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Healthcare Professionals' Perceptions of Psychological Treatment for Chronic Pain in  
Singapore: Challenges, Barriers and the Way Forward

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treatment experiences; outpatients.

## **Abstract**

**Purpose:** There are very few studies on healthcare providers' experiences of delivering treatment for chronic pain in a Southeast Asian setting. The aims of this study are to understand the experiences of professionals delivering treatment for **people with** chronic pain in Singapore and identify possible barriers to psychological treatment for this condition within the broader experiences of these professionals.

**Method:** Healthcare professionals with at least one year experience treating chronic pain were recruited and purposefully sampled. Fifteen inductive semi-structured interviews were conducted to explore healthcare professionals' experiences of treating people with chronic pain. Interviews were transcribed verbatim and analysed using thematic analysis.

**Results:** Four main themes were identified: 'System Barriers', 'Core Beliefs and management of Chronic Pain', 'Engaging Patients in treatment', and 'Creating Awareness for Chronic Pain Management.' Professionals trained in a multidisciplinary approach to pain management were seen as rare. Professionals who could refer patients for psychological treatment do not refer due to costs, and their perception that patients may lack understanding of such a treatment.

**Conclusion:** Reducing barriers in the access to psychological treatment in settings like Singapore will require a multifaceted approach.

## **Introduction**

Healthcare professionals quite naturally can exert significant influence on the treatment experience of people with chronic pain. Healthcare professionals' clinical choices, methods, and delivery style are influenced by their past experiences, education, knowledge of evidence, and personal beliefs [1-2]. Patient-related and policy-related factors specific to the health service, including influences of the medico-legal system, also can contribute to the way patients are treated during the medical consult [3-5].

Studies from North America have shown that limitations in knowledge and skills related to pain management among clinicians could be a contributing factor to inadequate pain management [6-7]. For example, it appears that patients are not referred to multidisciplinary pain treatment because their doctors are either not aware of its availability or do not believe it is effective [7].

## **Psychological Treatments for Chronic Pain**

Research consistently demonstrates the efficacy of psychological treatments for chronic pain [8-10]. In particular, treatments based on cognitive-behavioral therapy (CBT), perhaps the most often applied **psychological** treatment model, appear efficacious for chronic pain [11-12]. At least in Europe and North America, the multidisciplinary pain management approach, based on a biopsychosocial model and including CBT, has been widely recommended as a standard chronic pain management treatment approach [13-14]. This approach is less common in Southeast Asia [15-16].

## **Bridging the Gap**

There are few studies detailing the experiences of healthcare professionals in the treatment of chronic pain in the wider Southeast Asian population. Similarly, there are few if any that

address current views of psychological treatments for chronic pain, and any factors that may affect access to these treatments. A recent systematic review found a total of seventeen psychological treatment outcome studies focused on chronic pain in East and Southeast Asia, a majority of these studies only published in the last ten years [17]. It appears, however, that there are no studies from Southeast Asia detailing the experiences of healthcare professionals with regard to these treatments. Singapore's complex mix of four separate cultures, Chinese, Indian, Malay and Eurasian, results in a unique context for healthcare delivery, a context that is both distinctive and may also inform a general perspective on the health of the wider Southeast Asian population.

The purpose of the current study is to examine health care provider experiences of psychological treatments for **chronic** pain in Singapore. The use of qualitative methodology in this study is an appropriate choice to explore the opinions, perceptions and experiences of various healthcare professionals and their interaction with psychological treatments for chronic pain in this context. Given the lack of previous research, this study aimed to include in-depth exploratory qualitative analysis of the experiences of those who provide treatment for **people with** chronic pain in Singapore as a way to support potential improvements in patient care.

## **Methods**

This study was approved by the Domain Specific Review Board DSRB: 2012/00717 in Singapore. All participants provided written informed consent to participate in this study.

