the virus which is expressed by participants themselves:

*The fear of Ebola they say is the beginning of wisdom in those days. (IP,009)*

As the EVD continued to spread widely in communities, the fear of the virus intensified, and this prevented people from venturing outside of their homes. They also became apprehensive and uncertain about the pattern of EVD infection in their community, so much so that they avoided public places such as hospitals. These sentiments were echoed in participants’ statements:

*So, it created a lot of fear in everybody you know because we don’t know how we can how anybody can get it you know. (IP ,001)*

Further findings showed that communities were impacted by the implementation of military style surveillance during lockdowns which prevented them from meetings and observing traditional rituals such as burial of loved ones. Because of these actions, participants felt that socio-culturally they were deprived, and they were harassed. These concerns were expressed in the following statements that:

*…in Sierra Leone the lockdowns, the travel restrictions were rigid. (IP, 003)*

As the widespread death of people became problematic, so was the effective and safe burial of dead bodies. In fact, people were initially advised against going to burial ceremonies for fear of contracting the EVD. Participants vividly recalled the widespread death of individuals and fear of going to burial ceremonies during the EVD epidemic. This point is evidenced by participant’s statement below that:

*Then even we were even warned that we should not even go to any burial, if there is any burial ceremony. (IP, 001)*

*I didn’t catch the virus, but amm there were a lot of people that were impacted that died (IP, 004)*

On the other hand, the unhindered spread of the EVD was associated with traditional burial ceremonies. This finding is reaffirmed by the statement that:

*The culture also in Sierra Leone all contributed to the spread of the Ebola crisis. Like…. when somebody dies according to our culture with that person has to be buried under a certain ritual. (IP,005)*

Another experience that was associated with the introduction of community isolation and lockdowns, was the financial impact and hardship. This consequently impacted commerce negatively and limited the financial capabilities of people. This financial limitation resulted to hardship especially where governments’ financial supports were lacking. This finding is evidenced by statements from participants who remarked that:

*Emotionally it was hard, physically was difficult, psychologically it was torturing, financially you can’t even go to the bank because the banks, the queue is so long that you can’t even access your finances. (IP, 008)*

Participants’ experience indicates that there is personal, family and community experience which sit strongly in their memory which are explored further in the following paragraph.

**Strongest memory of EVD epidemic**

***Yourself:*** Regarding the strongest memory of EVD, participants recalled many events which included anxiety about the cause of the disease and the apparent lack of cure or vaccine. They also reported that they feared the EV infection and the stigma and social barrier that was attached to them or family member after being infected with the virus. Participants expressed that there was community-wide distress especially when there was illness and death of members and seeing dead bodies in the street. They further reported that the rigid home and community isolation and lockdown and the consequent hardship that followed were significant challenges especially when government support was not available. There was hindrance of intra and inter-community movements, which contributed to the closure of businesses that affected their jobs and finances. All of the aforementioned points negatively impacted participants according to their statements:

*Personally, I was not infected, but I was affected by the EVD epidemic, both socio-economically and psychologically based on what was witnessed and having to move away from and stay from my house for some time. I lost family members, more than 60 relatives. (SQP,1)*

*Strongest memory was to witness a close family member die because of lack of medical care. Hospitals were ghost towns. people were so scared to go there for help. (SQP, 6)*

Some of the participants were concerned about the manner in which dead bodies were treated. They described mass burial of the dead due to EVD as disrespectful to their culture.

*…their bodies were not given a respectful burial. (SQP,50)*

*I can vividly recall people dying and buried en masse. (SQP,60)*

Additionally, other findings such as the destruction of the homes of sick individuals, a situation that was compounded by the difficulty of finding living under lockdowns. As one participant commented:

*During the Ebola epidemic, lives were negatively affected, homes were destroyed, and job opportunities was difficult. (SQP, 61)*

***ii. Family*:** The reported sadness among family members who were deeply affected by the EVD epidemic

Participants also reported some difficult experiences for their families in the following statements:

*Many of my family members were affected and died. (SQP,18)*

*It was sad because I lost some of my family members. (SQP,36)*

***iii. Community:*** Participants reported widespread illness and deaths. They further reported that there was fear, anxiety and stress.

