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Posted Date: 10 March 2025

doi: 10.20944/preprints202503.0390.v1

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 doi:10.20944/preprints202503.0390.v1

Article

An exploration of Barriers and Motivators Contributing to Patient Delay in Seeking Tuberculosis Care Services in the Hhohho Region of Eswatini

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Abstract: Tuberculosis (TB) is one of the top twenty leading causes of death globally, it is the second leading cause of mortality from a single infectious cause after COVID-19 but ahead of HIV/AIDS. In 2020, TB was responsible for the ten million disease burden and an estimated 1.5 million deaths world-wide. Africa and South-East Asia account for almost 70% of the global TB burden but HIV/AIDS remains the biggest driver of TB morbidity and mortality in sub-Saharan Africa. This study aimed to explore patients' attitudes, perceptions and beliefs that promote or hinder TB care-seeking behaviour at Dvokolwako Health Centre, Hhohho region, Eswatini. This was an explorative qualitative study and the primary data was obtained through semi-structured interviews. A sample of fourteen male and female participants above eighteen years of age were selected from the list of patients enrolled into TB care as late presenters in the period from 1 January 2020 to 30 December 2021. All data collected was audio-recorded, transcribed verbatim and analyzed using the thematic content approach. The study findings showed multiple factors contributing to the delayed access to TB health services. Inadequate knowledge, beliefs about TB symptoms, stigma associated with TB and lack of access to TB health services were individual factors that were found to contribute to patient delay in seeking TB care services. Lack of decentralized and community-based health education and promotion and negative health care workers' attitudes were the health system-related factors that hindered early TB care-seeking. Persistence of symptoms and family encouragement and support were found to be motivators for eventual presentation into TB care services. From the findings of this study, a multi-pronged approach targeting the factors hindering early TB care-seeking and strengthening the motivators of health-seeking behaviour is necessary to mitigate the late presentation into TB care services in this and similar settings.

Keywords: tuberculosis (TB); TB care services; TB treatment; health-seeking behaviour; patient delay; diagnosis delay; health systems delay; treatment delay; Hhohho region; Eswatini

Introduction

Tuberculosis (TB) is a disease caused by a fairly ubiquitous bacteria called Mycobacterium TB (Greenwood, Slack & Peutherer, 2012) [1]. It primarily affects the lungs through the inhalation of infected droplets but it can be disseminated throughout the body (Greenwood et al., 2012) [1]. Its typical symptoms include cough, fever, loss of appetite and unintentional weight loss. TB can be treated by chemotherapy whose combination of drugs and duration depends on the strain of the causative bacteria (Longmore, Wilkinson, Turmezei & Cheung, 2007) [2]; Caminero, 2013 [3]; Lange, van Leth, Mitnick, Dheda & Gunther, 2018) [4]. These strains are normally classified into drug sensitive and drug resistant bacteria which cause drug sensitive (DS-TB) and drug resistant TB (MDR-TB and XDR-TB), respectively (Caminero, 2013 [3]; Raviglione & Sulis, 2016) [5]. Despite being a

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preventable and curable disease, TB still ranks within the top twenty causes of death globally and it is the second leading cause of mortality from a single infectious agent after COVID-19 but ahead of HIV/AIDS (WHO, 2020) [6] In spite of a sustained decline in global incidence of TB of about 2% per year, TB mortality remains substantially high (WHO, 2020) [6]. In 2020 alone, TB was responsible for an estimated 1.5 million deaths signaling no significant change when compared to 1.4 million TB deaths recorded in 2011 (WHO, 2018) [7] Abdullahi, Ngari, Sunga & Willetts, 2019 [8]. Africa, together with South-East Asia, account for almost 70% of the global TB burden. However, the drivers of the TB epidemic vary in these world regions (Vesga et al., 2019) [9]. In Africa, HIV/AIDS is the main driver whereas in South-East Asia, the burden is underlined by poverty associated factors which hinder access to TB diagnostic and therapeutic services (Vesga et al., 2019) [9].

