

## Original article

# An exploration of the experience of pain among culturally diverse migrant communities

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### Abstract

**Objective.** To explore the ethnocultural influences on the chronic pain experience in three culturally and linguistically diverse communities in Australia.

**Methods.** Six focus groups were conducted with 34 women and 7 men (ages 36–74 years) who self-identified as Mandaean, Assyrian or Vietnamese. A purposive sample of community-dwelling adults living with chronic pain (daily pain >3 months) was recruited from community organizations. Participants were asked broadly about the meanings of chronic pain, acceptance, ethnocultural community expectations and approaches to pain management. A standardized interview collected sociodemographic and symptom data for descriptive purposes.

**Results.** Inductive thematic analysis yielded a multidimensional web of themes interrelated with the pain experience. Themes of ethnocultural identity and migrant status were intertwined in the unique explanatory model of pain communicated for each community. The explanatory model for conceptualizing pain, namely biopsychosocial, biomedical or a traditional Eastern model, framed participants' approaches to health seeking and pain management.

**Conclusions.** Chronic pain is theoretically conceptualized and experienced in diverse ways by migrant communities. Knowledge of cultural beliefs and values, alongside migration circumstances, may help providers deliver health care that is culturally responsive and thereby improve outcomes for migrant communities with chronic pain.

**Key words:** chronic pain, qualitative research, cultural and linguistic diversity, ethnicity, culture.

### Key messages

- Understandings of chronic pain are ethnoculturally constructed, varying for diverse communities.
- The explanatory model of pain is shared among community members and influences their coping mechanisms.
- Ethnocultural and migration influences need to be incorporated into chronic pain assessment and management.

### Introduction

Communities from culturally and linguistically diverse (CALD) backgrounds represent a substantial and

growing proportion of society in many countries [1]. As a consequence, health care providers must interact with and manage clients from ethnocultural backgrounds different from their own. Such cross-cultural interactions may be complicated by coexisting, potentially discrepant beliefs, values and explanatory models of health and illness between provider and patient [2]. Given that a patient's experience of health and illness is framed by social and cultural constructions, health care providers must be able to recognize and incorporate the views and values of culturally diverse patients [2].

Chronic pain is one condition where the disease burden disproportionately affects CALD, migrant, refugee and low socioeconomic status communities [3–5]. While

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an abundance of clinical and experimental research supports that pain is perceived and experienced differently according to ethnoculture, research exploring mechanisms behind these differences is limited [3, 6]. Further, there is a paucity of high-quality research into pain management approaches inclusive of ethnoculturally diverse and migrant communities [7]. Therefore research is required to understand the cultural and social underpinnings of chronic pain among CALD communities.

Discordant explanatory frameworks for pain between patients and health care providers is one domain thought to impact on management decisions and outcomes for patients with chronic pain [8, 9]. While the biopsychosocial model is accepted as the most appropriate approach for managing chronic pain in the Western world, not all patients or communities operate under this framework. In some communities, psychological influences are rejected in favour of biological explanations, while in others, spiritual, social and environmental factors are considered causative [2, 9–11]. Beliefs about the nature and cause of an illness can influence help-seeking behaviours and engagement with therapies [10, 12]. Failure to recognize culturally bound beliefs about pain may be one reason why suboptimal clinical outcomes have been observed in CALD populations [3, 7].

While suboptimal outcomes in CALD populations are common in many areas of health care, research highlights that patients' perceive that the quality of care is better when health care providers respect and learn about the cultural practices of patients [13, 14]. Despite this, there is limited information to guide providers in the most effective ways to adapt their assessment and management practices to respect the cultural values of their patients, particularly in the area of chronic pain [7, 15]. Therefore research is required to inform health care providers about the ethnocultural dimensions underpinning the construction of pain and pain experiences in order for pain management to respond to the needs of CALD societies. Thus this research sought to explore the ethnocultural dimensions influencing how chronic pain is constructed and experienced in three CALD communities (Vietnamese, Assyrian and Mandaean) with the overall goal to inform recommendations for the development of culturally responsive pain management practices.

These three CALD communities were selected, as they are prominent in Australia and internationally, dispersed from their homeland largely due to conflict. The Vietnamese community is one of the largest Asian community's in Australia, the USA and Canada [16]. Much of this growth can be attributed to the refugee crisis following the Vietnam War [17]. Similarly, Assyrian and Mandaean dispersion was propelled by conflict in Iraq. Internationally, Iraqis are the second largest nationality seeking asylum in industrialized countries [18] and represent large communities in Australia, Norway, Canada and the USA [19]. Given the prominence of Vietnamese, Assyrian and Mandaean communities in Australia and internationally, this exploration focused on CALD communities' experience of pain in these cohorts.

## Methods

### Design

This research was an exploration of how chronic pain is constructed, accepted and experienced by Vietnamese, Assyrian and Mandaean communities in Australia. Focus groups were used, as they allow for the generation of collective perspectives and are particularly useful when investigating CALD and/or vulnerable populations [20, 21]. The topic guide was developed by the research team, modelled on previous research with CALD communities [2, 22] and piloted with a group of physiotherapists and volunteer community leaders. The topic guide included 11 questions derived from four broad topics: (i) meanings of chronic pain, (ii) pain acceptance, (iii) community expectations and (iv) pain management (Supplementary Data, available at *Rheumatology Advances in Practice*). The South-West Sydney Human Research Ethics Committee and the Western Sydney University Human Research Ethics Committee approved the study protocol. All participants provided written, informed consent.