*My community was gravely affected; I lost colleagues and students, and I witnessed too many deaths and suffering to last a lifetime. (SQP, 1)*

*My community was severely devastated with the many cases of confirmed Ebola cases and deaths, the harassment from the security forces to enforce the regulations and the deprivation to congregate for worship and other traditional rituals. (SQP,7)*

Nevertheless, not all of the strongest memories of events were negative, some communities appeared to function normally and supported each other during the 2014-16 EVD epidemic. This was reported in the following statements:

*The way communities were able to mobilise themselves in the fight against Ebola. Seeing People putting aside their differences and giving support to one another remains my strongest memory of Ebola. (SQP,10).*

*It was not so bad in my area; life was as though there wasn't an epidemic and people carried about their daily activities. (SQP,46)*

**Experience with the COVID-19 pandemic**

Findings included a reminder of their experiences during the EVD epidemic, antisocial behaviors directed at certain people during the pandemic, negative effect of COVID-19 lockdowns on their mental health, positive impacts of the lockdowns and information about the COVID-19 and government supports. This finding is reflected in the following statements from participants:

*I experienced social barriers in Australia, and I was judged because of my skin colour and cultural orientation* *(IP, 005).*

The negative impacts of the lockdowns during the 2019-23 COVID-19 pandemic, health enhancing behaviors, the effect of 2019-23 COVID-19 pandemic on their mental health, information about COVID-19 and support, which included provision of vaccines and financial assistance. Findings further show that the 2019-23 COVID-19 pandemic lockdowns had negative effects on their mental health. The community lockdowns according to participants brought some poignant feeling because of the isolation, being trapped, flashbacks and prevention of physical contacts with people during the pandemic which was painful. These feelings are reflected in this participant’s statement:

*Not being able to make physical contact with loved ones, negatively impacted*

*This COVID-19 outbreak is causing me to have flashbacks and nightmares of the past EVD epidemic in West Africa. (IP, 010)*

*COVID-19 has caused poignant feelings in me especially when I recall the EVD epidemic experience in West Africa. (IP, 003)*

Findings further showed that some people were concerned about receiving mixed messages especially when they focused on social restrictions on visiting places, wearing masks and taking vaccines.

*The mixed message about compulsory wearing of masks is getting to me and I don’t like it. (IP, 004)*

Also, CB lamented that:

*Mixed messages received during this pandemic is impacting my mental health. (IP, 003)*

Although most of the participants appreciated the Australian governments’ effort to provide a variety of vaccines, which they said was not available during the 2014-16 EVD epidemic in West Africa, a participant expressed dislike for the enforcement of COVID-19 vaccinations. The participant described it as coercion

*Forcing me to take COVID-19 vaccine would cause me to shut down if the coercion continued. (IP, 004)*

**Strongest feelings about the COVID-19 pandemic**

***i. Yourself:*** The findings showed that people held strong memory of events that made them feel sad, fearful, and traumatised, not believing that COVID-19 was real, the psychological impact especially of the effects of lockdowns and government support provided and the responses of families and communities to the COVID-19 pandemic.

*Again, my greatest fear here is the risk of me contracting the COVID-19 at work and infecting my family. (SQP,7)*

*Personally scared of being infected. (SQP,28)*

*I need to socially distance myself from others in order for me not to be infected. (SQP, 44)*

*For me, I still feel sad about what happened. (SQP,59)*

A participant narrated how traumatising it was for workmates to fall sick of COVID-19 and die.