## **Design**

An inductive semi-structured interview format was used to obtain in-depth and detailed information about healthcare professionals' experiences of providing treatment for people with chronic pain in Singapore, as well as their thoughts on referring people with chronic pain for psychological treatment. All interviews were conducted in English. The unique style of English in which Singaporeans communicate in is reflected in the healthcare professionals' quotes.

### **Participants**

Healthcare professionals, who have had **at least one year's experience treating chronic pain in Singapore**, were recruited via an e-mail invitation through the membership list of the Pain Association of Singapore (PAS) as well as directly through local hospital pain clinics, including partially government funded and privately funded clinics, in Singapore. Participants were excluded if they did not have experience treating patients at outpatient clinics. **As we wanted to gather a variety of responses, in addition to the e-mail invitations we directly invited** a group of healthcare professionals with different training backgrounds. **This included the types of professionals that usually provide treatment for pain whether in multidisciplinary or unidisciplinary settings.** We interviewed medical professionals, allied health professionals and non-conventional treatment providers. Recruitment of participants proceeded until data saturation was reached through the use of constant comparison and review of the data. Data saturation is the point where including additional interviews did not result in the creation of new themes [18-19]. **Data saturation was reached at 15 participants.** **All participants who were approached agreed to participate.**

Our final sample of participants (N=15) included five pain physicians , three pain nurses , one psychologist , three physiotherapists , two occupational therapists , and one osteopath who were currently and predominantly working with patients with chronic pain. All participants had at least basic knowledge of the use of psychological treatment for people with chronic pain. A total of eight men and seven women participated in the study. The participants' median age was 40 years (range 27-56) with a median of 8 years (range 1.5-15) of working with people with chronic pain. Table 1 provides a summary of the participant characteristics.

*[Insert Table 1 about here]*

### **Procedure**

Healthcare professionals who agreed to participate were interviewed in a private room at their workplace. The primary researcher (S.Y.) explained the study to each participant separately and also provided a study information sheet for participants to review prior to signing the informed consent form. Participants who agreed to participate were then given a consent form to sign. All interviews were audiotaped and the researcher kept a reflective diary to record observations and impressions from each of the interviews. The interviews followed a prepared interview schedule (see Appendix A for details) that comprised of open ended questions and lasted between 10 and 40 minutes (average 22.51 mins). Participants were broadly asked about their experiences of treating chronic pain patients in Singapore, their thoughts about psychological treatments for chronic pain and referring patients for such a treatment. Participants were also asked to suggest ways to improve the uptake of these treatments. All interviews were fully transcribed. Nvivo 10 software was used for data management.

## Data Analysis

Data analyses included both inductive thematic analysis [20] and features of grounded theory [21]. Framework analysis [22] was used in the coding process. The method of constant comparison used in framework analysis was adopted in the coding procedure, where S.Y. first listened to the interviews and coded the transcripts line by line. The first five transcripts were coded and codes that were most common and applicable to the research question were then applied to the next five transcripts and subsequently to the remaining five transcripts. To ensure that the codes identified were both consistent and reflected the true nature of the data, a coding manual was created allowing for constant comparison and refinement between codes [21]. The coding manual was refined and updated each time new codes were identified. To ensure that themes were grounded in the complete data set, all new codes were applied to earlier transcripts and codes checked by two co-authors (A.B. and R.M.M.). Main themes and subthemes were formed from the classification of codes which identified similar characteristics of the data. After a thorough discussion of the interviews, codes and themes, all authors came to an agreement on the final set of themes and subthemes that accurately reflected the data. Participants were subsequently classified according to their **professional background, gender, age and the type of service they worked for (private practice or partially government funded hospital)**. The code of 'P' was given to physicians, 'N' to nurses, 'PT' to physiotherapists and 'OT' to occupational therapists. The code of 'PP' was given to those who were in private practice and 'PGF' given to those who were working in partially **government funded hospitals**. All participants were given a participant number for purposes of confidentiality and anonymity with all identifiable data in the transcripts removed.