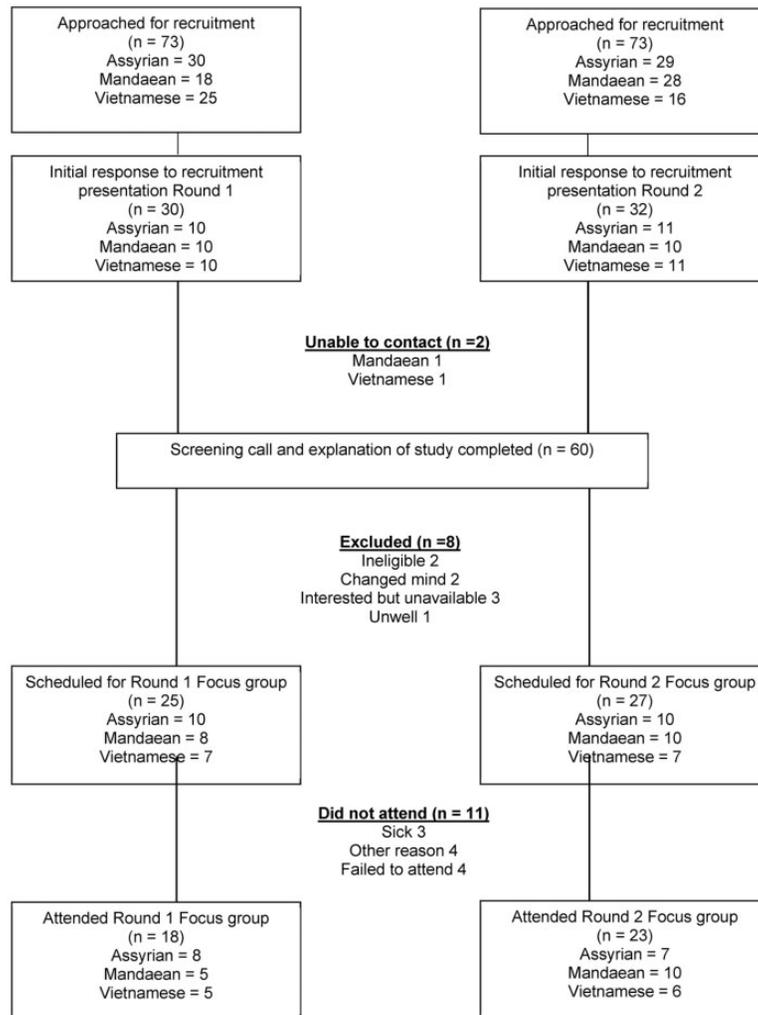
### Participants

Participants were drawn from community venues in south-west Sydney using purposive criterion sampling [23, 24]. Venues were selected by community leaders to give access to potential participants' representative of patients accessing chronic pain services in south-west Sydney (age, gender and socioeconomic characteristics). Following project announcements, interested community members consented to be contacted by the research team to establish eligibility. Participants were included if they were adults (>18 years), with a diagnosis of chronic pain (daily pain >3 months), self-identifying [25] as a first-generation member of the Assyrian, Mandaean or Vietnamese ethnocultural community and willing to attend and participate in a focus group discussion. There were no specific exclusion criteria. Figure 1 outlines the flow of participant recruitment. A description of the three communities can be found in the Supplementary Data, available at *Rheumatology Advances in Practice*.

### Procedure

Initially, one focus group was conducted with each community in the language of the participants (Arabic for the Mandaean community, Assyrian and Vietnamese). One trained multicultural health worker representing each community facilitated the session, assisted by a bilingual physiotherapist and supported by a separate observer who recorded participants' interactions and non-verbal communications [26, 27]. Each participant also completed a short individual interview with researchers to collect sociodemographic and pain characteristics. All focus groups were audio recorded, translated and transcribed by an independent translation agency. The facilitator and bilingual physiotherapist reviewed all