*Additionally, seeing people I provide support to, or colleague workers get sick of COVID-19 and lose their life makes me relive the traumatising experiences of the Ebola epidemic few years ago. (SQP,7)*

A few participants described the news updates about the COVID-19 pandemic as a source of anxiety and stress and it arose feelings of horror of the experiences during the 2014-16 EVD epidemic This feeling is expressed in this participants statement that:

*The anxiety, uncertainties and stress dealing with the news on a daily basis.*

*Personally, my strongest feeling now is fear. I am likely to remember a feeling of déjà vu; having experienced the horrors of Ebola, COVID-19 was like reliving the same horrors but at a level that I never anticipated. (SQP,1)*

Data shows that some people did not believe in the reality of COVID-19 disease, and the introduction of community lockdowns further exacerbated negative psychological feelings including feeling isolated and uncertainty about the end of the pandemic was expressed in the following statements:

*The feeling that some people don't even think it’s real makes it even harder. …. The shutdowns of life activities, the boarders and the economic impact will always be remembered. (SQP,5)*

*The second lockdown in Victoria, Melbourne had a psychological toll on my four kids as they could not go out to the park to play or even go to McDonald to have a treat. (SQP,18)*

*Being in lockdown caused flashbacks of impending death from the virus for me. (SQP,61)*

*I am very worried now and not sure when this pandemic will end. The continuous lockdowns are a reminder of how fragile life can be for me. (SQP,64)*

Despite the many problems that were associated the COVID-19 pandemic, participants stated that they trusted their government of Australia that they would eventually control the disease. Furthermore, findings showed that participants followed infection prevention and control measures from the government since such measures were not strange considering their experiences with the EVD epidemic. Although lockdowns were restrictive and may have caused inconvenience, some participants appreciated their purposes and intentions which were to break the infection chain.

*I feel it when lockdowns are instituted, but since it is for the common good, we appreciate them. (SQP,60)*

***ii. Family*:** Families thought that interactions in the community posed the risk of infection. Because of the associated loss to COVID-19, families expressed fear of contracting the virus and some even were depressed because of the impending loss and such memories were expressed in the following statements that:

*My family is scared, and as a family, we will never forget the financial hardship and homelessness we experienced; there was fear of the unknown. (SQP,1).*

*A scary experience for my family. (SQP,13)*

***iii. Community:*** The feelings of depression and hopelessness reverberated within some communities and the continuous lockdowns increased anxiety levels among impacted communities. These expressed fears extended to participants’ workplaces and their communities as explained here

*Family and community lost their job. Hardship all over. (SQP,22)*

*My family felt hopeless, and so was my community. (SQP,58)*

*I was worried at the early onset of the COVID 19 pandemic because I work My family is still scarred as well as my community. A lot of family and community members are still depressed. (SQP,58)*

Findings from this study show that as the COVID-19 virus spread to communities and caused fears of being trapped.

*My community was greatly impacted by the strongest feeling of anxiety and, for the first time, not being able to collectively support other members of the community due to the restrictions. (SQP,1)*

*My family felt trapped and hopeless and were scarred that being communal, my community will no longer be possible again because of COVID-19. (SQP,63)*

*As a community, we are worried that any community engagement is a potential life sentence from this virus, so we hardly get to commune anymore. (SQP,64)*

**How surviving the 2014-16 EVD epidemic has changed life in Australia**

The responses could be grouped into two categories: the positive changes which improved their awareness to the hazards of the EVD and other infectious diseases and improved resilience to other challenging events. Another positive change was participants’ perceptions about the quality of the healthcare delivery system in Australia, which they described as better than in West Africa. These sentiments were expressed in the following statements:

*Aah yes it has really changed my life, my perception about life …because I realise Ebola was and it is still a deadly disease you know (IP, 001)*

*Amm, it has changed my life in a very big way. It has taught me not to take life for granted. (IP, 010)*

The positive EVD induced behavior change enhanced their compliance with infection prevention and control procedures in Victoria- Australia. Such changes included staying home and observing constant lockdown during the COVID-19 pandemic in Australia. The following participants explained the influences the EVD had on them:

*...to educate people to learn about ……take early precaution to stop to prevent this thing to overtake yeah. (IP, 002)*

*… surviving Ebola changed my life especially when it comes to proper hygiene. Especially washing of my hands daily and also using the hand sanitiser after washing your hands and also, I must keep my social distance with people because as previously. (IP, 006)*

