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"It is difficult for us to treat their pain". Health professionals' perceptions of Somali pastoralists in the context of pain management: a conceptual model

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ABSTRACT

Pain is one of the most neglected areas of care in sub-Saharan Africa. Access to adequate pain management is important, especially in marginalised populations, such as pastoralists. Little is known about health professionals' perceptions of pain-related care for Somali pastoralists. This study seeks to understand health professionals' perceptions of Somali pastoralists in the context of pain management in Eastern Ethiopia. Within the scope of this qualitative multicentre study, we conducted semi-structured interviews with 17 health professionals (mainly nurses) experienced in treating Somali pastoralists with pain. Data analysis was based on the coding paradigm proposed by Strauss and Corbin within Grounded Theory methodology and resulted in a conceptual model of pastoralist-specific pain management. We gave voice to pastoralists in the study design, for example, through focus group discussions conducted prior to this study. Our study is part of a larger ongoing research project involving health professionals and pastoralist communities. The perspective of pastoralists is explored in a consecutive study. 'Patient-professional relationship' was the core category we identified within the conceptual model. This category was closely linked with issues of '(mis)trust' and 'communication (barriers)'. 'Patient-related conditions' (eg, (under)-reporting of pain, care preferences and beliefs) and 'health professional-related' conditions' (eg, insufficient training, (under)exposure to local culture) had an influence on the core category. Contextual factors proved to be relevant as well, such as age and gender. The study highlights the complexity of pain management among marginalised communities, such as pastoralists. Health professionals perceive Somali pastoralists to have distinct illness beliefs and pain concepts influencing their health-seeking behaviour. The study highlights the importance of reaching this patient group with culturally acceptable and comprehensive pain management strategies.

BACKGROUND

Pain relief as a global health priority is not receiving the necessary attention from international health funders and organisations (Hastings 1995; King and Fraser 2013; Knaul *et al.* 2018; Treede *et al.* 2015). The Lancet Commission on Palliative Care and Pain Relief noted that 'global health is devoid of the investments, interventions and indicators

that are essential to ensure universal access to safe, secure and dignified care at the end of life or to the palliation of pain and suffering' (Knaul *et al.* 2018, 1391).

Although pain management is a problem in high-income, middle-income and low-income countries (Sá *et al.* 2019), suffering from untreated pain is far more worrisome among socio-economically disadvantaged communities (King and Fraser 2013). In 2019, WHO issued a statement emphasising their grave concern regarding the very low access to medication for moderate and severe pain, particularly in low-income and middle-income countries (WHO 2019).

In sub-Saharan Africa, pain is often not adequately assessed and treated (Cartledge *et al.* 2004). This is due to fundamental barriers to pain management, such as lack of validated pain assessment tools, insufficient pain education of health professionals or difficulty in accessing pain medication (Huang *et al.* 2013).

Pain conditions such as lower back pain are prevalent in 39% of people on the African continent (Morris *et al.* 2018). This is more than twice as high compared with global estimates (Hoy *et al.* 2012).

Biomedical pain management in Ethiopia

A study in Ethiopia found that the prevalence of inadequately managed pain is as high as 80% among adult hospitalised patients (Woldehaimanot, Eshetie, and Kerie 2014). General reasons for this are, among others, misconceptions, inappropriate beliefs of health professionals or resource shortages, including unavailability of pain medication (Germossa, Sjetne, and Hellesø 2018). Within the multiprofessional team, nurses have a key role in assessing, treating and monitoring patients' pain. Nurses are uniquely positioned to understand the health concerns of their patients because they frequently interact with patients and their families. At the same time, nurses can empower patients to share their stories and illness narratives. This can encourage better understanding and enable the delivery of high-quality, collaborative care fostering resilience (Drumm 2013).

However, to identify patients with pain, nurses have to be sufficiently qualified. In Ethiopia, specific training for nurses on pain management and palliative care is very limited (Admass *et al.* 2020). A study at a university in South-West Ethiopia

revealed that 50% of graduating nurses and 45% of graduating physicians had inadequate knowledge about pain management (Woldehaimanot, Mulatu, and Abrha 2014). In Southern Ethiopia, >80% of hospital nurses had a negative attitude towards pain management (Jemebere 2020).

The Somali Regional State: socio-historical context

The Somali Regional State (SRS) in Eastern Ethiopia has a population of estimated 5.6 million people. The majority are pastoralists or agro-pastoralists depending on livestock (such as goats, sheep, cattle or camels) and farming for their livelihood (UNICEF Ethiopia 2018). In the past decades, pastoralists in this region have experienced displacement and were exposed to periods of severe droughts, disease outbreaks as well as interclan and interstate confrontation (Carruth 2014). The SRS is designated by the Ethiopian government as one of four Developing Regional States because poverty is high and health indicators lag behind national figures. Services provided by the government remain limited, particularly in remote areas (Muhumed and Siraj 2017; Sugule and Walker 1998).

Pastoralists: living conditions and attitude towards healthcare provision

Pastoralists are a marginalised population, with very limited access to biomedical health services in Ethiopia (Getnet *et al.* 2021; Zinsstag, Ould Taleb, and Craig 2006). They are characterised to be well-adapted to harsh living conditions with frequent exposure to extreme climatic events, tolerant of poor health, seasonally mobile, tightly knit within their clan system and independent of governmental institutions (Zinsstag, Ould Taleb, and Craig 2006). Only 10% of pastoralists in Southern Ethiopia make use of modern healthcare facilities in case of illness. The majority seeks aid from traditional healers or prefers self-treatment (Kawza, Dejene, and Hailemariam 2018). Carruth (2014) found in her study that the pastoralists' perception of illness can be described as pluralistic and ambiguous. Different health cultures with their practices exist in parallel without mutually excluding one another: pastoralists in the SRS have been found to consume camel milk for digestive health problems, to prepare different herbal concoctions from unlicensed healers and to rely on medication from biomedical facilities. In response to the 'divine source' of all illnesses, Qur'anic healing and prayer are of utmost importance (Carruth 2014). As a study with Somali women revealed, such practices co-existed without conflict (Campeau 2018). Considering this lived medical pluralism among pastoralists and Somalis, a complex phenomenon like pain emphasises the importance of multiple treatment options and interventions.

The International Association for the Study of Pain highlights the need to consider all biomedical and psychosocial aspects of pain problems for good pain management, including faith-based approaches. Therefore, clinicians should be aware of the importance of biological, psychological, spiritual and social factors with regard to pain problems. They should aim to reduce pain

intensity and psychological distress in order to improve function and overall quality of life (International Association for the Study of Pain 2021).

Health professionals' attitude towards pain is, among others, also influenced by their own ethnic background and upbringing. Research on pain management in Ethiopia is scarce (Germossa, Sjetne, and Hellesø 2018; Woldehaimanot, Eshetie, and Kerie 2014; Zeleke, Kassaw, and Eshetie 2021). The lack of specific studies addressing pain management in marginalised populations—and particularly in Ethiopian pastoralists—is even more pronounced. Moreover, pain management in the SRS was raised as a priority in earlier studies (Carruth 2014; Osman *et al.* 2021). Challenges in the relationship between professionals and patients with pain can be reflected in narratives. To improve medical education, it is necessary to thoroughly understand how professionals experience their contact with pain-affected patients. Therefore, the analysis of professionals' narratives can offer important insights (Kristiansson *et al.* 2011).