Fig. 1 Flow of participant recruitment



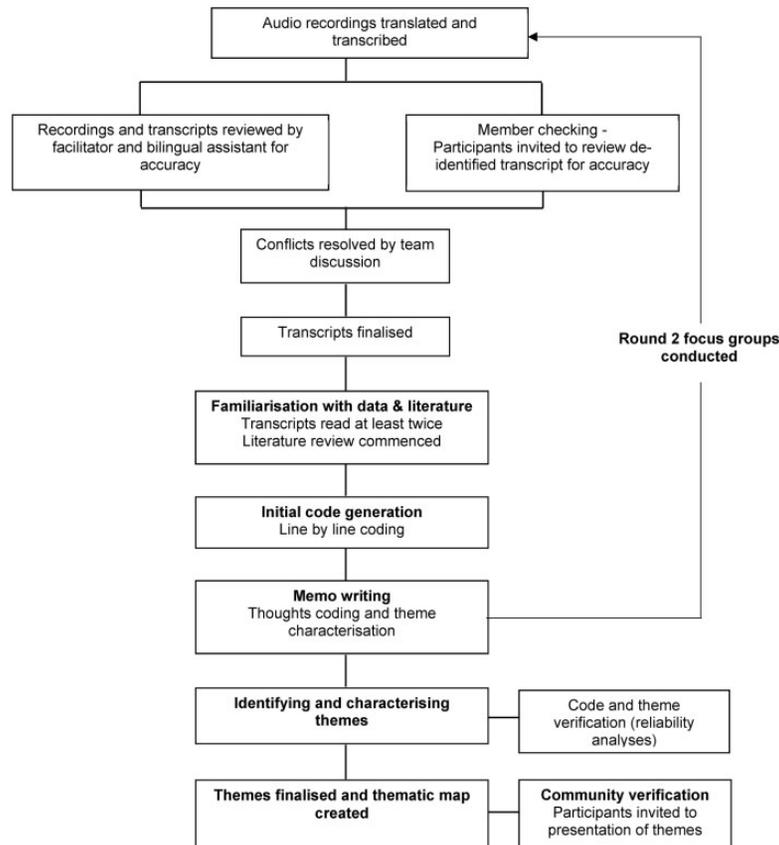
transcripts to ensure accuracy in the transcription and translation to English. Any discrepancies were resolved via discussion and review of the audio recording. Data analysis commenced following the first round of focus groups, with plans for further rounds until saturation of data was reached [28, 29]. A debriefing session, using the transcripts, was completed with the facilitators and physiotherapists prior to subsequent focus groups. Member checking was achieved through participant review of the transcripts for accuracy and a facilitated discussion of the themes and concepts that emerged following analyses [30]. This was performed for each community separately and facilitated by the multicultural health worker and primary researcher.

### Data analysis

An inductive thematic analysis approach was used [31]. Data familiarization was conducted by all authors independently, focusing on eliciting meaning and patterns in

the data [31] (Fig. 2). Simultaneously, a literature review was undertaken to sensitize authors to potential themes embedded in the data [31]. The entire dataset was organized by the first author into meaningful groups with coding, using the NVivo software package (QSR International, Doncaster, VC, Australia). To avoid selective perception of the first author, two authors from different disciplines (physiotherapy and social science) independently coded extracts of the dataset (multi-analyst triangulation) [30]. A codebook was then created and revised through each stage of the analysis [32]. Memo writing was performed to document the process of theme emergence. The codebook was finalized and assessed for consistency of application across the research team and reliability was established by calculating Cohen's  $\kappa$ , using NVivo. Reflection on codes and their components was performed to facilitate understanding of implicit, unstated and condensed meanings within the dataset [32]. All authors reached consensus on patterned meanings, or themes, identified throughout

Fig. 2 Steps involved in data collection and analysis



the process of analysis and these were grouped into thematic categories [32].

A second round of focus groups was conducted with each community and analysed as per the previous steps. A critical issue in assessing data saturation in non-probabilistic sampling is providing a measure of the overall relative importance of the codes that emerge. At a certain point, additional focus groups would not result in uncovering any new information about the ethnocultural influences on chronic pain. Thus we determined that saturation had been reached when (i) no new themes emerged from a successive focus group with a specific community and (ii) when there was adequate internal consistency between the relative importance of codes. The latter followed a method outlined by Guest *et al.* [28], which is a novel utilization of the Cronbach's  $\alpha$  coefficient. No new codes emerged between the first and second focus group for each ethnocultural community, satisfying the criteria for theoretical saturation [28]. Second, this was supported by investigating the variability of code frequency between the first and second focus group, using Cronbach's  $\alpha$  [28]. Cronbach's  $\alpha$  was calculated as 0.82 for the Mandaean community, 0.79 for the Assyrian community and 0.87 for the Vietnamese community, indicating consistency of codes between round one and two.

## Results

Six focus groups with between 5 and 10 participants, with a mean age of 60 years (range 36–74), were conducted. Table 1 displays the demographic information of the 41 participants. Despite an attempt to recruit an equal number of men and women, a number of men ( $n=13$ ) declined to participate or did not attend the scheduled session. Therefore 83% of the final sample was women. The average duration of time in Australia was less for the Mandaean community compared with the Assyrian and Vietnamese communities. Further, the majority of Madaeans identified as refugees, in contrast to the Assyrian and Vietnamese participants. Finally, the sample represents a low socioeconomic status cohort from each community. Socioeconomic and pain characteristics reflect the typical demographics of patients in these communities who access pain services in south-west Sydney.

Analyses highlighted multiple dimensions related to the pain experience (Fig. 3). These were classified as input factors about how pain was cognitively constructed and output factors representing the lived experience of pain. Three themes underpinning the construction of the pain experience emerged—ethnocultural identity, migrant status and explanatory model—and were viewed as interrelated. This in turn influenced each

TABLE 1 Participant demographic characteristics

Characteristics	Mandaeen (n = 15)	Assyrian (n = 15)	Vietnamese (n = 11)
Age, mean (s.d.), years	60 (5.8)	65 (9.3)	56 (10.5)
Female, n (%)	14 (93)	10 (67)	10 (91)
Length of time in Australia, mean, years	7.6	14.5	25
Migration circumstances, n (%)			
Voluntary migrant	2 (13)	10 (67)	9 (82)
Refugee	13 (87)	5 (33)	2 (18)
Marital status—married, n (%)	9 (60)	14 (93)	5 (46)
Level of education, n (%)			
No school or primary only	5 (33)	7 (47)	2 (18)
Secondary	4 (27)	4 (26.5)	6 (55)
Tertiary	6 (40)	4 (26.5)	3 (27)
Number of pain areas $\geq 5$ , n (%)	11 (73)	12 (80)	10 (91)
Duration of pain $\geq 5$ years, n (%)	14 (93)	13 (87)	5 (45.5)
Work status, n (%)			
Unemployed due to pain	13 (87)	10 (67)	5 (46)
Retired	0	3 (20)	3 (27)
Carer or domestic role	2 (13)	2 (13)	3 (27)
Receiving pension or benefit	15 (100)	15 (100)	10 (91)
Pension or benefit type			
Disability, n (%)	11 (73)	7 (47)	1 (9)
Unemployment (pain related), n	2	2	2
Age pension, n	0	5	2
Carer pension/other, n	2	1	5

n = number of participants. % = percentage within the group.