*I have always believed in the philosophy that says bad and difficult times are things make us stronger and that has always been my belief. … we went through it, we come out of it stronger. (IP, 009)*

Additionally, participants believed that it was divine (God) blessings that protected them from harm which according to some participants it was he/she who saved their lives during widespread infection, illnesses and deaths. This was expressed in participants’ views that:

*… am satisfied I have to be grateful to God... Am satisfied yeah. I can’t emphasise mor on that, but I am, yeah. (IP, 002)*

*…. I believe in God, and I believe that eh it was by the grace of God that I could make it. It is not out of my wisdom or my knowledge. …I thank God there is research, I thank God there is a healthcare system from outside coming in to help and thank God that there is United Nations, thank God there is countries like Australia. (IP, 005)*

A participant appreciated his country’s government for being proactive during the EVD epidemic. They also reported that their survival was attributed to the observation of standard precaution as stated in the following statements:

*But … government were so proactive they were able to control it you know (IP,001)*

*…the same principle of washing our hands continue, and also the sanitising of hands continues including the social distancing. (IP, 006)*

Despite the confidence and reported positives such as the compliance with standard precaution rules and enhanced resilience, some of the participants reported many negative changes of surviving the EVD epidemic on their lives and reflected on the graphic incidences that caused fears and hopelessness in them which are evidenced in the following statements:

*During the Ebola crisis people were lying dead on the street bleeding, vomiting and no one was able to offer assistance for fear of their lives. (IP, 005)*

*So, during those times* *I would feel really, really, really helpless and hopeless. (IP,010)*

The statements above are indicative of the mental changes that have been influenced in West African EVD survivors living in Victoria-Australia. Examples of these changes include being scared forever, belief in divine interventions during difficult moments, experiencing flashbacks and nightmares.

**Social support that helped you during EVD epidemic**

Findings from this qualitative data which reported that though some members of the community were supportive, some were not. Reported finding showed that some participants received supports mainly from family, friend and nongovernment organisations.

*Support was poor. It was poor. Because there was like I said there was dead body everywhere, hospital was full yeah. The support was really bad, the governments were helping but not to that extent yeah. (IP, 002)*

*During Ebola the only support I had was my immediate family. I didn’t get any support even as a healthcare worker. So, all the support I had was from my immediate family.* *(IP, 010)*

On the contrary, other participants noted that though their governments social support during the EVD epidemic was suboptimal it was provided especially towards the end of the epidemic.

*The support from government was non prevalent, there was nothing like that ok. it was after the Ebola during the post Ebola that government through collaboration with the development partners came up with some support. (IP, 003)*

However, although government support was perceived as inadequate, some family and non-government organisations were able to provide support for EVD survivors.

*I received support from my immediate family members who were living in Australia and a few community members. (IP, 005)*

*I got support from my husband who was living in Australia and my workplace. (IP,010)*

As some family members and communities were able to provide support to EVD survivors, others were not. This is evidenced in the following participants’ statements that:

*Distrust among neighbours in the community. Everyone had to avoid getting infected thus, look after themselves. (SQP,13)*

*It was so difficult for everyone to move around or get help from people. (SQP,20)*

*No one in the neighbourhood wanted to assist us because of fear of being infected with ebola virus. (SQP,52)*

Social support was further assessed among participants for the COVID-19 pandemic period.

**Social support that has helped during COVID-19 pandemic**

The qualitative findings showed that though some people encountered some difficulty in accessing the government provided social supports because of visa conditions, the overwhelming majority were happy with the supports they received from not only individuals and neighbours, but also from the Australian government.

*My job is giving us staff members support in addition to the Australian government support. (IP, 001)*

*Unlike when I was in Africa, the Australian government provided both financial and social support. (IP, 004)*

*Here, government say stay indoors we would look after you, we would provide for you the income and the support, and it was evident because we all could see what government was doing (IP,005)*

In addition to government supports, family members provided support to participants.