To the best of our knowledge, there are no qualitative studies exclusively investigating pain management among pastoralists in the SRS from the perspective of health professionals.

Aim and objective

We address the research gap concerning in-depth knowledge about pain management in the SRS. The study aims to gain first insights into health professionals' perceptions of pain-related care provision for the pastoralist population by elaborating central aspects emerging inductively from the data.

METHODS

Patient and public involvement

The overall project design is visualised in brief in figure 1 to better understand where the patient pastoralist involvement is situated. The project takes on a transdisciplinary approach, involving academic and non-academic actors as a transformational research process co-produced from systemic and practical knowledge (Berger-González *et al.* 2021; Wiesmann, Stöckli, and Lys 2018; Zinsstag *et al.* 2022).

In advance of the interview study with health professionals (study 1), which is the focus of this paper, we performed two focus group discussions in a pastoralist village to consider their needs and concerns in the overall research project design (preliminary work).

We invited the pastoralist community representatives to take part in focus group discussions by reaching out to the community leaders as gate keepers. Participants received a compensation for their travel expenses. Thereby, we intended to facilitate the participation of pastoralists from more faraway areas. We formed two groups, separated in women (n=8) and men (n=11), in order to ensure a freer expression of opinions. The focus group discussions were semi-structured with open-ended questions regarding health, illness and pain, for example: "What health concerns are currently most important for you and/or your community?" or "How do you experience pain in

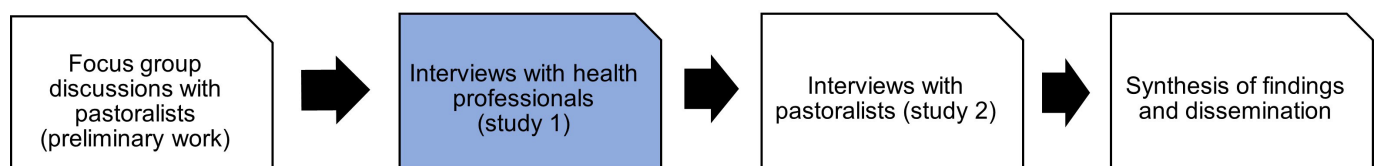


Figure 1 Overall project design.

your everyday life?” The analysis of the focus group discussions revealed that pastoralists considered pain to be a normal part of their daily lives and harsh living conditions. However, chronic pain proved to be a phenomenon causing intensive suffering for pastoralists’ families. We became aware that the participants did not clearly differentiate between pain and illness. Due to this, it might be challenging for health professionals to assess pain in this population and to derive adequate treatment. The participants’ responses encouraged us to further explore this under-researched phenomenon in the pastoralist population and to consider a qualitative study design from several perspectives (studies 1 and 2) to better understand their experiences.

In the final phase of the overall research project (fall 2023), we shall disseminate and discuss the synthesised findings of pastoralists and health professionals at a 1 day workshop with all stakeholders (eg, health professionals, pastoralist community members and policy makers). The final workshop will have the following aims:

1. Present the research findings of health professionals and pastoralists.
2. Discuss the implications of research findings.
3. Hold a world café on how good pain management in this context will look like and discuss ways forward.

The overall research project is embedded in the Jigjiga University One Health Initiative (JOHI) seeking to improve healthcare for pastoralists and their animals (‘human-animal One Health’ at the confluence of human and veterinary public health). Our study builds on earlier local research addressing malnutrition (Osman *et al.* 2020) and access to care for pastoralists (Osman *et al.* 2021; Umer *et al.* 2020).

Research question

The guiding research question of this study was: How do health professionals perceive pain management in their daily care practice for pastoralist patients?

Sampling and recruitment

Eligible were trained, clinically active health professionals fluent in Somali and/or English and treating pastoralists with pain. In order to gain rich data, we first conducted semi-structured interviews with purposively selected nurses caring for patients with severe pain in hospitals (Foley *et al.* 2021). We initially selected nurses, because of their unique and important role for managing pain within a multiprofessional team. We believed that the nurses’ narratives could provide a deeper level of understanding pastoralists’ pain as a result of their caring role and the time they spend with pastoralist patients and their affected families. In addition, their attitudes towards patients with pain can add another layer of understanding of a health problem that seems to defy logical narratives that are familiar to us in the context of illness experience (van Hout, van Rooden, and Slatman 2022).

The selection also entailed an element of theoretical sampling (Corbin and Strauss 2008). For instance, as our research and analysis proceeded, we wanted to explore more thoroughly emerging themes concerning interprofessional pain management. The complex nature of pain itself requires a multidisciplinary approach (International Association for the Study of Pain 2021). Therefore, and for reasons of comparison, we also recruited two physicians from two different hospitals (Morse and Clark 2019). To gain more insight into local contexts and to investigate nurses’ strategies in resource-poor settings, we also interviewed nurses in rural primary care at a later stage.

We recruited health professionals working either on hospital wards or in health centres. Furthermore, we selected the first four nurses purposefully after the first author had organised two workshops on pain management at the Jigjiga Hospital. We gained access to later participants through one gatekeeper-head nurse in each health facility.

Setting

This study took place in the SRS, bordering with Kenya, Somalia and Djibouti. The SRS health system is structured in the following way: starting from the top, the Regional Health Bureau manages zonal health offices and hospitals. The zonal health offices, in turn, manage health centres and health posts on the primary care level that provide links to higher-level health facilities within often very remote and rural areas. Health centres provide both preventive and curative, inpatient and outpatient services, including vaccinations. Fees at public health facilities are more affordable than in private clinics and can be subsidised depending on financial circumstances. However, health facilities in the region are confronted with a shortage of trained health providers, limited availability of essential medications and scarce or outdated medical equipment (Getnet *et al.* 2021). To improve access to biomedical health services and to facilitate community involvement, the Ethiopian government launched several strategies in primary care. In recent years, the Federal Ministry of Health of Ethiopia has launched several initiatives to improve pain management. According to the National Cancer Control Plan (2016–2020), the first strategy on pain management is to focus on capacity building. Key interventions involve awareness campaigns that target healthcare personnel and the public. In addition, skills trainings should be provided to health personnel to treat distressing symptoms, including pain (Federal Ministry of Health Ethiopia 2015).

Up to now, however, government strategies have not sufficiently reached the pastoralist population in Ethiopia. Due to this, inequities concerning the access and utilisation of health services and health outcomes are visible (Assefa *et al.* 2020).

We performed our study on three care levels (primary, secondary and tertiary) and in two different SRS areas: a more urban Northern region and a more rural Southern region (figure 2).