## Results

There were a total of four main themes of “System Barriers”, “Core Beliefs and management of Chronic Pain”, “Engaging Patients in Treatment” and “Creating Awareness among Health Professionals”. The theme and subtheme labels and their categorisation are shown in Table 2 and described in turn.

*[Insert Table 2 about here]*

### System Barriers

*“Challenges to get a group of people who are interested in chronic pain management”*

A major challenge expressed by participants, was finding a group of like-minded professionals who were interested in chronic pain management. Many of those interviewed felt that the current training, for both medical and allied health professions, is to blame for the lack of knowledge in pain management. With regards to the specialist area of psychological treatment for chronic pain, *“within the group of psychologists that are available... there are very few of them who are interested in chronic pain and managing patients with chronic pain.” (P3, male, 40, PGF)*

*“Top down approach takes a long time to change things”*

Participants expressed that the “*current healthcare system in Singapore it's ...hierarchical.*” (P3, male, 40, PGF), and pain management services have been given a low priority by higher management.

“(the) hospital is not very supportive in terms of...setting up of a pain management service or centre...because they say... that is not really very important.” (N2, female, 38, PGF)

With this perceived status of pain management in Singapore, many participants felt that challenges within the healthcare system were major barriers to more effective pain management with “*the awareness of chronic pain treatment itself... to be improved amongst hospital practitioners.*” (P5, male, 51, PGF). In comparison to other pain management facilities overseas, participants generally felt that “*locally we are not doing as much as some of the overseas setting*” (PT 1, female, 36, PGF)

### *Lack of Resources*

A lack of resources including areas of funding, particularly considering the evidence base for psychological treatments, was further cited by participants as a potential barrier to effective chronic pain management in Singapore. Most of the participants, apart from one, felt that high treatment costs from a lack of medical funding deter patients from attending psychological treatment sessions. Such costs also appeared as a deterrent for participants referring patients to see a psychologist for pain management.

*“In terms of healthcare funding I’m a firm believer that more can be done. That the current levels of funding are not sufficient and we have a significant number of patients who cannot afford their treatments because of funding issues ...I mean it applies to psychotherapy but it also applies to medication costs or even acupuncture.” (P3, male, 40, PGF)*

Although participants believed that patients would benefit from an intensive group based CBT, they were cautious in referring patients for this treatment due to treatment costs.

*“In Singapore I think is the cost of it, because we tried to organise you know the CBT...when the costing came... up to a thousand (\$) for group therapy you know per person. In Singapore it’s not really very possible...in the patients that I have broached the subject to... you know they find that the cost is too hefty for them to bear... for patients to come up with cash up front maybe they will not be so keen...” (P1, male, 39, PP)*

Participants felt that obtaining the government’s approval for the use of medisave (medical savings scheme) [23] for treatment of chronic pain would be helpful. With medisave, individuals who require medical services in Singapore can utilise this special account to pay for their personal or immediate family's hospitalization, day surgery and certain outpatient expenses. Medisave does not currently cover the costs of outpatient chronic pain treatment. Participants felt that medical subsidies for pain treatment would help patients who could not afford treatment, allowing them to receive the treatment they need and not just the treatment they could afford.

*“at the moment they are allowing medisave to be deducted for chronic cases like diabetes and all that right?...Ministry of Health needs to acknowledge that pain is as chronic as... diabetes as chronic kidney disease...If that happens then people will come forward (for treatment). (OT 1, male, 45, PP)*

### *Lack of Psychologists*

Apart from funding issues and treatment costs, participants felt that a shortage of appropriately trained psychologists specializing in chronic pain management is another major barrier. **In addition**, some participants believed that it is not a simple lack of personnel trained in psychology that is a problem but psychologists lacking pain management skills partly due to a lack of appropriate, specific, professional training.

*“We do have psychologists who can help us...they do have some experience...but they are not very well trained in terms of chronic pain management.” (N2, female, 38, PGF)*

Participants suggested that one of the ways to manage this lack of psychological resource was to train advanced practice nurses or other allied health professionals in basic psychological methods.