In 2016, the government of Eswatini adopted the global plan to end TB in its national strategic plan (NSP) for the four-year period 2016 to 2020 (WHO, 2018) [7]. In order to curtail TB spread in the community and the associated morbidity and mortality, one of the plan's primary targets was to reach at least 90% of the population with TB (TB case notification) by end of 2018 (NTCP, 2015) [10]. However, the TB case notification has remained stagnant at 65% from 2015 to 2018 (NTCP, 2019) [11]. Notably, TB case notification is influenced mainly by the diagnostic capacity of the health care system and patient health-seeking behaviour. Insua, Haumba, Zannat, Matji and Smith-Arthur (2012) [12] noted that the total diagnostic, and therefore notification, delay was approximately 102 days. Of these, patient related delay was about double the health system diagnostic delay. This is further underscored by the 2018 national TB prevalence survey which observed that an estimated 58% of people with symptoms characteristic of TB did not seek care (NTCP, 2019) [11].

The barriers to TB care include individual factors, socio-cultural factors and health system related factors. There are a number of personal attributes that affect health-seeking behaviour and consequently patient delay in seeking TB care services. These factors include demographic characteristics such as gender, age and marital status (Fatiregun & Ejeckam, 2010 [13]; Getnet et al., 2017 [14]; Laohasiriwong et al., 2018) [15]. Other factors pertain to how the individuals perceive severity of symptoms, level of knowledge of TB, their degree of literacy, employment status and residential geographical location (Pradhan et al, 2010) [16]; Mohamed et al., 2013 [17]; Getnet et al., 2017 [14]; Kigozi et al., 2017 [18]; Christian et al., 2019 [19]; Laohasiriwong, et al., 2018) [15]. Socio-cultural beliefs and practices were often associated with use of home remedies, self-medication and consultation of religious and traditional healers particularly in rural communities (Shaikh & Hatche, 2005) [20]. In settings where there has not been much investments in TB diagnostics, laboratory support and capacitation of health care workers (HCWs) in primary health care facilities on TB diagnosis, health systems delay is equally significant in delaying the diagnosis of TB (Bogale et al., 2017) [21]. Apart from purely health-systemic delays, there are health systems related factors that indirectly influence delay in the diagnosis of TB by adversely impacting health-seeking behaviour in patients with TB symptoms (Pardeshi et al., 2017) [22]. This is usually in the form of HCW attitude towards TB patients and how they care for them (Pardeshi et al., 2016) [22].

The majority of patients with TB-associated symptoms are eventually forced by various circumstances to seek care and according to Mutinda, Kabiru and Mwaniki (2014) [23], these drivers include failure of self-medication, too sick to bear the pains, advice from relatives and friends after worsening conditions. Initially, self-medication with antibiotics and pain-killers were reported to cause delay in seeking help from HCFs because they were able to mask some of the TB symptoms leading to temporary relief and faux healing (Helfinstein et al., 2020) [24]. Individuals were prompted to seek care once the symptoms started to persist in spite of the self-medication as observed by Helfinstein et al., (2020) [24] in South India. The same was observed with failure of treatment and concoction from faith and traditional healers leading to patients experiencing unbearable pains in advanced disease forcing the majority to seek health care in designated TB treatment facilities (Mutinda et al., 2014) [23]. In addition to the persistent and unbearable symptoms, Shatil et al., (2019) [25] observed that the role of family members, relatives and friends played a huge in motivating their

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sick relatives to seek TB care services and this role became more important when TB patients' health condition deteriorates, became bedridden or too sick to perform any normal activities.

The interventions employed in Eswatini, thus far, have been primarily centred on enhancing the diagnostic capacity of the health system through continual TB education of HCWs and acquisition of rapid molecular diagnostic equipment (Verdicchia et al., 2018) [26]. This has successfully shortened the health system-related delay but largely ignored patient-related delay, a factor repeatedly blamed for late presentation of patients into TB care services (Insua, Haumba, Zannat, Matji and Smith-Arthur (2012) [12]. Consequently, besides propagating the transmission of TB infection, these undiagnosed TB cases either die or present late with significant morbidity (Sreeramareddy, 2019) [27]. This study, therefore, sought to uncover the factors that underlie this trend of poor health seeking behaviour.

Methodology

Study Design

An explorative qualitative study design was used to investigate the participants' perspectives, perceptions, beliefs, and attitudes underpinning late presentation to TB treatment facilities. Participants were free to share their personal lived experiences and the arbitrary meanings they attach to those experiences due to the naturalistic paradigm that underpins qualitative technique (Barbour, 2000 in Jack, 2006) [28].