*Sometimes I do have support from my elder sister (IP,003)*

**Strategies participants used to cope during EVD epidemic**

Findings were that participants followed infection prevention and control such as hand washing and sanitation, social distancing and avoiding crowding and crowded places. These coping strategies were confirmed by the following statements;

*Coping strategy was strict adherence to government’s regulation in relation to the measures that were put in place, you know and yeah going by the health advice so those were the coping strategies. (IP, 003)*

*The strategies I used keep washing our hands daily regularly, sanitising our hands we go to no social gathering places, we know who we are mingling with. We should keep our distance are the only strategies I was putting in place so that I will not have the virus. (IP,006)*

Others stated that being surrounded by their families helped them cope with the EVD epidemic. This finding is confirmed by participants statements.

*So, you have families and friends were able to see them they are all close and just checking up on each other was a good way to just keep going. (Participant, 004)*

Mass media information, education and education helped participant cope with the EVD. A participant statement echoed this finding.

*I stay home, watch television, go to work and spend time with family. (IP, 003)*

*So, information helped me a lot. I had a mobile phone, and I had a radio that I was keeping in tune with current news each and every day. So that helped me a lot. (IP, 005)*

Another way they coped was by singing and offering prayers for divine interventions.

*One of them was like emm when once I got out of isolation you know being with family members am a very religious person praying and singing because in my culture we always sing and dance ...were some of the strategies that helped to alleviate some of the impact of Ebola. (IP,010)*

**Strategies participants used to cope during the COVID-19 pandemic**

Many participants stated that they complied with government public health regulations and embraced infection prevention and control measures. They avoided crowded places and shaking of hands, wore face masks, tested for COVID-19 when necessary, and stayed within travel limits. Some embarked on walking, running, dancing and offering prayers. A respondent took days off work and stayed home, not doing anything but relying on family support networks to cope. Similar to coping strategies for EVD, participants watched television and listened to the radio and used social media to cope with COVID-19.

*Make sure that you wash your hands consistently, wear your mask, wear your PPE you know, gloves you know, make sure that you don’t go to a crowded place. When you want to go out you make sure that ehh you don’t get closer to people like before you know there is no hugging again. That em so those are the rules. Just follow the rules, no hugging, no shaking of hands and all those things. (IP,001)*

*Sometimes I cry or sing and dance to cope with stress. (IP, 002)*

*I sit with my children, and we watch television a discuss and sometime go to a nearby park for a walk. (IP, 008)*

*Since I am living alone in my house, I rely on telephone calls to my family and friends back in Africa and the lockdowns are affecting my business negatively. (IP, 009)*

Another participant emphasised the strain on family dynamics and income that has impacted his coping during the pandemic.

*Because we cannot work in two places at the same time. So that has an effect, a rippling effect into ah the resources that normally flow in the family. (IP,005)*

They also utilised prayers to cope with the pandemic stress at home. This finding was stated by this participant that:

*Another coping mechanism is with my faith we pray at home every day; we pray at home every Wednesday and Sunday we have our church service at home, and we give a word of encouragement also with others online.*

**Times when it was difficult to manage distress**

Findings in the qualitative part of the study shows that although a few of the participants reported that they did not find it difficult to manage their psychological distress, such as this participant who stated that:

*Hmm not really, not really, because during this pandemic am all am always having people to talk with whether its family members, whether it friends. (IP, 006)*

Majority did report that there were indeed times when they found it difficult to manage their distress, and this is further stated in by the participants that:

*I have had times when I have really struggled to manage my distress. (IP, 005)*

*Yes, sometime very difficult because being the only provider in the family and I have family overseas in Liberia and Guinea that are looking up to me for survival. So sometimes yeh it just I can’t just cope with these things when I once I think on them. Yeah, is very difficult for me sometimes (IP, 008)*

*Yes. there have been multiple times, multiple times especially when it seems like the lockdowns will not end, and you kno*w. *(IP, 010)*

Participant further reported that they relied on mass media for updated information on the pandemic as they usually did in West Africa during the EVD epidemic.