### *Lacking a Biopsychosocial Approach*

## Healthcare Professionals' Perceptions

In terms of the broad approach to chronic pain management, participants felt that healthcare professionals *“tend to adopt a very medical model rather than looking at the... biopsychosocial model.”* (P5, male, 51, PGF). Participants felt that many of their counterparts are unlikely to refer patients for psychological treatment *because they don't know much about psychotherapy or what psychologists do.”* (N3, female, 41, PGF)

*“I belong to the old MBBS structure (Bachelor of Medicine, Bachelor of Surgery) where... the amount of psychology we are exposed is very minimal.... Most of the psychology I picked up later when I was doing pain exam. So in the undergraduate years you get very little psychology so you don't actually know what the psychologist actually do...the benefit of psychology therapy...not very well understood across the board. So people don't really know what is beneficial...unless they are blatantly quite mad...most of the time we don't think of referring to psychology...they obviously looks very anxious...they have some very strange way of thinking so it's obviously out of norm... maybe this one will benefit from psychology.”* (P2, male, 40, PGF)

*“I think most of the physicians treating pain still treat it as a one dimensional sort of disease...they don't realise that the patient that comes to see you for pain problems actually have a multitude of problems and that can also be psychosocial...with the increasing clinical workload and administrative of all the doctors it is very hard for a physician to actually explore the psychosocial make-up of the patient...”* (P1, male, 39, PP)

Many of the participants expressed that building public awareness of what a psychologist can do for people suffering with chronic pain and educating all health professionals on the need for a multidisciplinary approach to chronic pain could help in reducing misconceptions and increase understanding of the benefits of psychological intervention.

### **Core Beliefs and Management of Chronic Pain**

Many participants felt that it was difficult to work within the chronic pain field as they *“have to deal with ... mistaken beliefs...from both patients and fellow healthcare professionals about how chronic pain is viewed and how it should be managed.” (P3, male, 40, PGF).*

Some participants felt that *“some of the specialists haven't really kept up to date perhaps...they think their approach is best that's why they do it.” (Osteopath, male, 42, PP).*

Participants suggested that all *“healthcare professionals involved in the care of the patients would do well to learn about...the various psychological constructs... or problems that may...manifest in a chronic pain patient and therefore be able to identify and then follow up with a referral for treatment.” (P3, male, 40, PGF)*

*Many participants expressed that they chose not to refer patients as they felt that patients were not ready to be referred for psychological treatment.*

*“if you bring up too early...people think that you think there is no other treatment for them and they think that you think that they are a bit crazy or mad... people who don't really like a*

*lot of medicine they... believe that their body has ability to recover on their own... physical therapy and psychological therapy works very well for them... they tend to...be more motivated and... practice what you teach them.” (P2, male, 40, PGF)*

### *Health Professionals' Perception of Patients' Perception of pain*

Participants had their own perhaps pre-conceived ideas about patients' perception of pain. They felt that patients often displayed a cure seeking behaviour; had fixed beliefs about pain, and *“If you talk about psychological therapy, they either think you are accusing them of psychological problems or that they are imagining the pain” (P2, male, 40, PGF)*

*“For some patients...to manage the chronic pain for life is not within their belief... it is a very big challenge trying to work with this group of patients, they may appear resistant...They want a cure they are hoping we can do something to help them take away the pain.” (Psychologist, male, 30, PGF)*

Participants believed that among people with chronic pain, it is likely that many would have a misconception about psychological intervention for a chronic pain problem, and would tend to be concerned about being referred to see a psychologist. This was highlighted as a major barrier for healthcare professionals referring to such a service, having to deal with such resistance from patients.