In primary care, interviews took place at two different health centres located in a rural area within the same zone. Up to 25 patients per day visited these centres. In secondary care, we collected data on the medical ward, the emergency ward and in the antiretroviral therapy (ART) clinic of two zonal hospitals. Gode Hospital has about 100 beds and is located in a more rural area. Karamardha Hospital with nearly 200 beds is in a rather urban area. On the tertiary level, we recruited participants

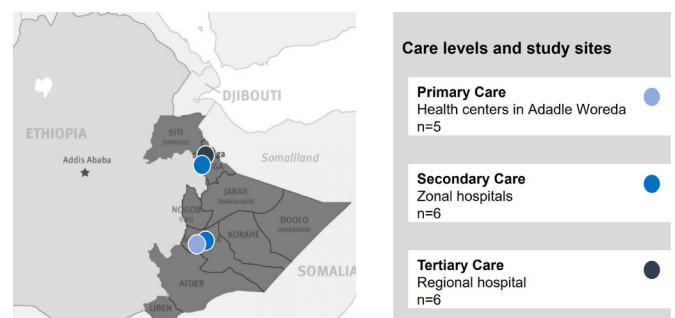


Figure 2 Study sites in the Somali Regional State.

from the medical ward, the intensive care ward and the surgical ward of the Jigjiga Hospital—the largest hospital of the SRS with >300 beds.

Context of the researcher

The first author is a PhD student experienced in applying as well as teaching qualitative research methods. She has a background in nursing and spent time working as a nurse in the Global South. Her expertise in palliative care and passion for global health enabled her to become a member of JOHI in Ethiopia. This initiative is dedicated to improving healthcare for pastoralists. Prior to conducting this research, the first author was not familiar with the local context and culture. To familiarise with the context, the first author work-shadowed the nurses on the wards and spent time with them. Importantly, close collaboration and exchange with the second author allowed for further cultural immersion. The second author is native to the region and familiar with the local context and community.

Data collection

The data collection took place between October 2019 and January 2021 with a break of several months due to the COVID-19 pandemic and political unrest in the country. Within the scope of this qualitative multicentre study, we conducted semi-structured interviews with 17 health professionals (mainly nurses) experienced in treating Somali pastoralists with pain.

Before commencing with the interviews, we organised two 1-day workshops on pain management with 89 health professionals, primarily nurses, at the Jigjiga Hospital. The first author led the workshops. Due to a lack of research on pain management in this context, the initial version of the interview guide was informed by the workshops and by the results of the preceding focus group discussions. To ensure comprehensibility, the guide (online supplementary file 1) was later piloted by two health professionals from the Somali region.

To encourage detailed descriptions and explanations, the questions of the one-on-one semi-structured interviews were open-ended (Morse and Clark 2019). The interview started with a question about general perceptions of pain, followed by more specific questions concerning pain-related care provision for pastoralists.

Interview languages were English and Somali. An interpreter fluent in Somali and familiar with the local context was present at all interviews. Language and place of the interview depended on the health professional's personal preference. Interviews in secondary and tertiary care took place in a separate room at the healthcare facility. Interviews in the health centres took place outside, in a quiet location, out of earshot. We audio-recorded the interviews and transcribed them word for word. Two members of the research team fluent in both English and Somali translated the transcripts into English. They discussed discrepancies in order to find a consensus.

Data analysis

To analyse the interviews, we applied the coding paradigm proposed by Strauss and Corbin (1990) within Grounded Theory methodology. Applying Grounded Theory principles (such as theoretical sampling or constant comparison) allowed us to explore people's understanding of their world view and how it is related to their social and cultural context (ie, in this case health professionals' understandings of pain management for a specific population). Three researchers (EB, BV, SA) experienced in qualitative research conducted the analysis. We used MAXQDA 2020 software for support. To ensure traceability, we documented all steps of coding

structure development at each level of analysis. EB and BV developed initial codes and subcodes, drawing heavily on the transcripts. They also relied on notes from the preceding focus group discussions and workshops to contextualise the findings. In line with the iterative approach, *in vivo* codes were central to indicate key issues (Corbin and Strauss 2008). A first round of inductive coding yielded >1600 codes. We then began comparing and sorting the initial codes into 28 cluster codes. To ensure that the results were not influenced by the assumptions of a single researcher, we further discussed reflective memos and initial findings within the research team. The team members resolved conflicting interpretations. We then grouped the cluster codes and formed categories (online supplementary file 2). Finally, we identified one overarching core category linked to all other categories. The core category emerged after further exploration and comparison of the already identified categories. We then generated a conceptual model explaining the relationships among the categories (Strauss and Corbin 1990).

Rigour

For reasons of self-reflexivity, EB wrote and audio-recorded memos on personal perceptions throughout the research process. Constant comparison of data and memos also contributed to self-reflexivity (Bryant and Charmaz 2019). To ensure credibility, we continuously reviewed interpretations by means of a member checking process performed by two nurses and a physician from the same cultural background (Glaser and Strauss 1967). Comparing the nurses' perceptions with those of two physicians' contributed to a high degree of trustworthiness. Additionally, we compared interview transcripts with field notes from initial focus group discussions and from pain workshop discussions (Wilson and Hutchinson 1991). We established applicability (Glaser and Strauss 1967) by considering pain management in different contexts and by writing down observations of our surroundings before, during and after the interviews. To report this study, we adhered to the CONSolidated criteria for REporting Qualitative research guideline (Tong, Sainsbury, and Craig 2007) for qualitative research (online supplementary file 3).

FINDINGS

We interviewed a total of 17 health professionals experienced in caring for pastoralist with pain on the primary, secondary and tertiary care level. Sociodemographic characteristics of the participants are summarised in table 1. The interviews lasted between 21 and 54 min.

Overview of the model

The identified core category was the 'patient-professional relationship' (figure 3). '(Mis)trust' and 'communication (barriers)' in this relationship are shaped by conditions that professionals either related to the pastoralist patient ('experience with professional care', 'care preferences and beliefs', '(under)-reporting pain' or '(limited) access to care') or to the health professionals themselves ('lack of training', '(under)exposure to local culture' or 'resource shortages') or to contextual factors such as age and gender.