Study Setting

The study was conducted at Dvokolwako Health centre, a rural health facility situated in North-Western Hhohho region of Eswatini (Kemp, 2023) [29]. The package of TB care services it provides include screening for TB, diagnosis of TB through sample analysis using Gene Expert machine and microscopy and treatment of both drug-sensitive and drug-resistant TB. In addition to TB care services, it also provides care to HIV/AIDS patients, maternity and general outpatients (WHO, 2018) [7]. Its catchment area is estimated to be a population of approximately 100 000 people.

Study Population

Population studied were TB patients enrolled for TB care services at Dvokolwako health centre in Hhohho region of Eswatini in the period from January 2020 to December 2021. Prior to registration as TB patients, these patients would have been confirmed and notified as TB cases after TB bacteria has been identified in their sputum. The fourteen participants for this study were recruited using a purposeful sampling method.

Rigour

Saturation was achieved through starting data review from the onset and through-out data collection and the saturation point was reached when no new additional insights or ideas were emerging as the participants were interviewed (Luescher, 2016) [30]. Level of internal validity and credibility was achieved by interrogating the findings and interpretation and by displaying and discussing how data was analyzed and processed. Additionally, rigour was achieved through a rich description of the research setting and population demographics and general socio-economic characteristics were detailed, particularly when using the lens of the participants so that their social realities are portrayed as perceived by them (Creswell & Miller, 2000) [31]. Reflexivity was used to objectively examine for coherence in the design steps (Malterud, 2001) [32]. Subsequently, it was also employed to assess if data coded into themes made sense and is a true reflection of what had been communicated by the participants; thereby enhanced credibility of the study by minimizing researcher bias. Confirmability was achieved by having an audit trail in the form of audio recordings of the in-depth interviews complemented by notes where feasible (Robson & McCartan, 2016) [33].

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Clinical Trial Number: Not Applicable

Ethical Considerations

Ethical request was assessed in accordance with the Declaration of Helsinki and approval was granted by the UWC Biomedical Research and Ethics Committee (BMREC) and also by the Eswatini Health Human Research Board (EHHRRB) and the Management team at Dvokolwako Health Centre. Respondents' participation in this study was voluntary. An information sheet was used to provide a clear explanation of the study's methodology and goal. To participate in the study, participants had to give their written consent. The study's participants' identities and confidentiality were upheld at all times. Respondents were advised that they could opt to stop participating in the study at any time, without having to give a reason, and that doing so would not put them at risk of losing out on anything. The identities of patients were not necessary nor used in the review due to the sensitivity of the data that needed to be gathered. Hard copy data generated in this study was kept in a secure cabinet in the Senior Medical Officer's office, and electronic data was stored in secure computer files on the University School of Public Health data repository. This data will be destroyed after five years.

Data Analysis

A Thematic Content (coding) Analysis (TCA) approach was used to analyse data in my research project. My qualitative research problem was premised on the exploration of the underlying issues that contribute to patients' poor demand for and consequent late presentation to TB care services. The research design was explorative in nature and there were no pre-determined categories of factors, thus, key concepts and phenomenon were extracted from the data collected through an inductive process.

The first phase of this approach entailed familiarization with the data collected, which implied a deeper understanding of the data gathered (Robson & McCartan, 2016) [33]. In my research, I immersed myself in the data starting from the transcription process of the audio-taped interviews. Here, after transcribing a session, I made a copy of the transcription which I went through with a highlighter pen highlighting and noting down any emerging ideas together with a brief note explaining my thought process. Since this was an iterative process (Robson & McCartan, 2016) [33], starting earlier on the in the study enabled a deeper grasp of the data from the outset in a piecemeal fashion which was easy to manage. This stage culminated into a statement summarizing key issues arising from the data gathered to aid subsequent analysis.

Following familiarization, the initial coding of the data was conducted. As defined by Robson and McCartan (2016) [33], codes were constructed from key ideas or concepts extracted from information gathered from interviewing the participants. In this research inquiry, coding was done manually and an overlap between familiarization and coding was anticipated as coding also entailed a thorough understanding of the data gathered to uncover ideas of interest, a process which started during the transcription process. Similarly, key impressions were highlighted and linked to an annotated code on the margin of the transcription sheet. Initially, I put as many codes as appropriate which I refined iteratively. By the end of this phase I compiled a list of codes juxtaposed to excerpts from the transcript with identifiers to ease the process of locating where the data was desegregated from the text.