*“Most of these patients that I see...feel there is a stigma, are you referring that I am depressed, I'm a xiao (mad) you know? So...the moment we...talk about... referring you to a psychologist or a psychiatrist, from that instance they tend to be a little bit worried.”(N3,*

*female, 41, PGF)*

### **Engaging Patients in Treatment**

In terms of being able to engage patients in treatment, participants felt that **the most important way to engage patients in treatment was to** develop a close and therapeutic relationship with patients. **Educating patients on the benefits of psychological therapy for pain and involving the patients' family as a form of support for patients during the treatment process are also important components in engaging patients in treatment.** A hindrance to such efforts would be patients holding onto a biomedical model and other challenging beliefs in the process of treatment.

*“Besides pharmacology, to be successful in treating this group you definitely need... a very close and therapeutic relationship...before they open up themselves to you and willing to learn and listen to you.” (N3, female, 41, PGF)*

*“Education is one... anything that you would like people to know and support... first of all you need to tell them, educate them what it is, how it works and what is the benefit?” (N2, female, 38, PGR)*

### **Creating Awareness for Chronic Pain Management**

Participants suggested that endorsement of psychological treatment for chronic pain through

mutual sharing at journal clubs, seminars, and conferences including experts from overseas to share their experiences, would be helpful to publicise treatment to healthcare professionals. Suggestions were also made to make educational material more accessible to patients, communicate success of psychological treatment through 'word of mouth' and to utilise the media and technological platforms; with use of regular e-mail announcements, audio and video recordings, iPhone applications, engagement of social media, like Facebook, and creating online treatment to facilitate treatment uptake.

## Discussion

Based on the findings from the current study, from participants' perspectives, chronic pain treatment in Singapore is predominantly restricted by system barriers that are currently in place within healthcare. Participants felt that their exposure to mainly a biomedical approach during their training and limited exposure to psychological treatments has resulted in a lack of a multidisciplinary treatment approach to chronic pain. Lack of resources in funding chronic pain treatment, leading to high treatment costs, and a lack of psychologists interested in managing chronic pain has also contributed to a low profile for psychological treatments in this area and a lack of awareness among professionals about the effectiveness of these treatments. From participants' view, patients and other healthcare professionals continue to have a stereotypical understanding that psychological treatment is only suitable for people who have clear mental health problems. These numerous barriers appear to contribute to low referral rates and ultimately limited access to psychological treatment for chronic pain. To the best of our knowledge, our findings contribute to the first qualitative study of healthcare professionals in the area of chronic pain conducted in Singapore and Southeast Asia.

In this study, it is interesting that healthcare professionals who seemingly support the biopsychosocial model of pain management chose instead not to refer patients for psychological treatment. Participants perceived numerous barriers on the part of patients in treatment: treatment cost and affordability, an emphasis on seeking a cure, fixed beliefs about pain and a perception that patients will feel they are being accused of imagining the pain. With these presumptions in place, many of these health professionals often chose not to explore this treatment option with patients. In the words of one participant, he was surprised that his patients were receptive to a referral for psychological treatment as he thought that patients would reject such a suggestion. In the end it appears that healthcare providers are presuming patient resistance or disinterest before checking to see if this is indeed the case – this represents a significant and seemingly unnecessary barrier to access.

In many ways, our findings are similar to findings from Europe. In particular, similarities in healthcare professionals adopting a biomedical model over a psychosocial model in treatment [24], healthcare professionals needing specialist training to assess and treat psychosocial issues related to chronic pain [25-26], and a lack of resources for chronic pain treatment [27]. Considering the pre-dominant western influences in many aspects of the healthcare system and in Singapore society as a whole, perhaps, these similarities are not so surprising.