When interacting with pastoralist patients, the health professionals tried to apply strategies to improve the relationship and to treat the patient's pain. However, these strategies did not always consider patients' needs and expectations and were based on the professional's assumptions. For example, they applied pharmacological interventions, whereas traditional or spiritual care preferences fell short. The consequence of lacking culturally sensitive strategies, mistrust as well as communication barriers

Table 1 Sociodemographic information of participants

	Age	Gender	Ethnicity	Health facility	Ward	Current position	Work experience (in years)
P1	Late 20s	M	Somali	Hospital*	Medical ward	Head nurse	4–7
P2	Late 20s	M	Somali	Hospital*	Intensive care unit	Head nurse	8–10
P3	Early 30s	M	Somali	Hospital*	Medical ward	General nurse	8–10
P4	Late 20s	M	Somali	Hospital*	Orthopaedic ward	Head nurse	8–10
P5	Late 20s	M	Somali	Hospital*	Intensive care unit	Medical doctor	1–3
P6	Late 20s	M	Somali	Hospital†	Emergency ward	General nurse	1–3
P7	Late 20s	M	Amhara and Tigray	Hospital†	Medical ward	Medical doctor	1–3
P8	Early 20s	F	Amhara	Hospital†	Emergency ward	General nurse	4–7
P9	Early 20s	F	Somali	Hospital†	Medical ward	General nurse	1–3
P10	Early 50s	F	Somali	Hospital†	ART clinic	Head nurse	>10
P11	Early 20s	F	Somali	Hospital*	Medical ward	General nurse	4–7
P12	Late 20s	F	Somali	Hospital†	Medical ward	General nurse	4–7
P13	Late 20s	M	Somali	Health centre‡	Health centre	General nurse	1–3
P14	Early 20s	F	Somali	Health centre‡	Health centre	General nurse	1–3
P15	Early 20s	F	Somali	Health centre‡	Health centre	General nurse	4–7
P16	Late 20s	M	Somali	Health centre‡	Health centre	General nurse	4–7
P17	Early 20s	F	Somali	Health centre‡	Health centre	Midwifery nurse	4–7

*Tertiary care.

†Secondary care.

‡Primary care.

F, female; M, male.

in the patient-professional relationship was the neglect of pain management.

Core category: patient-professional relationship

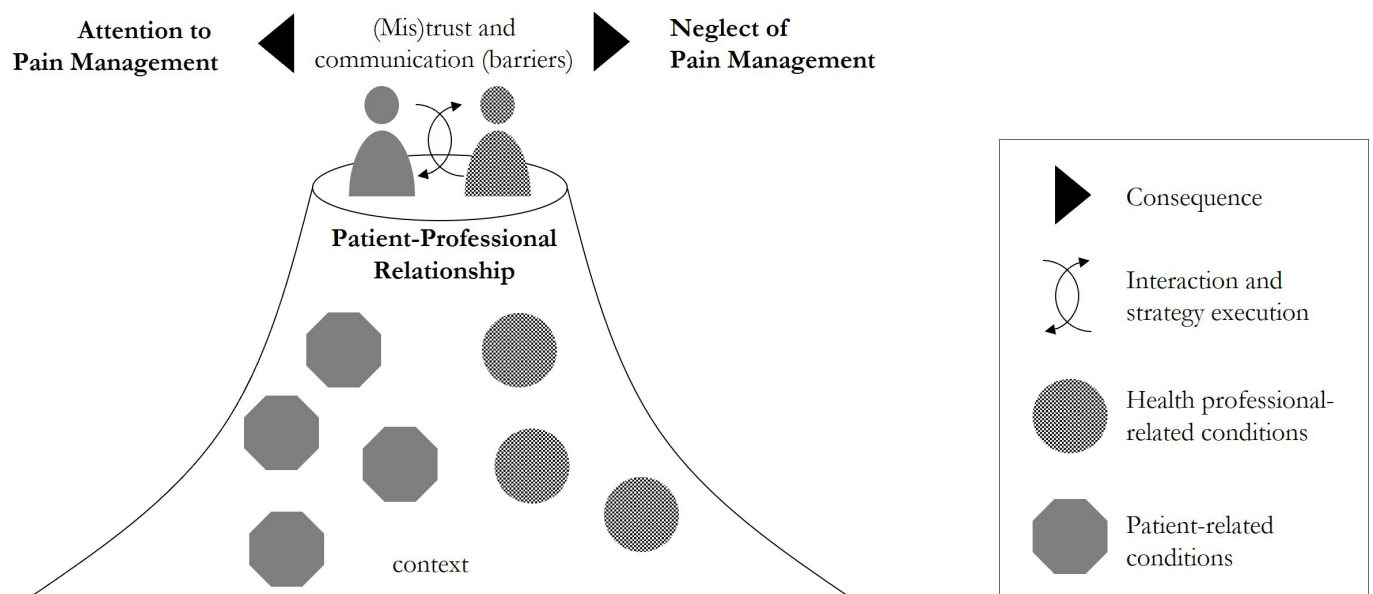
The patient-professional relationship was linked to all other categories. We differentiated between the following two conditions that influenced the core category:

1. 'Health professional-related conditions': these conditions primarily concerned health professionals themselves.
2. 'Patient-related conditions': health professionals attributed these conditions to patients.

Relevant aspects of the core category were mutual (mis)trust and communication (barriers).

(Mis)trust

All health professionals described different scenarios of trust or mistrust in the patient-professional relationship. Mistrust was more frequently mentioned in secondary or tertiary care. In several narratives, we found that health professionals did not entirely trust their patients' accounts of their pain. This had a negative impact on pain management, because health concerns were often not communicated by pastoralists or considered by health professionals ($n=10$). According to the participants, issues of trust became especially relevant when patients from a rural area had travelled a long way to the healthcare facility. The health professionals were much less acquainted with their patients' needs and at the same time these patients were much less acquainted with formal healthcare.

**Figure 3** Conceptual model of pain management in pastoralist patient care.

With regard to primary care, three nurses mentioned that they were able to establish a certain degree of trust with their patients since they knew the pastoralist community well. They had grown up in the community or were part of the community themselves. However, patients and their families did not always inform them about traditional treatments they had tried before:

When the pastoralists come to us, they won't say to us that they tried such things, even if we ask them. They won't admit this because they are afraid of being scolded or asked why they did so. But mostly they try [traditional treatments] before they come here. ... They may think we will ask them why they did not bring the patient early. (P17, female, nurse, primary care)

Health professionals across all levels of care also mentioned that some patients did not trust the diagnosis or the recommended treatment (n=8). They described patients that were of the opinion that professionals might not be capable of easing their pain. Therefore, patients were surprised when they in fact felt that their pain faded. This is important to consider, as an initial positive experience visiting a biomedical health facility could facilitate future visits.

Four nurses in secondary and tertiary care were sceptical when listening to patients reporting their pain. They considered this kind of expressing one's pain as an exaggeration or as attention-seeking behaviour, thereby indicating that they did not trust their patients' reports. Under these circumstances, some nurses preferred other pain assessment options, for example, assessing vital signs, in order to identify patients with pain.

Communication (barriers)

Difficulties regarding communication about pain was a frequent issue for health professionals. Eight interviewees mentioned this topic. For example, health professionals did not enquire on the pain of a patient diagnosed with lung cancer and the patient did not proactively talk about her pain with health professionals. As a consequence, professionals did not take pain into consideration. This was the case despite other possible pain assessment options, such as observing non-verbal communication or performing a physical examination.

Nurses sometimes did not understand the exact reason when patients tried to explain their pain or complained about pain. It was difficult for nurses to follow the pain descriptions or to interpret non-verbal indications, such as facial expressions. This may be due to their lack of training or to unfamiliarity with pastoralists' daily lives. Particularly when pain localisation was impossible, this proved to be a problem.