community's lived experience of pain. The subthemes and consistency of code emergence for each theme are displayed in Table 2. The reliability of the codebook across the team members was established with a Cohen's  $\kappa$  of 0.83.

### Ethnocultural identity

Participants constructed meanings of chronic pain collaboratively through discussions and interactions. In doing so, a communal representation of ethnocultural identity was communicated. Specific subthemes of ethnocultural identities included spiritual culture, gender culture, family culture and social culture. Quotes supporting each are displayed in Table 2.

#### Spiritual culture

The Assyrians and Mandaeans framed religion and spirituality as fundamental aspects of their ethnocultural identities, but this did not emerge as a theme in the Vietnamese focus groups. While the Assyrian and Mandaean communities had different spiritual beliefs and practices, spirituality was intertwined in their lived experience of pain and the coping strategies adopted. For example, Mandaeans practiced rituals such as baptism involving water, considered to be their life source, to renew connection with their community and alleviate pain. In contrast, Assyrians' spirituality offered a distraction and sense of solace from their pain, with their enduring faith offering 'hope that anything can be treated' (Assyrian focus group 1, participant 11, male). For both communities, religious leaders and institutions

were valuable sources of emotional support and mediated their personal relationships with the spiritual world. Finally, spirituality offered both communities the opportunity to give perspective to their suffering.

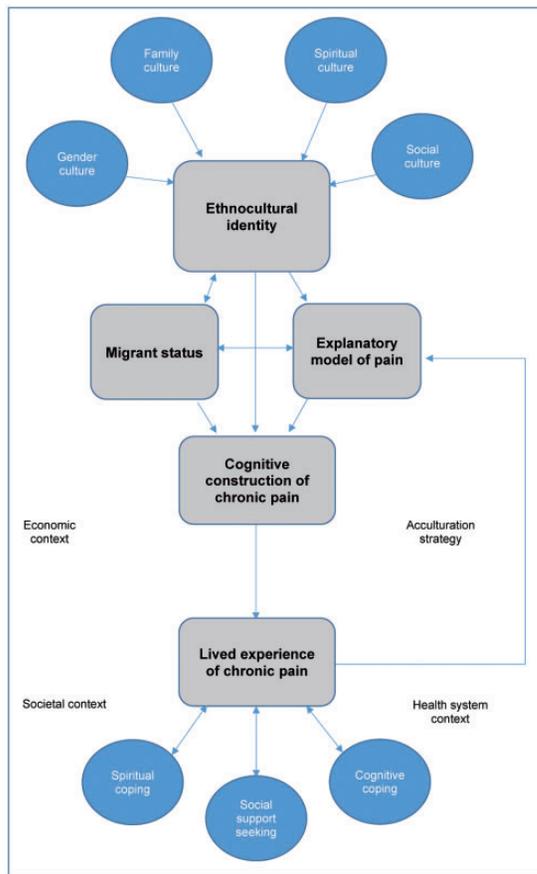
#### Gender and family culture

For all three communities, cultural roles were conveyed by obligations to their family and social-gender norms dictating appropriate behaviour. Notably, all communicated traditional gender roles with the expectation that women should act as a homemaker, attending to the needs of the family independent of her own health situation, while the role of men is as providers. The family unit was emphasized as an important aspect of culture for all three communities. Participants also noted the status of elders within their communities and expectations for them to be cared for and their instructions followed. Quotes presented in Table 2 reflect the traditional, collectivist views of all three communities. As such, the identity of the individual is entwined within their role in the family and wider community. Accordingly, the needs of an individual experiencing pain are viewed second to the needs of the family and wider community.

#### Social culture

Community connectedness, referring to a person's sense of belonging within the community, emerged for all communities. Rather than an individualistic point of view, Mandaeans, Assyrians and Vietnamese integrated sense of self through their relationships with others and their community status. For the Vietnamese community, there was an appreciation of societal roles and social

**Fig. 3** Thematic map of the multidimensional experience of chronic pain for culturally and linguistically diverse communities



hierarchy, with participants acknowledging respect for elders and those in positions of social standing, such as health professionals [33]. At the heart of this social organization is the benefit to the community such that knowledge and resources are shared, often in indirect and non-confrontational ways through the use of proverbs.

In contrast, Assyrian and Mandaean participants' sense of community connectedness was underpinned by religious beliefs and values. Religious venues provide an access point for community engagement, giving opportunities for Assyrians and Mandaeans to use spirituality to cope with health conditions. Further, participants from Mandaean and Assyrian communities projected their identities as communal in nature, using the collective 'we' and 'our', rather than self, when referring to core values and customs. As such, the experience of pain is viewed from a communal perspective.