This repetitive process of refining the codes ushered in the third stage which entailed the identification of themes. Themes are the over-arching categories formed from clustering of similar or contiguous codes (Robson & McCartan, 2016) [33]. Some of the themes may arise from topics that keep recurring in the data, or terminology that the participants use which maybe metaphors employed to describe concepts, meanings or events (Robson & McCartan, 2016) [33]. This phase was also repetitive until there was satisfaction that most of the key concepts had been coded and the codes had been clustered into broader categories.

Results

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The findings of this research investigation are described in this chapter. It begins by outlining the general characteristics of the study participants before moving on to the findings about how the participants perceived the factors underlying their late presentation into TB care services. The factors are discussed under the key themes that emerged from the data namely individual and health system issues. Lastly, the research respondents went on to give further insights on factors that motivated their eventual engagement with health care facilities for TB treatment and care services.

Participants' Profile

A total of fourteen participants were interviewed in this study. This comprised of seven female and seven male participants. Their ages ranged from twenty to seventy-seven years. As illustrated in Table 1, all male participants had at least one child and five of them were staying with their partners as married or stay-in couples. The majority of the female participants (six out of seven) were single, and all had children except for two participants.

While most of the participants attained at least primary school education, two male participants had no formal education. Two male participants were retired miners and the rest of the respondents had no formal employment and their sources of income ranged from semi-subsistence farming and short-term contractual employment.

Table 1. Socio-Demographic Description of Study Participants.

Variable	**Category**	**Gender (n)**		**Participants (n)**
		Male	**Female**	
Age	20 - 30	1	5	6
	31 - 40	1	0	1
	41 - 50	1	1	2
	51 - 60	1	1	2
	>60	3	0	3
Marital Status and Children	Single with no children	0	2	2
	Single with children	2	4	6
	Married with children	4	1	5
	Stay-in-couple with children	1	0	1
Level of Education	No Formal Education	2	0	2
	Primary Education	1	1	2
	Secondary Education	4	6	10
Employment	Retired	2	0	2

Four participants were diagnosed with TB after experiencing TB symptoms for more than a year and of these, three were male participants. Again, four participants were diagnosed between six months and a year's duration of illness. Six participants were diagnosed between 2 weeks and 6 months since onset of symptoms.

Themes and Sub-Themes

The responses from the research participants were categorized into three main themes that described factors underlying their late presentation into TB care services and motivations underlying

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their eventual presentation to TB care services. These themes were individual, health system-related and motivating factors as summarized in Table 2 below.

Table 2. Themes and Sub-themes.

Main Theme	Sub-theme
Individual factors	• Level of knowledge about TB • Beliefs about TB symptoms • Access to Health Care services • Stigma
Health System-related Factors	• Lack of Community Health Education and Promotion • Health care workers' attitudes
Motivating Factors	• Persistence of Symptoms • Family-driven motivating factors

Individual Factors

The individual factors that the participants perceived to have hindered them from presenting early into TB care were inadequate knowledge about TB, incorrect beliefs about TB symptoms, lack of access to Health care services and stigma.

Subtheme: Level of Knowledge About TB

i. No TB Knowledge

Among the participants interviewed, six out of fourteen said they delayed seeking care because they had no prior knowledge on anything about TB disease before their encounter with the health care facility. These were four female and two male participants.

"I knew nothing about TB, in fact, I thought I was just having a minor flu which will go away on its own." [Male, 25 years].

"I did not have any information at all about TB prior to coming to the hospital I only knew about traditional medicines which I learnt from my grandmother." [Female, 51 years].

The participants who had some level of knowledge about TB delayed seeking medical care because they lacked knowledge regarding symptoms characteristic of TB disease.

"…the delay in coming here was because TB is not the first thing one would think of judging from the symptoms I was experiencing at the time." [Male, 41 years].

"… I just knew that TB is like a flu but the symptoms confused me because in the first diagnosis, I did not have the symptoms I had now" [Male, 63 years].

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Others delayed seeking care because they did not know about the treatment and care services available to them.

"…I did not know the kind of help available to me even if I was to be diagnosed of TB disease" [Male, 25 years].

The other respondents mentioned that they did not know the cause of their symptoms, therefore, they delayed seeking care because they attributed their symptoms to other causes.