The current healthcare system in Singapore including the curriculum for trainee doctors appears to emphasize a biomedical model of treatment. **Studies examining the influence of treatment delivery from a biomedical model have predominantly been conducted with patients with chronic low back pain with limited data on patients with general chronic pain. Specifically, a** biomedical style of undergraduate training was shown to be associated with increasing negative beliefs and attitudes about low back pain [2, 28]. Delivering treatment from a biomedical model can lead healthcare professionals to unwittingly play a part in

adding to patient disability arising from chronic low back pain, by heightened attention to disease or limiting the level of their daily activities [2, 29]. Earlier studies have shown that the attitudes and beliefs held by nurses were more important than their knowledge of particular aspects of care and treatment [30-31]. Such beliefs and attitudes held by health professionals about pain and disability are likely to influence the treatment recommendations that they provide to patients [32-34] and patients' pain related behaviours and pain coping strategies [2, 35-36], **such as in the context of low back pain. Considering that a high incidence of chronic pain complaints stem from the suffering of low back pain, these results may one day be replicated in a wider range of conditions.**

Patients with chronic pain want an empathic and expert practitioner who can deliver a suitable treatment for them or refer them elsewhere [37]. Medical consultations that involve good communication between the physician and patient and involve the patient in treatment are likely to result in better treatment adherence [38]. These issues emphasize the importance of assessing patients' perceptions and feelings and tailoring treatment information to fit their needs.

Building public awareness of psychological treatments for pain may further help in reducing misconceptions and increase understanding of the benefits of psychological treatment. The use of technological advancements has been suggested as a means to promote psychological treatment for pain. This has not been done for chronic pain management in Singapore. A recent systematic review of internet interventions for pain concluded that CBT-based internet programs showed an improvement in pain, activity limitation and costs associated with treatment, with less consistency shown for effects on depression and anxiety [39]. Internet based interventions are still developing, but they appear to hold promise for pain treatment in the future [40].

## Study Limitations

Following the methodology of data saturation, recruitment stopped only when data saturation was reached. Data saturation is the point where recruiting one more participant would not contribute new data to the existing data collected. Nonetheless, a limitation of our methods is the possibility that important views were missed.

Secondly, the primary researcher also sits as a council member on the PAS, which is a small organization in a small community. This status could have also **influenced** the participants who volunteered for this study by virtue of association. Five of the healthcare professionals who participated in this study are members of the PAS. A review of the primary researcher's reflective diary however revealed that these participants appeared equally forthcoming and presented a balanced view in their responses. Both positive and negative views on the status of psychological intervention for chronic pain in Singapore were offered.

Questions in the semi-structured interview were kept as open as possible. However it is possible that some of the prompts could have led or influenced responses for participants.

Although qualitative methodology **appears to have been an appropriate** form of enquiry for this study, we also recognize the general limitations of this methodology. Qualitative methodology does not provide a basis for illustrating the occurrence of events on a wider population basis nor can causal inferences be made from the data. **As our data were collected from only one city in Southeast Asia, generalization to other populations and regions, such as other areas in Asia, is unclear and will need more study.**

## Conclusions

Overall our findings expand our general understanding of barriers to psychological treatment for chronic pain by providing us some insights into healthcare professionals' perceptions and experiences in Singapore. Ironically, healthcare professionals who seemingly support psychological treatment for chronic pain appeared to contribute to these barriers to treatment access and to further treatment development. Findings regarding barriers to psychological treatment from our study are similar in many ways to results from qualitative studies conducted in Europe. These barriers wherever they occur may have a kind of self-perpetuating quality, where a lack of knowledge, awareness, resources, utilization, and local evidence, each feed into each other, in a cycle of misconception and failed engagement.

If the results found here are later verified in further research, they imply that improving access to appropriate treatment in settings like Singapore will require a multifaceted approach. This is likely to include policy initiatives, funding arrangements, changes within the structure of education and training, dissemination of research findings, greater collaboration between service providers and service users, and significant service developments that are both sensitive to general attitudinal barriers and some that may be unique to Southeast Asia.

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### **Declaration of Interest**

The authors report no declarations of interest.

Appendix A

Interview Questions

1. Tell me about your experiences of treating chronic pain sufferers in Singapore?  
[If needed prompt with the following:
  - a) What are some of your thoughts about the current available treatment?
  - b) Please describe some of the successes and challenges you have had in providing treatment for patients.
  - c) How helpful is the treatment or treatments in helping patients manage pain effectively?]
  