*I would say yes. Am like a couple of times, I had to take a day off and just try to revive myself and just stay and do nothing at home (IP, 004)*

Others use crying as a coping mechanism as evidenced in this statement**.**

*But I overcome emm this distress things like when I am like when going through a lot, I sit in my room I cry about it and just get over it. (IP, 002)*

**Overall life satisfaction**

Despite participants reporting on their negative experiences such as fear of COVID-19, uncertainty about the outcome of the pandemic, stress and depression in relation to the COVID-19 public health intervention measures in Australia, they overwhelmingly stated that they were generally satisfied with life.

*Life is better here in Australia, and I am very satisfied with life. (Participant, 001).*

*I am satisfied with life in Australia and my standard of living is better than the one when I live in the refugee camp in Africa. (IP, 005).*

These results and findings will be discussed further in the other sections that follow. Some participants maintained that if they had a God that worked with them so that enhanced their satisfaction.

*I am satisfied hundred percent (laughs) because i have a god (IP, 001).*

*Am satisfied I have to be grateful to God (IP, 002).*

**Further note on the results**

Combining the qualitative results provides a deeper meaning and understanding of findings (Morse, 2010). Findings from both segments of this qualitative components were integrated to form major themes which will be reported in this section as it appears in Table 2. The significance of including text-based questions in the survey and further conducting interviews was for the participants to provide a reinforced and detailed description of participants experiences and an enriched data that will help in answering the research questions. Table 2 sums up the responses and compares participants’ general experiences between 2014–16 EVD and the COVID pandemic.

Table 2. Comparison of participants experiences of EVD epidemic and COVID-19 pandemic

| No | Ebola epidemic | COVID-19 pandemic |
| --- | --- | --- |
| 1 | Participants did not have access to vaccines during the epidemic and healthcare delivery was poor in Ebola affected countries in West Africa | Participants have vaccines and a functional public health delivery system in Australia |
| 2 | Information about the EVD was scarce and there was confusion among individuals | Information about COVID-19 is abundant and participants complained of receiving mixed messages |
| 3 | Participants lacked knowledge and experience about a large-scale disease outbreak like the 2014–16 EVD epidemic | Though COVID-19 is new participants describe it as their second experience of a large-scale disease outbreak |
| 4 | EVD caused fears and nightmares in participants | COVID-19 caused fear and flashbacks in participants i.e. post-traumatic stress disorder (PTSD) |
| 5 | EVD caused feelings of uncertainty hopelessness, and helplessness about the cause and cure | COVID-19 caused feelings of uncertainty, hopelessness, and helplessness about the duration of the pandemic |
| 6 | Participants reported that the 2014–16 EVD was severe, and the death rate was widespread | Participants compared the severity of COVID-19 to EVD and described COVID-19 as less severe although it had a wider spread globally |
| 7 | Participants experienced stigmatisation and victimisation and therefore lacked trust in the healthcare delivery system in West Africa | Though a participant reported that he was discriminated against, the others did not report anything relating to experiencing victimisation and therefore have faith in the healthcare delivery system in Australia which they described as better than those in West Africa |
| 8 | All of the participants reported that they and families did not receive support from some of their neighbours and government at the peak of the epidemic, some individuals, families, and communities later on in the epidemic became resilient and mobilised and supported each other. | Though majority of the participants, families and communities received support from Australian government, they still reported experiencing hardship. Also, participants built on their previously acquired resilience from the EVD epidemic, social media, family support to cope with the COVID-19 pandemic |
| 9 | There was hard lockdown and community and government distrust | There was also hard lockdown, but participants trusted the Australian government to quickly manage the pandemic |
| 10 | Showed symptoms of psychological impact which included anxiety, confusion, fear of going to public places such as hospitals and fear of lockdowns Participants also experienced depression, devastation, collective trauma, grief and disrespect for culture and burial ceremonies. Dislike for community lockdowns were expressed | Participants are psychologically impacted and show symptoms like confusion, stress, fear, anxiety, depression, and feelings of being isolated, nightmares and feelings of being trapped. Also, though some of the participants disliked COVID-19 testing procedures, wearing masks, travel restrictions and lockdowns, they understood the significance of these measures based on their previous experiences during the EVD epidemic |
| 12 | They relied on the television and radio for information | Participants depend on radio and television for information |
| 13 | Initially, there was denial and disbelief in the EVD because of the similarities of the initial symptoms to other endemic infectious diseases such as Malaria and misunderstanding of the initial manifestations of the disease. | Denial and disbelief in COVID-19 |