"…we all thought that the cough was being caused by the dust when it was actually TB. That's why it took me long to come to the hospital." [Female, 30 years].

"I thought the symptoms were a result of a different type of flu, only stronger, that is why I continued to take flu medication from our local chemist…" [Female, 20 years].

Subtheme: Low level of knowledge about TB

From the responses to the interview questions, some participants actually knew about some aspects of TB disease as illustrated in the quotes below:

Some participants knew how TB infection is transmitted from one person to another.

"I knew that TB is transmitted when someone coughs without closing one's mouth…" [Male, 41 years].

"… the little knowledge I had was on how one can gets TB, I got this information from my first diagnosis when I was working at the mines. [Male, 63 years].

Other respondents knew some of the symptoms associated with TB disease.

"I was coughing and I knew that TB causes coughing…" [Male, 25 years].

Subtheme: High Level of Knowledge About TB

Some even demonstrated high level knowledge on most aspects of TB disease.

"*I knew that TB is spread when you breathe in air contaminated with TB and some of the common symptoms are coughing with phlegm and a lot of sweating. I knew about this from health education talks done at the clinics… I also knew that TB is best treated at health facilities…"* [Female, 27 years].

"… I know that TB is transmitted from one person to another through the air and that it causes coughing, so much tiredness, fever and over-sweating. This is taught at the mines during routine health talks…" [Male, 62 years].

"… you can get TB if you sit next to someone who has it and is coughing. I also knew that there are different types of TB… adhering to medication given by health care workers helps. Most of this information, I got it from the clinic health talks but some of it from newspapers and other people I interact with…" [Female, 20 years].

Subtheme: Beliefs About TB Symptoms

Some participants believed that the cough they experienced was a result of being bewitched, therefore, they sought alternative remedies for bewitchment first before seeking care from health facilities.

Some of these participants consulted faith healers first when flu medication had failed to resolve their symptoms.

"…because I had been sick for some time and have been using flu medication with no success… I was taken to a man of God who confirmed my earlier belief that I had been bewitched..." [Female, 27 years].

Other participants decided to consult traditional healers first.

"The problem is that the TB symptoms are similar to the symptoms you have when you have been bewitched, that is why we always start by seeking help from traditional doctors first because we know the effects of witchcraft are quick to kill you and hospitals cannot help. Only when the traditional healer failed to treat my painful cough and sweating at night, is when I went to the clinic…" [Female, 20 years].

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One participant who was a traditional healer tried self-medicating with traditional medicines first.

"… my traditional medicines usually cure most things including coughing but this time around I continued to cough a lot and I developed a lump on my neck which was not going away" [Female, 51 years]

Subtheme: Access to the Health Care Facility

Some participants mentioned that the unavailability of money for bus fare also contributed in delaying them from visiting health facilities earlier.

"…even though I had suspected TB, because I was once treated for TB in the mines, I stay very far in Nsingweni where I have to catch two buses to get here… the distance itself is not a problem for me, my issue is the money for bus fare…" [Male, 63 years].

"… I stay a bit far and I do not always have money for bus fare to visit the hospital so I usually walk. Because of this I only go to the health facility if the symptoms are worse… it's about an hour's walk which can be a problem if one is too sick." [Male, 52 years].

Subtheme: Stigma

Even when the participants had started to suspect that their symptoms could be due to TB disease, they further delayed seeking care because they feared the stigma attached to a diagnosis of TB from the community.

"I was uncomfortable because there is just a negative perception on TB that made me uncomfortable to seek help... I was generally scared to confirm it because I thought people will give me an attitude as a sickly person." [Female, 20 years].

Other participants feared that if TB is diagnosed, they will be stigmatized by their close family members.

"…they told me that 'if you have TB, we cannot eat with you…" [Female, 30 year].

Health System Factors

Some participants perceived that the health care system was also a deterrent to early care-seeking. They blamed the lack of community health education and promotion and negative health care workers' attitudes.

Subtheme: Lack of Community-Based Health Education and Promotion

Some participants felt that, as a community, they were not well educated on matters pertaining to TB and they also had no time to go to health care centres where such TB information and care services were available.

"…it would be best to have people go around communities to teach about TB symptoms, transmission and treatment. This will benefit street vendors, like us, who do not have time to go to the clinics" [Male, 38 years].