#### Health framework

Varying understandings of how health and pain are framed were conveyed and grouped into three broad

frameworks: biomedical, biopsychosocial and traditional medicine approaches. The Assyrians communicated a dominant biomedical framework for understanding pain. That is, pain is attributed to organic pathology, and while other factors, such as psychological health, influence the consequences of the disease, they are not related to the development or manifestation of pain. Conversely, Mandaeans communicated a biopsychosocial approach to illness. Pain was framed as multifactorial, influenced by pathology, psychological factors and socioeconomic circumstances. Specifically, psychological pressures and social challenges related to refugee identity were highlighted and, in contrast to the Assyrians, constituted explanations for, rather than consequences of, pain symptoms. In contrast, the Vietnamese community conveyed a hybrid framework for the understanding of pain that was a combination of traditional Chinese medicine and biomedical views. Founded by principles of âm and dương harmony [34], participants reflected that imbalances in the body, such that could occur by eating 'too hot food' (Vietnamese 1, participant 6, female) or 'too cold food' (Vietnamese 1, participants 6 and 10, female), could cause pain. Alongside this traditional framework, Vietnamese participants also accepted pathological diagnoses for pain and illness.

#### Migrant status

The Mandaean and Assyrian communities emphasized the influence of the migration experience on their pain experience, while for the Vietnamese community this was not an emerging theme. For the Mandaean community, the term 'refugee' was prominent in their ethnocultural identity. Cultural and religious persecution underpinned their refugee status and not only had a significant influence on the development of pain, but served as a reminder of their battle for ethnocultural preservation. Further, the Mandaean and Assyrian communities emphasized that their perspectives on pain and health were framed by past experiences in Iraq and their current status as a migrant or refugee. Both communities described personal turmoil, including loss of loved ones, and experiences of conflict, displacement and persecution. Importantly, participants emphasized this was not a personal trauma, but a cultural and collective experience.

#### The lived experience of pain

The ways in which each community managed their pain were intrinsically related to both their ethnocultural identity and their explanatory model of pain. Spirituality, an important component of ethnocultural identity for the Assyrians and Mandaeans, was used as a coping strategy in different ways. For the Mandaean community, this was framed in an active context whereby participants performed rituals to help relax their body and mind. Conversely, for the Assyrian community, spiritual coping was passively used, characterized by praying and hoping. In a similar manner, cognitive coping took

TABLE 2 Summary of themes

Theme and subtheme	Mandaean	Assyrian	Vietnamese
Ethnocultural identity			
Spiritual culture	<p>Baptism and ablutions served to renew their connection with their sect and alleviate pain: <i>We Mandaeans have faith within our hearts. I practice my daily religious rituals which make me feel relaxed from within and comforts my pains; you just raise your hand and supplicate. The Mandean religion is very strong and I believe in it. I love my religion very much (M1, p4, female).</i></p> <p>Perspective to suffering: <i>I can say that there is a situation more serious than being handicapped in hands or legs, which is being so by the Lord (M2, p21, female).</i></p> <p>Woman is a strong figure who can bear up more than men (M1 and 2, p2 and 23, male and female).</p> <p>Woman as homemaker, support for the husband, carer for children and the doctors in the house (M1, p2, male).</p> <p>Woman prioritises herself as second: <i>All effort relies on women in managing the house and the children... If she is ill, no matter how much ill, when there is a baby that needs her to feed him, she would go to him, even crawling (M1, p2, male).</i></p> <p>Balanced relationship between husband and wife with the expectation that <i>if they understand each other, they will complete each other (M2, p26, female).</i></p> <p>Extended family unit, with the obligation to care for elderly family members: <i>Well, in our culture, I am obliged to serve my husband's parents and so for the husband to his wife's parents, because it is shameful for us even to send the old to the nursing home (M2, p20, female).</i></p>	<p>Faith offers solace from the pain and a sense of hope: <i>It will be accepted and then she will leave it in Gods capable hands, because he is the strongest Doctor. Even the Doctors say God is more powerful he is healing people (A1, p17, female).</i></p> <p>Perspective to suffering: <i>We should praise God that we are still able to walk and move around we are not bound to a chair or a walking apparatus. We shower and look after ourselves. Praise be to God (A2, p37, female).</i></p>	N/A
Gender and family culture		<p>Traditional gender roles of the woman as homemaker: <i>A woman born in Iraq suffered terribly, she has raised with discipline her children at home and even for those few hours at home she did not sit, her work did not cease from this job to another home duty... (A1, p18, female).</i></p> <p>Man's role is provider, to work and bring home money (A1, p11, male).</p> <p>Culture promotes cohesive family units: <i>My husband's family have been here for over 40 years all their children are born here and studied and work here, but every weekend they manage to get together and are there if anyone is in need of help (A2, p38, female).</i></p>	<p>Traditional gender roles of woman as homemaker: <i>I have to take care of my children, do the housework. So I need to face with the pain (V2, p30, female).</i></p> <p>Family is highly valued and extends beyond the nuclear family. All extended family are valued for their role and contributions: <i>We will help each other! Or my nephews and nieces can help (V1, p7, female).</i></p>

(continued)