Moreover, interviews provide the opportunity of gathering additional information from data. As findings from text-based data were initially derived from summaries of the survey, these were read, summarised, analysed, evaluated and coded to generate subthemes, which were later collapsed to provide themes thinking that every finding is significant. On the other hand, data from the semi-structured interviews were similarly retrieved, transcribed, analysed, and assembled into subthemes. And findings were reflected upon before merging them with findings from the text-based components together to form overarching themes as presented in Table 3.

Table 3 Themes and subthemes from quantitative and qualitative data combined

| No. | Themes | Subthemes |
| --- | --- | --- |
| 1 | Trauma of disease events on participants | Stigmatisation, hopelessness and helplessness following the widespread death of family members |
| Symptoms of psychological and socioeconomic impacts including fear, anxiety, distress, nightmares and hardship. |
| Mixed messaging, confusion avoidance and distrust during EVD epidemic |
| 2 | Memory of events | Impact of lockdown restriction on gatherings and social functions such as burials during both EVD epidemic and COVID-19 pandemic |
| Experiencing disrespect during the EVD epidemic |
| Role of culture in infectious disease dissemination such as customary burial ceremonies in West Africa and the frequent and the travelling culture in Australia which enhanced the EVD and COVID-19 dissemination in communities |
| 3 | Influence of surviving the EVD epidemic during the COVID-19 pandemic in Australia | Enhanced coping strategies, trust in infection, prevention and control measures based on previous experiences during the EVD epidemic. Belief in the fragility of life and divine interventions a in difficult situations. Fear related behaviors during the COVID-19 pandemic based on experiences during the EVD epidemic. |
| 4 | Capacity to cope with stress during both episodes of disasters | Difficult coping during EVD epidemic and utilised radio, singing, religion, hand hygiene, crying and embraced infection prevention and control measures. |
| Resilient coping during COVID-19 pandemic in addition to singing, prayer, crying and listening to the radio and television for further information of the pandemic IPC measures |
| 5 | Supports during both disasters | Government, family, professional and healthcare support suboptimal at the peak of the EVD epidemic in West Africa whilst the opposite was the case in Australia.  Lack of vaccines and financial incentives during the EVD epidemic |
| Government, family and social supports available in Australia during the COVID-19 pandemic. Vaccines and other treatment options available |
| 6 | Distress and confusion among participants during the COVID-19 pandemic | Mental distress elevated, pandemic impacted mental health arising from fear of COVID-19 infection, altered sleep patterns, dislike of nasal COVID-19 testing and feelings of isolation for individuals and children |
| 7 | Reflection on life | Uncertainty about life |
| Satisfied with life in Australia |

**Significance of the qualitative component results**

Data from the qualitative component especially the interviews provided a rich description of participants’ experiences in relation to the research question which otherwise would not have been achieved. Also, the interviews provided additional perspectives on the topics with a different method of investigation from the quantitative component. The method of analysis that was adopted for the interviews gave additional meaning to the data which included participants’ reports about their improved quality of life and satisfaction with healthcare in Australia. Appreciation of government provided supports such as financial, medical and healthcare during this pandemic. They further deliberated on the levels of healthcare services they have now in Australia which, in their own words, is better than what they had in their countries of origin in West Africa. By the same token, the qualitative semi-structured interviews provided a platform for participants to add their voices to the phenomena that were investigated.