Subtheme: Health Care Worker Attitudes

Some participants delayed going to the health care centres because they were anxious about the health care worker attitudes because they did not know what to expect.

"Sometimes you fear going to the clinic because nurses will shout at you asking why you delayed and yet you delayed because you were still coming to terms with your sickness… and you will also be fearing the worst." [Female, 20 years].

"I am just scared of the hospitals and I just thought it was a minor flu which will resolve on its own hence the delay" [Male, 25 years].

Motivating Factors

In addition to the factors contributing to delays stated above, participants also highlighted some of the factors that motivated their eventual presentation to health care facilities to seek help.

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Subtheme: Persistent TB Symptoms

Some respondents eventually decided to go to the health facilities because of the persistence of their symptoms.

"*I came to get help because I have been sick for quite some time now…"* [Female, 20 years].

Others were motivated by the fear of death when they started suspecting that they might have TB,

"…once I began suspecting that I could be having TB, I resolved to seek help from the clinic because I had started to perceive TB to be a ticket to death" [Female, 51 years].

The other participants feared being stigmatized because their body image and health continued to deteriorate as the symptoms persisted.

"…because of the persistent loss of weight, I became uncomfortable around people as I seemed to be attracting more attention and negative comments from people from my neighbourhood who knew my normal body size, that is why I decided to step up and seek help…" [Female, 20 years].

"*…some of my family members told me that if I have TB they will not eat with me, this later forced me to seek help because I yearned to belong to the family again…"* [Female, 30 years].

Subtheme: Family-Driven Factors

Family factors also contributed towards motivating some participants to seek care for their symptoms.

For some participants, family members directly encouraged them to go and have their symptoms assessed at a health facility.

"After seeing my persistent weight loss, my relative who is a nurse persuaded me to go get my symptoms checked and she assured me that I will be well taken care of at the hospital" [Male, 41 years].

Other participants were motivated by the desire to protect their families from contracting TB disease

"Most diseases nowadays are easily transmissible, so I decided to quickly seek help to protect my family from contracting the disease too" [Male, 52 years].

Some participants were eventually driven to seek care by the need to get well again so that they are able to provide financial support to their family dependents.

"…when I am sick, I am unable to provide consultation services to my clients because I struggle to kneel down. This affects money coming in for the family as I am the bread winner…so I eventually went to seek help from the clinic because I wanted to be cured so that I can support my family and be a valuable member of the community." [Female, 51 years].

Summary of Findings

The findings of this research study show that individual participant-associated factors and health-system associated factors contributed to TB patient delay in seeking treatment and care. Among individual factors, the key issues were inadequate TB knowledge and incorrect beliefs about TB symptoms which they attributed mostly to witchcraft. The delay was, therefore, due to the consulting of traditional or faith healers before a health care facility. Stigma associated with TB and distance from HCFs also hindered early access to TB care services. Beyond the individual factors, lack of decentralized health education and promotion and negative HCW attitudes worsened the poor health-seeking behaviour amongst the TB patients. Nonetheless, the worsening TB symptoms and family encouragement were the main drivers that compelled the participants to eventually seek care. The next chapter goes further to explore how these findings relate to and are validated by available literature.

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Discussion

From this research enquiry, lack of adequate knowledge about TB contributed as a barrier to early presentation into care. This was noted in respondents who had no knowledge about TB and those who lacked knowledge about the causes, symptoms, transmission of TB and available TB treatment services. The results of this study are similar to findings of (Basa and Venkatesh, 2016) [34] done in India, which also noted that poor knowledge about TB was the most self-reported reason for delay in seeking TB care services. In addition, Marahatta et al., (2020) [35] noted that one of the significant causes of delay was that though participants had knowledge about TB, they lacked knowledge regarding prominent symptoms of TB in a study done in a similar rural setting in Nepal.

Nonetheless, some participants had high knowledge about TB but still delayed seeking care. This shows that having good knowledge about TB might not be sufficient to improve TB health-seeking behaviour. This is supported by the findings of Almeida, Skupien and Silva (2015) [36] who failed to see the association between patients delay in seeking TB care and lack of knowledge about TB. Furthermore, in a systematic review on research assessing factors associated with health seeking delay, some studies which included some done in Ethiopia, reported high levels of knowledge about TB among participants who had significant delays in seeking TB care (Samal, 2016) [37].