TABLE 2 Continued

Theme and subtheme	Mandaean	Assyrian	Vietnamese
Social–community connectedness	<p>Community is viewed in collective terms, united by shared ethnonreligious values and experiences: <i>if he belongs to the sect, we have a fund for such issues... We put money in the fund, they [referring to the elders] distribute it according to the case (M1, p2, male).</i></p> <p>Strong blood relationships, mediated by marriage within the sect, reinforce community relationships: <i>We are a small community, and the majority of us are relatives (M2, p20, female).</i></p>	<p>Spirituality mediates the community connectedness. Religious institutions form an access point for community engagement and foster a sense of belonging: <i>We should ourselves try mixing with our community may it be in our churches, at different functions and meetings because by doing this we tend to forget about our medical conditions (A1, p17, female).</i></p> <p>Collective perspective reflected by participants' view of each other as quasi-kin 'brother' and 'sister': <i>Just as my brother 11 and sister 17 have spoken about, people... (A1, p18, female).</i></p>	<p>Society/community is hierarchical: Expectation of respect for elders and those in positions of social standing, especially medical professionals: <i>... will do everything I am advised and do not dare (V1, p9, female) question a medical opinion.</i></p> <p>Collectivist culture. Knowledge, remedies and resources should be shared: <i>Vietnamese proverb says "Only when baby cries that the mother decides to feed". Just like in this case, we need to tell people that we have pain so that if they have good treatments, they will tell us (V1, p8, female).</i></p>
Migrant or refugee identity			
Cultural and religious persecution	<p>Struggle for ethnocultural survival related to the ethnic cleansing campaign in Iraq where Mandaeans 'were targeted' (M1, p2, male).</p> <p>Identity as Mandaean was synonymous with ethnonreligious persecution and associated with a fear of ethnocultural extinction: <i>According to us, Mandaeans, we were mistreated in Iraq, we didn't have a voice, people were scared to call themselves Sabians. Most of them would say they were Christians, but in truth we are Sabians. What that meant is that we were outside the Muslim religion, so the fact that we had to repress what we were is what would cause pain (M2, p25, female).</i></p>		N/A
Personal turmoil and living with war	<p>Loss of loved ones as a result of war.</p> <p>Fear for personal and family safety.</p> <p>Harsh and deprived living conditions that played a role in the development of pathology: <i>As soon as Saddam Hussein declared comprehensive war, they immediately shot the oil. We spent four years in Iraq sleeping in cars and in the street. Iran shot us with chemicals of all sorts. We ran away, they beat our house in the fourth year. It was destroyed... We spent years moving from one place to another (M1, p3, female).</i></p>	<p>Loss of loved ones as a result of war.</p> <p>Fear for personal and family safety: <i>We have come from a country that we have seen many trials and challenges, and because our heart has been broken, so when we have all these pains surfacing it all seems normal to us. We have seen and got used to wars, fear and killings and so when it comes to pain and suffering it means nothing to everyone around you especially in our community (A2, p39, female).</i></p> <p>Harsh and deprived living conditions that played a role in the development of pathology.</p>	N/A

(continued)

TABLE 2 Continued

Theme and subtheme	Mandaeen	Assyrian	Vietnamese
Adaptation to life as a migrant/refugee	<p>Refugee will always be a part of their identity: <i>We are like a tree that is uprooted, were brought and were put here. It is impossible we will live here as we used to be in our country!</i> (M1, p4, female).</p> <p>Dispersion of family and community throughout the world.</p> <p>Reflected on social and religious struggles, especially financial hardships, struggle to maintain family units and maintain their cultural responsibilities such as caregiver with their pain.</p> <p>Gratitude for new life in Australia and the support and safety afforded in Australia: <i>You can say, here is nice, people love me, they are nice, they cover on me, there is no problem. Ever since we came here, we are treated kindly. There are physicians, we get salaries, and we thank God. They don't leave anyone in pain! There is excellent care!</i> (M1, p1, female).</p>	<p>Reflected on the value religious institutions played in facilitating adaptation.</p> <p>Gratitude for the safety and comfort they found in Australian society: <i>Thank God for this country if we feel not well, we have the freedom to go outside walk around and forget about it. We have so many things to do to distract us from our pains/stresses</i> (A2, p38, female).</p>	N/A
Health framework	N/A	N/A	Pain can be caused by an excess or deficiency in 'am or duong': <i>When I was still a child, my friends advised me not to take off your shoes when you get home after a long time walking in sunshine. Because if you take off your shoes right after they been in hot temperature, coldness from the floor may attack and absorb in your body</i> (V1, p8, female).
Traditional beliefs	N/A	N/A	<p>Imbalance occurs by eating too hot food (V1, p6, female), too cold food (V1, p6 and p10, female), too much sour food (V1, p8, female) and too much fruit (V1, p10, female).</p> <p>Biomedical explanation such as Phong Thap or arthritis (V1 and V2, multiple participants), sciatica (V1, p8, female) and soft bone (V1, p6, female) could cause pain.</p> <p>Doctors had a role in investigating these pathological sources with the X-ray test (V1, p6, female).</p>
Biological/pathological	<p>Biological explanations such as joint degeneration represent one explanation for the cause of pain.</p> <p>Abnormal loading attributed to their 'hard works' in Iraq has contributed to the development of pathology: <i>We do hard works in Iraq, such as carrying Gas bottles on shoulders without a trolley, without driving. Taking it all on our shoulders and doing housework. This badly influences us</i> (M2, p19, female).</p> <p>Medicine has a role in determining and treating the source of pain.</p>	<p>Pain is attributed to organic pathology such as discs rubbing on to the nerves (A1, p12, male).</p> <p>Abnormal loading attributed to the hard labour endured and seen and... also the lifting of heavy items like the barrels of kerosene (A1, p18, female) has contributed to the development of pathology.</p> <p>Medical investigations such as X-rays support the biomedical nature of pain. Medicine is responsible for determining and subsequently treating the source of pain: <i>I think and feel that my pain is severe and I have they X-rays that show this</i> (A2, p41, male).</p>	N/A
Social	Social pressures such as financial hardship and inability to fulfil traditional roles had a direct impact and could cause pain.	N/A	N/A