Due to the severity of their pain, they don't tell us the exact site. They say that they have generalized body pain. So it is difficult for us to treat their pain and also to rule out what kind of pain they feel. They have severe pain but they do not define it properly. So, we are treating it as mild or moderate pain. (P10, female, nurse, secondary care)

This nurse also mentioned the difficulty of adequately treating severe pain due to a knowledge deficit among health professionals.

The majority of participants (n=11) referred to aspects we considered under the concept of (biomedical) 'health literacy'. The health professionals described the pastoralists' health literacy as poor. From their point of view, poor health literacy increases the difficulty of treating pain.

Health professional-related condition: lack of training

The majority of interviewees (n=13) considered their training in pain management as very limited or even inexistent.

Assessment issues

Assessing pain correctly or assessing pain as such was difficult for several participants (n=8). According to nurses in secondary and tertiary care, pain assessment scales to measure pain intensity (eg, the Faces Pain Scale-Revised) were available. However, using them was difficult due to their own insufficient training. Health professionals also lacked the resource to act on the assessment. In addition, nurses had the impression that patients rarely understood the assessment instruments. To complement the nurses' view, one physician in secondary care pointed out that they had introduced a pain assessment scale, but the nurses no longer used it:

I don't think it is getting managed as properly as it should be. We had training, we learned to regard it as a sixth vital sign and to assess the pain of every patient on the ward. We did this for about a week and then it was stopped. Nobody continued. And I don't think it has been properly assessed and properly managed ... It was delegated to the nurses, but they were not doing it properly. That column on the vital sign sheet ... they wrote down other things like medications. I don't think that the training was effective. (P7, male, medical doctor, secondary care)

This physician spoke of a vital sign sheet located within the patient's folder. He mentioned that the assessment by means of a Faces Pain Scale was delegated to the nurses but that they were not documenting the pain intensity correctly according to this physician.

In primary care, no assessment instrument had been introduced. The nurses described that they assessed pain on the basis of the patient's medical history according to their own personal evaluation and experience. The nurses asked about pain location or treatments already tried at home. However, this was not a systematic assessment.

Prescription and administration of analgesics

Several health professionals in secondary and tertiary care reported that pain medication was not administered correctly (n=4). Prescriptions were not completed as necessary. Participants attributed this to a lack of training and to missing commitment concerning the newly established protocols, such as systematic pain assessment. In addition, four nurses mentioned that they treated pain by administering antibiotics. The participants barely had any experience with prescribing and administering strong opioids, such as morphine for severe pain. They were hardly ever available in their respective health facilities. This was also evident in the pain workshops at the Jigjiga Hospital. Only one participant in tertiary care mentioned that morphine was currently available. Most health professionals working in tertiary care were of the opinion that certain opioids commonly caused respiratory distress and thus should be avoided. One physician mentioned a situation with a cancer patient suffering from severe pain. When he proposed to administer opioids, the team responded with strong resistance. They feared adverse effects of opioids when used inappropriately.

Health professional-related condition: (under)exposure to local culture

The majority of health professionals in secondary and tertiary care reported having no in-depth understanding of the rural pastoralist population and its living conditions (n=7).

Interviewees from urban regions explained that they were much less familiar with the local traditions and customs, especially among pastoralists from remote regions. For instance, one physician commented:

I don't know much about their culture or their religious methods for dealing with pain. I am from [name of larger city]. [...] I am an outsider to this. (P7, male, medical doctor, secondary care)

Therefore, several health professionals were not able to adequately consider these traditions with regard to pain management measures. According to this physician, nurses were closer to the patients and had more insight into pastoralists' daily lives. In some cases, health professionals also described difficulties with understanding the local dialect or certain words. As a result, connecting with patients and establishing a trusting relationship were challenging. Such issues were much less evident in primary care where nurses considered themselves as being part of the local community. Therefore, they had more detailed knowledge about traditional pastoralist-specific medicine, such as drinking camel milk or burning one's own skin to heal certain ailments.

Health professional-related condition: resource shortages

Health professionals mentioned shortages of analgesics, such as paracetamol, diclofenac and tramadol, across all healthcare settings. Morphine was said to be practically unavailable or never used. One nurse from the secondary care sector emphasised:

We don't have morphine here. Because of that we don't use morphine. (P10, female, nurse, secondary care)

A nurse working in tertiary care mentioned that due to morphine unavailability, they had access to pethidine instead. One physician added that pethidine was not recommended. However, there was no choice—they had to use it.

Available treatment options for cancer pain were not mentioned in the interviews. According to the participants, it was difficult to diagnose cancer with the available equipment. Patients with cancer had to be referred to the national capital Addis Ababa. This would be unaffordable for most patients in this region.

Patient-related condition: (under)-reporting pain

Pain perception

Six health professionals were of the opinion that pastoralist patients across all care levels did not perceive pain to be a serious condition or an ailment requiring treatment in a health facility:

They don't consider it as being serious. They often think that they will feel better soon. People who live in faraway areas mostly think like that. (P16, male, nurse, primary care)

Participants described pastoralist patients to commonly seek healthcare when their pain was severe and their condition had already advanced. Therefore, treatment was difficult for nurses:

Those who live in rural areas don't think they have a disease or pain until they break down. Then they believe that they are ill. But before that they may say: No, that's normal. I don't have any pain. They try to hide their pain because they think that pain is normal. (P9, female, nurse, secondary care)

This statement underlines that this nurse perceived pastoralists' specific cultural attitude of considering pain as something 'normal' to be dealt with privately.

'Stoic' attitude

Several interviewees mentioned that the Somali culture in the region is characterised by a 'stoic' attitude towards pain (n=5). They described that in this cultural context, pain is considered as a sign of weakness or inferiority:

Look at Somalis. Someone who is sick or in pain will feel he or she is inferior or worth less. He or she believes to be inferior to others. (P4, male, nurse, tertiary care)

Therefore, expressing pain was described as being unacceptable.

Some participants also observed this 'stoic' attitude in women from rural areas. As an example, this physician mentioned women not expressing pain when giving birth:

...so many women will not cry or shout while giving birth. You can imagine how strong or severe it [the pain] is. But she never cries. She bites into something. Never. (P5, male, medical doctor, tertiary care)

Women hiding their pain

The majority of health professionals (n=12) perceived women from rural areas to be particularly prone to under-reporting pain in a culture characterised by a 'stoic' attitude towards pain. In the context of female genital cutting a nurse said:

Men precisely describe their pain, but women don't. Women will try to describe their pain precisely if you ask more questions and if they are alone. ... Since this is a rural area and most people are pastoralists, women don't want that somebody knows about their pain. (P14, female, nurse, primary care)

Reasons for 'hiding pain' were a recurrent issue in the interviews. The participants mentioned that women often were shy and less outspoken than men:

If you ask a mother about her illness and how she feels, it is difficult for her to answer. [...] This is because they feel ashamed. It is a tradition. Men can say everything but for women it's hard. I think it's because of the culture. (P4, male, nurse, tertiary care)

A young female nurse described fear of societal repercussions, such as discrimination or stigmatisation among female pastoralists:

They believe that in the cultural, traditional place where they live other women ... will say: 'Hey, she is weak. She can't control the pain, can you see?' They will insult her. They will socially discriminate her. They will isolate her and say: 'All the time she says she has pain. She is very weak, she cannot be with us. What is going on with you? You have to be strong.' (P9, female, nurse, secondary care)

Other nurses surmised that fear of being examined by a male was a reason. This was mentioned in the context of rural primary care centres, attended by young or unmarried women, particularly with regard to more sensitive female health issues.