It is interesting to note that a review of Demographic Health Surveys (DHS) in fifteen countries, including eight from Africa, found that knowledge about TB curability took precedence over knowledge about TB transmission in curtailing patient delay in seeking TB care services because it was perceived that an increase in the knowledge about TB transmission was counterintuitive as it seemed to increase TB associated stigma and the consequent poor TB care seeking tendencies (Rood et al., 2017) [38]. This seems to contrast the findings of this enquiry which had participants with good knowledge about TB curability but still delayed in seeking care. This supports the notion that other multi-factorial determinants are necessary to effectively influence TB health-seeking behaviour apart from the patients' level or type of knowledge about TB.

The unavailability of funds to cover transport costs was a barrier for some participants who stayed far away from the nearest health facility. This was so even for participants who suspected their symptoms to be due to TB. This is similar to what was noted by Santos et al., (2017) [39] in a quantitative study in Angola where they found that patients staying outside the ten kilometre radius of the nearest health care facility, had longer delay in seeking TB care services. Another quantitative study done in a population consisting of newly diagnosed TB patients in Ethiopia, Seid and Metaferia (2018) [40] also found that patients who needed to walk more than thirty minutes to the nearest health facility significantly delayed seeking TB treatment services compared to those who walked for less time.

The stigma attached to TB disease made some participants more inclined to keeping their illness a secret due to fear of being isolated by their families and their communities. This stigma was perceived to be arising from the association people make between TB and being unhygienic or contagious. This is consistent with the findings of a study done in Hohoe Municipality in Ghana Osei, Akweongo and Binka (2015) [41] where they found that the perceived infectiousness of TB and its association with poverty were major causes of stigmatization affecting health seeking behaviour among suspected TB patients.

Eswatini being among top thirty TB/HIV high burden countries globally, the strong association between TB and HIV may also have exacerbated the stigma experienced by those who were diagnosed of TB as they were automatically perceived to be HIV co-infected (WHO, 2020)[6]. This agrees with what Msoka et al., (2021) [42] found in their study in East Africa. Similarly, Khan et al. (2021) [43] discovered that stigma was a significant barrier to accessing TB care services for the participants because of the fear of being isolated by their communities in Pakistan.

Some respondents felt that TB care services including health education were centralized at health care centres away from their communities. This greatly limited access to the information on TB more specifically for community members who could not find time to visit health facilities. This may have aggravated the impact of the lack of adequate knowledge about TB thereby leading to sub-optimal

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utilization of TB health services. This paucity of decentralized health education and promotion has also been noted in the general population of Ethiopia in a study done among TB patients who had delayed seeking care (Datiko et al., 2019) [44]. In this study, they found that close relatives were the main sources of TB information, implying that if none of the family members had encountered TB, the TB patients were unlikely to have known much about TB to promote early presentation into care (Datiko et al., 2019) [44]. This also concurs with the findings of a study done in Myanmar by Htun et al., (2018) [45] where TB patients who delayed seeking care services ascribed their late presentation to the lack of access to health information.

In this study, some participants had low awareness concerning the severity and consequences of TB and others did not know about the TB care services available. This aligns with the findings of a study done in Nepal which noted a significant patient delay in seeking TB treatment because of the low awareness on the available TB care services and the national free TB treatment policy (Marahatta et al., 2020) [35].

Many studies from diverse settings agree with the notion that the way patients experience the health care system as a result of health care worker – patient interaction has a direct influence on the health-seeking behaviour of those patients and their communities (Phetlhu & Watson, 2011 [46]; Zhang et al., 2020 [47]; Pardeshi et al., 2016 [22]). This has also been evident in this study where some respondents, even if they might have wanted to visit a health facility sooner than they did, they delayed because they were anxious about how they would be treated by HCWs. Participants were hesitant to seek care because of the anticipated unprofessional and rude conduct from HCWs like being shouted at even when one was evidently sick. Other respondents opted to endure the symptoms hoping they would resolve on their own than approach a health facility. The adverse impact of similar HCW attitudes and conduct on TB health-seeking behaviour was also documented in the qualitative studies done in Zimbabwe (Mavhu et al., 2010) [48] and Malawi (Kumwenda et al., 2016) [49]. HCWs who were part of the study by Kumwenda et al., (2016) [49] in Malawi even acknowledged these concerns from the communities they served but they blamed this to the frustrations they experienced from working in resource-strained environments and poor remuneration. Although this enquiry did not have HCWs participants, the setting is comparable to rural Malawi. In India, the majority of the surveyed HCWs lacked compassion and tended to avoid TB patients (Pardeshi et al., 2017) [22]. Most of these HCWs either knew of a colleague who had had TB or they had not undergone a training program on TB (Pardeshi et al., 2017) [22].