**Conclusion**

This chapter has focused on reporting findings from the qualitative components of this research which included impacts of participants experience during the EVD epidemic. Data revealed that participants experienced events that traumatised them before they arrived in Australia. Examples of such events included rebel wars, the 2014–16 EVD epidemic, living in refugee camps, witnessing the death of loved ones and widespread death of neighbours during the EVD epidemic, the effects of militarised lockdowns on them socio-culturally. It reported on how participant coped during the EVD outbreak. Regarding participants adopted coping strategies, data revealed that they listened to radio – television broadcasts, sang, cried, and followed government-prescribed infection prevention and control regulations.

Similar to the EVD period, participants reported symptoms of distress which included anxiety, depression, fear of infection and nightmares. Participants coped with the COVID-19 pandemic by utilising their previous experiences with the EVD epidemic which they said increased their resilience. Participants reported that they are satisfied with life especially when compared to the period during the EVD epidemic in West Africa.

**CONSENT**: Consent was given in writing before the study commenced.

**ETHICAL APPROVAL**: Approval given by the Charles Sturt University, New South Wales, Australia (Approval number H20325).

**COMPETING INTEREST**: No competing interest

**CONFLICT OF INTEREST**: There is no conflict of interest in this research.

**COMPETING INTERESTS DISCLAIMER:**

**Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.**

**References**

Bingham, A. J. (2023). From data management to actionable findings: A five-phase process of qualitative data analysis. *International Journal of Qualitative Methods*, *22*, 16094069231183620. <https://doi.org/10.1177/16094069231183620>

Birkenmaier, L., Lechner, C. M., & Wagner, C. (2024). The Search for Solid Ground in Text as Data: A Systematic Review of Validation Practices and Practical Recommendations for Validation. *Communication Methods and Measures*, *18*(3), 249-277. <https://doi.org/10.1080/19312458.2023.2285765>

Hill, Z., Tawiah-Agyemang, C., Kirkwood, B., & Kendall, C. (2022). Are verbatim transcripts necessary in applied qualitative research: experiences from two community-based intervention trials in Ghana. *Emerg Themes Epidemiol*, *19*(1), 5. <https://doi.org/10.1186/s12982-022-00115-w>

Khan, S., Hirsch, J. S., & Zeltzer-Zubida, O. (2024). A dataset without a code book: ethnography and open science. *Front Sociol*, *9*, 1308029. <https://doi.org/10.3389/fsoc.2024.1308029>

Lindsey, L., & Rathbone, A. P. (2022). Beyond the numbers: Utilising existing textual data for qualitative research in pharmacy and health services research. *Research in Social and Administrative Pharmacy*, *18*(1), 2193-2199. <https://doi.org/https://doi.org/10.1016/j.sapharm.2021.04.010>

Mandoh , S. L., Bwititi, P. T., & Nwose, E. U. (2024). Study protocol for psychosocial impacts of COVID-19 pandemic on Australian based West Africans who survived the 2014-2016 Ebola epidemic. *Protocol.io*, Available:. <https://www.protocols.io/view/study-protocol-for-psychosocial-impacts-of-covid-1-5qpvokzk9l4o/v1>

Mandoh, S. L., Bwititi, P. T., & Nwose, E. U. (2025a). Chapter 5: The psychosocial impact of COVID-19 pandemic as perceived by Australian-based West Africans who survived the 2014-2016 Ebola virus disease epidemic – Survey data. *Figshare*. Retrieved 01 Feb 2025, from <https://doi.org/10.6084/m9.figshare.28270322.v2>

Mandoh, S. L., Bwititi, P. T., & Nwose, E. U. (2025b). Chapter 6: The psychosocial impact of COVID-19 pandemic as perceived by Australian-based West Africans who survived the 2014-2016 Ebola virus disease epidemic – Qualitative interview data. *Figshare*. Retrieved 01 Feb 2025, from <https://doi.org/10.6084/m9.figshare.28270607.v1>

Morse, J. (2010). Simultaneous and Sequential Qualitative Mixed Method Designs. *Qualitative Inquiry - QUAL INQ*, *16*, 483-491. <https://doi.org/10.1177/1077800410364741>

Pool, R. (2017). The verification of ethnographic data. *Ethnography*, *18*(3), 281-286. <https://doi.org/10.1177/1466138117723936>