(continued)

TABLE 2 Continued

Theme and subtheme	Mandaean	Assyrian	Vietnamese
Psychological	<p>Psychological cause: Ethnocultural repression was a cause of pain. Reminders of past traumatic events trigger pain. <i>Because the physical pain is the outcome of psychological pressures in the first place. Secondly, is the effort we exert in the house, particularly, the family that has parents with children in this country, want to raise up our children with all our efforts, with what we can afford; most of us are housewives. We provide them with their basic needs, meanwhile, we forget ourselves (M1, p 5, female).</i></p>	<p>Psychological comorbidity: Mood and emotional health problems influence pain, but are not causative: <i>... the times that we are living in and the life we have lived before... thinking about loved ones who are in another country or scattered around the world'. Depression is evident in our culture (A1, p17, female).</i></p>	N/A
The lived experience of pain	<p>Active religiousness—performing rituals to cleanse the body and mind: <i>I practice my daily religious rituals which me feel relaxed from within and comforts my pains; you just raise your hand and supplicate. The Mandeni religion is very strong and I believe in it. I love my religion very much (M1, p4, female).</i></p>	<p>Passive religiousness—praying and hoping: <i>she will leave it in God's capable hands, because he is the strongest doctor. Even the doctors say God is more powerful he is healing people (A1, p17, female).</i></p>	N/A
Spiritual coping	<p>Turning to the community and religious leaders for spiritual and emotional support: <i>We go to the hospital to consult, support and if they need anything, we help them reach it (M2, p28, female).</i> <i>Our Sheiks and our religious people, those who are concerned about us, as soon as I telephone them, tell them what happens to me, I ask their blessing and their appealing. They help me (M1, p4, female).</i></p>	<p>Seeking out and expecting emotional support from others: <i>a sister should be there to help me, to comfort me emotionally (A2, p39, female).</i></p>	<p>Actively seeking out solutions and guidance from others within the community: <i>I tell them all [referring to others within the community], I don't hide anything. Because I hope that if someone knows about this pain, he or she will tell me how to cure it (V1, p9, female).</i></p>
Social support seeking	<p>Distraction—engaging in activities, particularly community functions, to direct attention away from the pain: <i>My opinion is that people should help themselves by joining good people or communities, go out a little or if unable to go out, reading a newspaper, on the computer a little, watching TV... etc. So that all these elements help him forget a bit about the pain (M2, p20, female).</i></p>	<p>Distraction—engaging in activities, particularly community functions, to direct attention away from the pain: <i>We should ourselves try mixing with our community, may it be in our churches, at different functions and meetings because by doing this we tend to forget about our medical conditions (A1, p17, female).</i></p>	<p>Problem focused coping— Identifying aim and du'ong imbalances and directing efforts towards resolving these: <i>The weather changes then I feel tired. The pain gets worse, especially in joints... we can prepare a tub full of warm water, lay inside and relax our bodies. I insist we will feel much better (V2, p34, male).</i> <i>Sometimes I feel pain when I eat too much fruit. Sometimes I decide not to eat fruit and drink less water, I don't feel much pain... because my body can't bear "too cold" food (V1, p10, female).</i></p>
Cognitive coping			

M1 or M2, Mandaean focus group 1 or 2; A1 or A2, Assyrian focus group 1 or 2; V1 or V2, Vietnamese focus group 1 or 2; p, participant number; N/A, not applicable (i.e. theme did not apply for this community).

on different forms. Both the Assyrians and Mandaeans used community engagement as a means to direct attention away from their pain, while for the Vietnamese community, deliberate efforts were made to identify and subsequently remedy the specific âm and dương imbalance. Finally, consistent with the three communities' collectivist natures previously discussed, social support seeking was an important means for living and coping with pain.

## Discussion

This article is the first to explore ways in which chronic pain is framed and experienced by individuals from three CALD communities in Australia. In doing so, this research adds to the body of literature that speaks to the non-homogeneous and fluid nature of ethnoculture, recognizing multiple and intertwining variables including ethnicity, gender, religion, role category and/or social and community group membership (Fig. 3). An individual may draw concurrently from a multitude of cultural identities to frame their understanding of health and illness. The relative contribution of each cultural variable to an individual's experience of pain will vary, being influenced by socio-environmental contexts. This in turn impacts the explanatory model of disease that will manifest in different ways [2]. Skilful inquiry into these relative contributions will enable health care providers to approach pain management with sensitivity to the diversity of culture, while respecting the individual and their unique illness narrative.