The other reason respondents were reluctant to seek care from health facilities in this study probably emanated from bad previous experiences as some had been treated of TB before. This phenomenon was also noticed in patients previously treated for DR-TB who delayed seeking care because they lacked confidence in health care workers attitude due to their previous encounters (Bonadonna et al., 2017 [50]; Bhagyalaxmi et al., 2019 [51]). As a result, participants opted to exhaust other available treatment options first before they decided to present to a heath care facility (Bhagyalaxmi et al., 2019) [51].

Motivators For The Eventual Presentation To TB Care Services

In spite of the delays, the participants eventually sought care from the health care facilities. The main facilitators were the persistent TB symptoms and encouragement from close relatives and family.

Persistent TB Symptoms

For most participants, symptoms remained unresolved after trying different remedies ranging from self-medication and services from traditional or faith healers. At some point the symptoms became unbearable physically as they worsened, and psychosocially as a result of the stigma attached to deteriorating body image. Similarly, in Kenya, Mutinda, Kabiru & Mwaniki (2014) [23) also found that the majority of participants who had delayed seeking TB care services eventually sought help

 doi:10.20944/preprints202503.0390.v1

when they became too sick to bear the pains and when they realised that self-medication was not working.

According to Helfinstein et al., (2020) [24], having fever for a week or more and unintended weight loss significantly increased the odds of care-seeking implying that having symptoms for longer and the type of symptoms experienced prompted affected individuals to seek care.

5.4.2. Family-Driven Factors

In settings with no effective community health education and promotion as also reported by some participants in this study, most people got most of the health-related information from their close relatives and family members as also noted elsewhere (Datiko et al., 2019) [44].

In this enquiry, family motivation to seek care ranged from family members directly encouraging their sick relatives, participants' desire to protect their close relatives from contracting the disease to the need to regain fitness to be able to earn a living to support their family dependents. Shatil et al. (2019) [25] in their qualitative study, also found that the opinions of family members and relatives were key determinants for health-seeking behaviour among patients with TB symptoms.

These studies, however, did not explain how the role of family members influence health-seeking behaviour but it might be that family support and encouragement countered factors that negatively impacted TB health-seeking behaviour like stigma, wrong beliefs and inadequate knowledge about TB.

In contrast, other studies by Senbeto et al., (2013) [52] and Seid & Metaferia, (2018) [40] assert that larger family size was associated with longer patient delay in seeking TB care services and they argued that the reason was the huge financial responsibilities that hindered their ability to afford costs associated with accessing health care even if there might have been a higher likelihood of having a family member with knowledge about TB in a larger family.

Limitations and Strengths of the Study

Limitations

The findings of this research study came from a sample size of fourteen participants who were already enrolled on TB treatment and therefore their views might not be transferable to the entire rural population of Eswatini because, for instance, perspectives of patients with TB who did not seek care services were not included. Furthermore, the study might be limited by the reliance on participants' ability to recall events and time duration of symptoms which risks introducing inaccuracies by way of recall bias. The study would have been further strengthened if HCWs were involved as key informants so that their perspectives were also considered to enrichen the findings.

Strengths

The findings of this study are voices of real people describing their lived experiences in their own words. In addition, participants voluntarily spoke about factors that motivated them to seek care, thereby providing balanced and rich accounts of their experiences. The interviews were conducted in the participants' language of comfort to ensure that only their voices were captured.

Funding: There was no funding for this study.

Acknowledgments: I would like to start by expressing my gratitude to my supervisor, Dr. Anam Nyembezi of the University of the Western Cape, for his direction and assistance over the duration of this research work. I want to express my gratitude to the volunteers who agreed to take part in the study. I particularly value the assistance provided by Nurses Vuyani Mdluli and Nkosikhona Shongwe in translating the study tools and equipment into siSwati. Many thanks to Ms. Makhosazana Matsebula, who helped with the data coding.

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 doi:10.20944/preprints202503.0390.v1

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