Patient-related condition: care preferences and beliefs

Spiritual care preferences

All participants emphasised the importance of spirituality with regard to illness and pain beliefs. The interviewees described their pastoralist patients as deeply religious. They mentioned that from a religious point of view, pain is caused by Allah to deliver a person from sin. In this sense health professionals emphasised, patients believe that only Allah can heal them, turning to their religious leaders for support. The participants

described religious leaders as men praying on the patients' behalf for relief from pain. They pointed out that when religious practices do not reduce pain, patients turn to traditional medicine or visit health facilities. According to some health professionals, pastoralists' strong belief was a resource helping them to cope with illness and pain. However, this could also lead to persons seeking care at a very late stage of disease.

Traditional care preferences

The importance of traditional medicine as a form of pain management was a recurrent issue in the majority of interviews (n=13). With regard to traditional medicine, the participants mentioned pastoralists using herbal remedies, animal products or visiting traditional healers. Health professionals had the impression that these strategies deterred pastoralists from visiting health facilities at an earlier stage:

People don't come to the health center until they have tried to treat the pain with whatever method they know. If there is no improvement, they bring the patient here. (P16, male, nurse, primary care)

Nurses across all care levels recognised the importance of traditional healthcare practices. However, they did not tolerate these practices in health facilities. Traditional healers (as opposed to religious leaders) were not welcome in any of the hospitals or health centres. The participants described a traditional healer as a person travelling from place to place and treating people with herbal concoctions or performing surgical procedures such as tonsillectomy.

Avoidance of health facilities

According to most of the participants (n=13), pastoralists with pain prefer staying at home, contacting religious leaders or using traditional remedies to deal with their pain. This can be linked to the other conditions—importantly the limited access to biomedical care. Some participants described that pastoralists living far away from health facilities might avoid hospitals, associating them with dying and death, as in this example:

They have a phobia with regard to hospitals. They think that if they go there, they will die because if someone is admitted to the hospital, they think that he is on his last. ... So, they try to avoid going there. (P9, female, nurse, secondary care)

A nurse from a health centre in a rural area also emphasised religious reservations against health facilities:

If you tell them: Come to the health center and get treatment—otherwise you may die, they may reply: You don't believe in Allah. Allah is the only one who can treat and kill people. [...] So, they bring the patients at the end of their life and you can't do anything to save the patient's life. (P16, male, nurse, primary care)

None of the nurses mentioned palliative care or similar treatments at health facilities for severely ill patients.

Patient-related condition: experience with professional care

According to several health professionals (n=12), pastoralists had different reservations against formal healthcare. Sometimes they were disappointed when the medication did not lead to immediate or long-lasting pain relief. Four nurses mentioned family members or patients in the hospital that requested more invasive treatments to reduce their pain.

I have a headache and you gave me nothing but a painkiller. The pain killer did not help me. So, give me an injection. (P12, female, nurse, secondary care)

However, several nurses also experienced the opposite. They mentioned that patients or family members refused certain treatments (eg, oral intake, injections or intravenous administration of drugs) or did not believe in treatment efficacy (n=8). Health professionals associated such refusals or discontinuation of medications with fear of treatment, mistrust or poor health literacy.

Patient-related condition: (limited) access to care

Financial concerns

In general, most of the participants (n=14) described poverty as a major barrier for pastoralists to seek biomedical aid. According to the participants, visiting faraway care facilities is costly. Pastoralists often had to sell their camels and goats in order to pay transportation. Health professionals also mentioned the problem of paying for medication. In such cases, they turned to hospital social workers to financially support pastoralist patients.

Role of the family

Family members are very much involved in patient care at the health facilities. Most participants described how relatives care for patients at the bedside and help to distract patients from pain (n=13). Furthermore, family members are involved in decision making and act as proxies uttering complaints. Sometimes, relatives also organise medication and pay for medication from the pharmacy when it is out of stock in the hospital. Several interviewees were of the opinion that patient care would be much more challenging if patients had no family nearby.

Health professionals' strategies to reduce pain

Health professionals mentioned different strategies to build a trusting relationship and to communicate effectively, thereby hoping to reduce pain. However, these strategies did not necessarily match patients' needs and expectations. According to health professionals' narratives, they themselves lacked the necessary training and resources to adequately treat their patients' pain. They also had the impression that pastoralists underestimated pain or the professionals did not trust their patients' pain reports. These conditions affected the health professionals' strategies.

Patient counselling

Most nurses mentioned that they provided general health education and explained the diagnosis as well as the effect of pain medication, thereby addressing health literacy (n=10). Several nurses also reported that patients from rural areas require more intensive pain-related health education and counselling. For this reason, they tried to convince patients of the benefits of biomedical treatments.

From the participants' point of view, the low level of health literacy among pastoralists is challenging, making refined counselling skills necessary. Several interviewees mentioned that they must convince patients with regard to the pharmacological therapies' meaningfulness and usefulness, as in the following statement:

It is necessary to convince the person that he is in the right place, that he will be treated, that the medicine is effective and an effective remedy for his illness. It can be helpful to say: 'Give it a try and get rid of the old way of thinking'. (P3, male, nurse, tertiary care)

From the nurses' point of view, taking time to talk to patients often improved the acceptance of (biomedical) pain treatment. Mostly, therapy consisted of prescribing and administering medication. In the majority of cases, the participants did not consider alternative treatment options or actual patient needs.

Understanding the patients' pain

Having difficulties with understanding patients' pain and trusting pain self-reports was a common theme in the interviews. Several nurses mentioned not believing the symptoms the patients reported (n=6). This is attributable to the theme of mistrust. Relying on patients' vital signs was one of several options to determine pain intensity.

After taking vital signs and checking the temperature, you may see that the patient has severe pain. Or the patient may just increase his breathing, thereby telling you that he is not well. Especially older patients—when they need medical care or additional support, they show it by increasing heartbeat, by breathing. (P1, male, nurse, tertiary care)

Some nurses were of the opinion that vital signs are often a more reliable source of information than verbal expressions. This was the case when nurses were not able to identify a specific cause for pain. For example, one nurse emphasised that her patient had neither a fracture nor a medical condition. So, it was justified, from her point of view, to rule out the presence of pain.