Skilful inquiry should be underpinned by familiarization with the beliefs and practices of prominent ethnocultural communities, sensitizing health care providers to the ways ethnocultural identity may manifest and influence pain. Participants in all communities reflected that gender and family identity played significant roles in the experience of pain and coping methods. For some participants, gender and family roles strengthened their resolve to 'face the pain' (Vietnamese focus group 2, participant 30), while others communicated loss of identity related to an inability to fulfil this role. Inability to fulfil social and cultural roles has been associated with loss of identity and higher levels of psychological distress [35] and is important to address in pain management. In a similar manner, recognition of the therapeutic benefit of unity and sense of belonging fostered by collectivist ethnocultural communities should be cultivated [36–38]. Mandaean and Assyrian communities emphasized that maintenance of networks with the community were important for both preserving their ethnocultural identities and coping with pain, consistent with previous research with Middle Eastern migrants [38]. Importantly, these networks served as points of access to information about health services and a formal structure for social support. Such community networks can be valuable resources for health care providers seeking to engage CALD patients in active behaviour change by fostering acceptance for treatment concepts [36].

Spiritual identity was an important part of patients' pain narratives, reinforcing known associations between

spirituality and chronic pain [39, 40]. Spiritual beliefs should be important considerations for health care providers, as they may facilitate or impede engagement with pain management therapies. For example, the use of active spiritual coping by Mandaean participants could be said to promote an internal locus of control and be therapeutic. Conversely, the passive spiritual coping adopted by the Assyrians may impede providers' attempts to promote patient self-management [39]. Given that evidence suggests that positive spirituality may promote psychological and physical well-being and provide a means for coping with chronic pain [39, 41], health care providers may want to adopt practices to facilitate assessment of the pain-relevant aspects of a patient's spirituality. Indeed, McCord *et al.* [42] reported chronic pain was a condition, among other health diagnoses, where patients from a variety of ethnocultural backgrounds welcomed spiritual discussion by their health care providers. Thus, in keeping with principles of patient-centred care, health care providers should approach patients holistically, attending to cultural and spiritual dimensions in addition to the physical and psychological ones.

Incorporation of a patient's worldview into therapeutic decision making requires an ability to unravel the explanatory framework for a patient. A patient's explanatory model dictates their health and illness behaviour and influences their satisfaction and utilization of health care [8, 43]. Our research highlighted that members of the same ethnocultural community share explanatory frameworks, represented by similarities in their narrative of causation, course and consequences of chronic pain. These explanatory frameworks appear to be influenced by ethnocultural identity, migration experience, personal experience and the socio-environmental context within which they are experiencing pain. For example, the Vietnamese explanatory framework could be attributed to a number of potential influences, including Vietnam's traditional Chinese medicine foundations, the prominent use of Western biomedicine in Vietnam and acculturative influences from living in a Western society [43–45]. Thus health care providers need to look beyond traditional cultural beliefs and explore the individual patient's acculturative influences and personal experiences in their construction of chronic pain explanatory frameworks.

The degree of patient alignment with the current biopsychosocial framework is an important consideration for providers attempting to engage patients with psychosocial therapies. The Mandaean community was the only community that iterated psychosocial elements as causative of chronic pain, while the Assyrians, a community from a similar geographic and national culture as Mandaeans, presented a predominantly biomedical view of pain. Importantly, the Vietnamese did not associate psychological health with chronic pain. Such contrasting views highlight a need for caution among health care providers adopting psychosocial treatments. For example, a Vietnamese patient may find attempts to establish a link between psychological health and chronic pain confronting, given the stigma associated with mental

illness in traditional Vietnamese culture [46, 47]. Similarly, Assyrians, like many Middle Eastern ethnocultural communities, may not recognize, accept or engage in psychological treatments [48, 49]. Thus health care providers should approach therapeutic encounters with the flexibility to reframe pain management approaches in ways that are ethnoculturally acceptable.

The process of migration and subsequent status as a migrant or refugee influenced the three CALD communities in different ways. For the Vietnamese community, identification as a migrant or refugee did not appear to relate to their experience of pain, but was expressed to different degrees by Assyrian and Mandaean participants. The relative importance of this theme may relate to the duration of settlement in Australia and the degree of social adjustment. The Vietnamese community had, on average, a longer time in Australia, while the Mandaean community had the shortest. Such differences argue for caution when approaching CALD migrant communities with chronic pain. It is not appropriate to assume that migration is a significant influence on pain for all migrants. Further, the length of time in a country may either dilute cultural identity or strengthen it according to an individual's degree of acculturation [50]. Therefore providers should feel comfortable to inquire into the migration history to ascertain the extent that migration and related stressors may contribute to the individual's illness experience.

Research focusing on pain and cultural diversity is dominated by quantitative studies focusing on pathology. Thus the qualitative literature in this field is in its infancy, with recruitment of hard-to-reach or hidden populations presenting a challenge to research [7, 51]. To meet this challenge, we used non-random purposive sampling. While this has provided rich and valuable data, it is not possible to generalize the findings to the broader community. Based on the limited sample, it is possible that community members with different socio-demographic characteristics may have different beliefs and attitudes. Further, while health behaviours and explanatory models of disease vary according to ethnoculture, ethnoculture is not the sole determinant of health behaviours and health outcomes. Rather, ethnoculture is one factor among a number of variables, including sociodemographic factors, influencing health beliefs and behaviours. Finally, the findings are not intended to be authoritative regarding Assyrian, Mandaean and Vietnamese approaches to chronic pain. To interpret the findings in this manner would perpetuate ethnocultural stereotypes that assume any patient who identifies as Mandaean, Vietnamese or Assyrian operates with a core set of static beliefs linked to ethnocultural identification.

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## Supplementary data

Supplementary data are available at *Rheumatology Advances in Practice* Online.

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