2. What are your views on referring patients to a treatment with a focus on Cognitive Behavioral Therapy (CBT) to manage their pain problem?  
[If needed, prompt with the following:
  - a) Tell me some of your thoughts and feelings on treatment that focuses on teaching patients to change patterns of behavior to manage their pain problem.
  - b) How effective do you think this sort of treatment will be in helping patients function better with pain?]
  
3. We would like to understand why some healthcare professionals might be accepting of psychological treatment as a treatment for chronic pain and why others might not. In your opinion why do you think this is so?
  
4. Is there anything that could be done to facilitate the use of a psychologically based service for chronic pain?

5. In order to make psychological treatments more accessible to chronic pain patients, we are interested to design a treatment that professionals like you would be keen to use as a service for your patients. Some of our goals in designing this service would be to make sure it is used and that it is affordable. We would also want it to focus on helping patients manage their pain more effectively, to function better in their daily life, and eventually reduce hospital/clinic visits. What do you feel such a treatment would need to include to achieve this?

[If needed prompt:

- a) How might we label or describe the service so that it would capture your interest?
- b) How do we make it affordable?
- c) Is there anything else you feel we would need to incorporate? ]

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**Table 1: Participant Characteristics**

|  | Pain Physician | Pain Nurse    | Psych     | PT            | OT            | Osteopath |
|--|----------------|---------------|-----------|---------------|---------------|-----------|
| Total number in each group                   | 5              | 3             | 1         | 3             | 2             | 1         |
| Median age (range as relevant)               | 40<br>(39-51)  | 41<br>(38-56) | 30        | 36<br>(33-37) | 36<br>(27-45) | 42        |
| Gender Ratio                                 | Male: 5        | Male: 0       | Male: 1   | Male: 0       | Male: 1       | Male: 1   |
|  | Female: 0      | Female: 3     | Female: 0 | Female: 3     | Female: 1     | Female: 0 |
| Number of participants per type of practice  | PP: 2          | PP: 0         | PP: 0     | PP: 1         | PP: 1         | PP: 1     |
|  | PGF: 3         | PGF: 3        | PGF: 1    | PGF: 2        | PGF: 1        | PGF: 0    |
| Median years of practice (range as relevant) | 8<br>(5.5-10)  | 9<br>(7-10)   | 1.5       | 7<br>(3-15)   | 6<br>(2-10)   | 10        |

Psych, Psychologist; PT, Physiotherapist; OT, Occupational Therapist; **PP, Private practice;**

PGF, Partially government funded

**Table 2: Summary of Main Themes and Sub-Themes**

| Main Themes                                     | Sub-Themes  |
|---|---|
| System Barriers                                 | Challenges to get a group of people who are interested in chronic pain management |
|   | “Top down approach, takes a long time to change things.”                          |
|   | Lack of resources   |
|   | Lack of psychologists   |
|   | Lack of a biopsychosocial approach  |
| Core beliefs and management of chronic pain     | Health professionals' perception of patients' perception of pain                  |
| Engaging patients in treatment                  | Close and therapeutic relationship needed   |
|   | Educate patients on the benefits of psychological treatment                       |
|   | Involving patient's family in treatment   |
| Creating awareness for chronic pain management. | Endorsement from health professionals   |
|   | Endorsement through patient experience  |
|   | Use of media and technology   |

### **Chronic Pain Management**

- A multifaceted approach is required to reduce barriers to psychological treatment for chronic pain in settings like Singapore.
- Educating healthcare professionals on the need for a multidisciplinary approach to chronic pain could help in reducing misconceptions and increase understanding of the benefits of psychological approaches.
- Utilizing both media and technological platforms as a means to facilitate psychological treatment uptake for chronic pain may be a way forward for a technological savvy generation.