Providing (non-)pharmacological care

Health professionals rarely mentioned non-pharmacological interventions for pain management. Most of the interviewees were of the opinion that health facilities are places for pharmacological treatment. From their point of view, patients or their relatives expect to receive effective medications in these facilities (n=12). To fulfil this expectation, they prescribed and administered pharmaceuticals, such as paracetamol, diclofenac and tramadol. These medications were often reported as lacking in facilities. According to the interviewees, non-pharmacological options (eg, traditional or spiritual practices) were not considered to be compatible with professional care at a health facility:

Non-pharmacological pain treatment can be given at home. At the hospital, we provide pharmacological pain management. (P3, male, nurse, tertiary care)

Health professionals, especially in secondary and tertiary care, did not take into account other treatment options.

Consequence: neglect of pain management

Pain being 'overlooked' or 'neglected' was a central issue in all of the interviews with health professionals. The neglect of pain resulted from a weak patient-professional relationship. It became obvious in several interviews that health professionals commonly focus on treating a certain disease rather than prioritising pain itself. Aside of the lack of professional training and resource shortages, this can also be associated with cultural-linguistic reasons. According to most of the interviewees, patients often did not report their pain (n=13). However, when pain was reported, health professionals did not always trust the patient's words.

The current situation of pain management in our hospital or in this area? I can say it is one of the most neglected parts of the care we give in our hospital. Usually most of the time they [the professionals] address the diagnosis of the patient and the treatment purpose and

medications. We treat the disease not the patient. (P5, male, medical doctor, tertiary care)

According to the majority of the interviewees, pain management was not a priority across all levels of care.

DISCUSSION

This study explored health professionals' (mostly nurses') perceptions of pain management in Somali pastoralists. To our knowledge, this is the first qualitative study exclusively investigating pain management perceptions of health professionals in a pastoralist context in the SRS. In the following, we discuss the key findings considering comparable investigations.

Building a trusting relationship

The developed pastoralist-specific conceptual model of pain management had the patient-professional relationship at its centre. Health professionals described their relationship with pain-affected pastoralist patients to be challenging regarding the management of pain. The patient-professional relationship was influenced by the particular level of care. This played a role in the health professional and patient-related conditions within the conceptual model. Nurses in primary care described being a trusted part of the local pastoralist communities. In contrast, we found that professionals in secondary and tertiary care had difficulties with establishing a trusting relationship. They did not always trust their patients' accounts of pain and often perceived them in need of counselling and having to convince them of getting 'rid of the old way of thinking'. These statements reflect the attitude of paternalism. In comparison, Abakar *et al.* (2018) point out that pastoralists can feel humiliated and neglected by health professionals due to their nomadic way of life. Such demeaning attitudes of providers towards particular patient groups weaken the quality of patient interactions (Gilson 2003). In our study, health professionals described that pastoralists did in fact go out of their way to receive care in health facilities that were hard to reach when their condition was advanced. This implies a certain degree of trust in these facilities and in biomedical care—but not necessarily in health professionals themselves. Yet, positive interactions with health professionals have the potential to reinforce trust in healthcare systems (Misztal 1996). According to Luhmann (2017), trust allows for the reduction of complexity. Once people have had good experiences, a trusting relationship can develop and result in the empowerment of patients (Drumm 2013). Ongoing negotiation and laborious acknowledgement of difficult issues (complexity) is no longer necessary, thereby facilitating future interactions (Luhmann 2017).

In our study, health professionals perceived pastoralists, especially those living in faraway places, as having specific health beliefs, a low-level of (biomedical) health literacy and difficulties to express pain. According to Campeau (2018), explaining one's pain is challenging, particularly across language and literacy barriers in different healthcare settings. Due to this, building trusting relationships with patients is even more important for health professionals. According to our conceptual model, a relationship of trust and communication could result in increased attention to pain management (figure 3). However, we found that professionals and pastoralist patients lacked opportunities for the necessary exchange at eye level.

Improving communication

In our study, some nurses in secondary and tertiary care did not entirely trust the patients' reports of pain. At times,

they considered it as an exaggeration. This became especially evident in tertiary care where some nurses suggested that more ‘objectively measurable’ vital signs (eg, pulse) are more reliable than patients’ verbal information. In fact, patients’ self-report of pain is considered to be the most valid approach to pain assessment (Melile Mengesha, Moga Lencha, and Ena Digesa 2022). At the same time, interviewees working in tertiary care considered pastoralists to rarely communicate minor pains. Such seemingly contradicting statements reveal perceived differences among Somali patients, for instance, when considering their home and place of care, stoicism being mentioned more commonly in rural areas. However, it is important to consider that stoicism can also mask other barriers to seeking care. Moore *et al.* (2013) argue that rural populations not visiting health facilities could in fact be associated with travel distance or stigma—two barriers also mentioned in our study. Yet, elements of stoicism and pain align with other research on pastoralists (Hastings 1995; Nortjé and Albertyn 2015; Sargent 1984). For instance, the West African Fulani people (to a large number also pastoralists) follow a code of social conduct known as ‘pulaaku’ implying ‘restraint, endurance and a strong sense of shame’ (Ver Eecke 1988, p. 8). According to the participants of our study, having a ‘stoic’ attitude is particularly characteristic for young pastoralist women from rural areas. They described them as fearing stigmatisation when expressing pain. This phenomenon also proved to be more commonly mentioned in rural primary care. The aspect of trust-building and relationship-building is particularly important in order to encourage women to speak frankly and make them feel comfortable. Considering the Health Access Livelihood Framework (Obrist *et al.* 2007), acceptability is described as a significant dimension determining the health-seeking process. It refers to the importance of considering local illness concepts, of patients finding healthcare providers to be trustworthy and of healthcare providers making patients feel comfortable, which can lead to a higher degree of satisfaction with healthcare. In a recent scoping review on nurse-patient interaction in sub-Saharan Africa, Kwame and Petrucka (2020) underlined the necessity of mutual trust, respect and understanding for improved communication. They argued that collaboration with patients, active listening and empathic communication contribute to effective nurse-patient communication and interaction. To do justice to the subjective nature of pain as well as to sociocultural and linguistic aspects associated with pain, patient-centred communication is indispensable for good pain management (Tetteh *et al.* 2021).

In our study, most interviewees were aware of medical pluralism among pastoralists. However, they also pointed out that pastoralists at times avoided mentioning other health practices (eg, traditional medicine) out of fear of being criticised. Against this background, compassionate and culturally sensitive communication proves to be essential to build trust and to pave the way for pastoralist-specific pain management. This approach addresses physical issues of pain and psychosocial and spiritual aspects that proved to be of utmost importance in this context. Holding a dissemination event with both pastoralist patients and health professionals could be a first step towards improving the patient-professional relationship. Abakar *et al.* (2018) have argued that communication channels between pastoralists and local health systems are needed to improve the health

of mobile communities. Moreover, communication trainings for health professionals could prove to be valuable.

Applying non-pharmacological pain management

Munkombwe, Petersson, and Elgán (2020) emphasise that a trusting nurse-patient relationship is essential for effective pain management and for addressing diverging patient needs. They also refer to the importance of considering patients’ practices of non-pharmacological pain management. In our study, nurses across all levels of care rarely or never applied non-pharmacological pain management. Research findings from Northern Ethiopia revealed that <30% of nurses sufficiently implemented non-pharmacological pain management practices. The majority of nurses did not apply non-pharmacological pain management practices at all (Zelege, Kassaw, and Eshetie 2021). In Somali culture, traditional medicine is very important (Umer *et al.* 2020). This became evident in our study by frequent mentions of traditional and spiritual care practices. However, we found that the interviewed health professionals themselves had very limited experience with such practices, particularly in urban secondary and tertiary care facilities. They lacked the cultural sensitivity of encouraging patients to utter their needs, worries and beliefs. When the health professionals encountered resistance against pharmacological treatments, they tried to convince the patients of efficacy rather than addressing the patients’ concerns. From some nurses’ point of view, not offering pharmacological pain treatments might be irresponsible and unjustifiable when pastoralists travelled very far and sometimes even had to sell their animals to pay for the trip to the hospital. Particularly in these cases, patients expected more advanced care than available at home. Not receiving pharmacological treatment could also result in future avoidance of healthcare utilisation. The interviewees tried to comply with the patients’ wishes when they trusted their descriptions and when there was an ‘objective’ pain indicator, for example, vital signs deviating from the norm. By this, we can conclude that some nurses in our study did not reflect the possibility of pain that is not physically measurable.

Difficulties with assessing and treating pain

It is important to note that the Somali word for pain (‘xanuun’) is not clearly distinguishable from ‘illness’. This offers a cultural-linguistic explanation as to why some health professionals responded to our questions by referring to other symptoms and also mentioning the use of antibiotics for treating pain. For health professionals, it is essential to understand that not explicitly verbalising pain does not indicate an absence of pain in a patient and that there are many other options of determining pain such as observation of non-verbal cues, physical examination or speaking to family members as a proxy (Waddie 1996). This becomes especially relevant when considering that health professionals mentioned language barriers in addition to stoic attitudes.

In our study, most interviewees mentioned their limited knowledge about pain management. This is in accordance with other research findings in Ethiopia (Woldehaimanot, Mulatu, and Abrha 2014; Admass *et al.* 2020). Pain assessment posed a particular challenge for nurses since the available instruments (such as the Faces Pain Scale-Revised) were not adequately used or not used at all (eg, in primary care). Huang *et al.* (2012) point out that available tools are frequently not fully validated for cultural acceptability. This may explain patients’ difficulties to understand them.

In our study, health professionals working in tertiary care mentioned their hesitancy to use strong opioids for treating patients with severe pain. They reflected on their lack of experience and training and thematized their fear of adverse effects. These fears were understandable, considering that opioid prescription and administration requires specific knowledge and training, and opioid misuse can have harmful outcomes. Among nurses working in oncology centres in other regions of Ethiopia, the prevalence of opioid hesitancy is nearly 80% (Admass *et al.* 2020). There is no question that the prevention of opioid misuse is indispensable. However, according to global standards on pain relief, opioid analgesics should be safely available for all persons in need of them (Brennan, Lohman, and Gwyther 2019). Bhadelia *et al.* (2019) argue that there are currently two crises: the opioid epidemic in the USA, Canada and Australia and a global pain crisis with millions of people with untreated pain, especially in the poorest countries of the world. Although there are many different treatment options for pain, including pharmacological interventions (with and without using opioids), it is essential to emphasise the need for a multimodule and comprehensive pain management approach depending on the patient's needs. Psychosocial and spiritual care practices should also be part of this approach.

Strengths and limitations

We conducted this study with a heterogeneous sample of 17 health professionals from different clinical settings and varying levels of experience. In addition, we considered rural and urban differences. Thereby, we gained important insights into their perceptions of pain management.

However, our study has some limitations. First, we did not focus on one specific type of pain. Since we wanted to gain first insights and found very limited research on the region and population of interest, we chose a broad approach. However, our initial findings hold promise to inspire other research with a more specific focus on pain types and their management in the Horn of Africa region. Second, this study addresses exclusively the health professionals' view. It is worthy of noting that this view might not be in line with pastoralists' perceptions. Third, due to political unrest in the region, drought and restrictions, it was not possible for us to return to the field as often as originally planned. Therefore, we were not able to explore certain categories in the intended depth to achieve theoretical saturation (Corbin and Strauss 2008). Fourth, the small sample size of 17 health professionals does not allow generalisations. Nevertheless, the interviewees' detailed narratives provide in-depth insight into their lived experience of care for pastoralists. The results can contribute to the knowledge on good pain management for this marginalised population. They can also serve as an orientation for future studies in this field with a larger sample size. Finally, the rich insights into health professionals' lived experience also contributes to the field of medical humanities. Focusing on the 'human factor' is highly relevant for educational purposes. It can encourage reflection, promote self-awareness and stimulate debate on complex and challenging issues, for example, caring for persons of a marginalised population in the context of pain (Robb and Murray 1992).

Within the overall research project, it will be interesting to compare the findings from this study with the perception of pastoralists (study 2) as part of the synthesis (figure 1). Based on this additional research, we intend to develop pastoralist-specific culturally sensitive interventions. In this way, we aim to improve access to adequate pain management for the pastoralist population.

CONCLUSION

We found that health professionals' experiences with pain management differed across the levels of care. Health professionals in hospitals often described struggling with understanding (rural) pastoralist patient needs with regard to pain management as opposed to nurses working in primary care health centres that were closer to the pastoralist communities. In all settings, however, health professionals rarely prioritised communicating about and comprehensively treating pain. This was due to a lack of necessary training and resources. Pain management had a lower treatment priority compared with other health concerns, such as communicable diseases. This can also be linked to cultural-linguistic reasons. Within our developed conceptual model, we argue that a more intensive consideration of both patient-related and health professional-related conditions and an improvement of communication could in fact enable the attention to (good) pain management.

Our findings showed that health professionals often lacked training and adequate pain assessment instruments were not available. Pharmacological treatment options often were not at the professional's disposal and non-pharmacological treatment options were rarely considered. According to our findings, individual, social and cultural aspects of pain were neglected at the cost of pastoralist patients, because health professionals did not have the necessary tools. In secondary and tertiary care, the health professionals had a lack of cultural understanding, particularly concerning pastoralists from remote areas. Even if pain was assessed adequately, the available resources for treatment are often very limited in this region. Therefore, pastoralists are particularly vulnerable to poorer health outcomes and lower quality of life.

Nevertheless, patients—no matter where they live—have the right to receive pain treatment tailored to their individual needs. Among pastoralists in the SRS, this implies the consideration of the culturally shaped pluralistic understanding of health and illness as well as corresponding health practices. Within the frame of our conceptual model, the presented findings indicate that culturally sensitive communication and empathic interaction with patients and building trust could improve the patient-professional relationship. The result is the attention to pain management. This calls for more research with Somali pastoralist patients affected by pain to better understand their perceptions and to better consider them in designing culturally sensitive interventions. In addition, opportunities for trust-building measures must be put into place. This is a precondition that may ultimately lead to a more comprehensive and pastoralist-specific approach towards good pain management.

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