

PainBlog

Never suffer alone again

Problem Space

The aim of our project is to assist people suffering from chronic pain to be seen and heard, as well as reduce stigma by raising awareness.

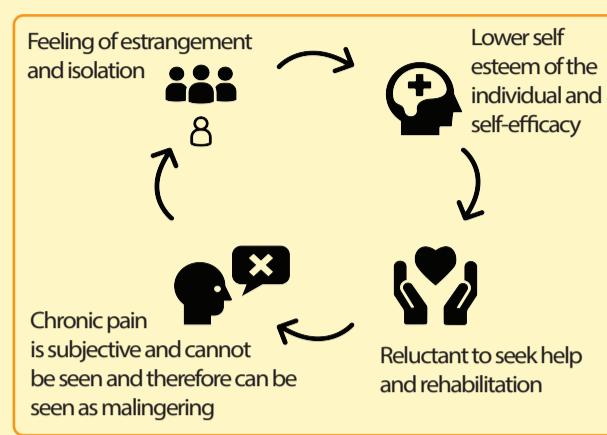
Stigmatisation is defined as a process by which the reactions of a community disregard a person's identity based on their own perceptions.

This causes the person to be devalued and socially excluded from society.

From our domain research, we managed to uncover a few pointers on how chronic pain might lead to mental health issues. More often people suffering from chronic pain are being judged as non-sufferers often struggle to understand the complexities of chronic pain. They are unaware of the fact that chronic pain might lead to various psychosocial elements, which might be tough for sufferers to deal with.

Based on what we have found, however, most of the solutions we found emphasise more on the original problem that causes the pain and not enough on the fact that there might some external factors that might affect the sufferers.

By allowing communities to develop empathy, we will be able to encourage chronically ill persons to have more confidence to talk about their conditions, as well as educate the non-sufferers on visualising the pain that chronically ill people are suffering, therefore reducing stigmatization and increasing empathy towards chronically ill people.



Concept

Based on this article, theorists have suggested some people find it easier to express their "true selves" online than in person. Micro-Blogging has become popular quickly, raising its potential for becoming one of the most efficient communication mediums. This research is aimed at gaining an in-depth understanding of why and how people use micro-blogging tools to express themselves.

Studies have shown that information communication allows users to develop common ground, and sustain a feeling of connectedness with one another. Through opportunistic conversations in informal communication, people often get to experience and hear about other people stories. Keeping each other in check helps build a background perception about a person.

Studies suggested that some people may express their true selves more freely on online platforms rather than face-to-face interaction. Researchers suggested that people who are socially anxious may find it easier to express their true selves online as usually these traits act as a barrier to relationship formation in the offline world.

After doing a thorough research, we decided to interview people who are currently struggling with chronic pain. Based on the interviews, we found out that interviewees prefer either wearable device or using an online platform. What struck us the most was when one of the interviewees said that it was embarrassing if people were to keep constantly checking her pain level. Interviewee stated that she prefers some privacy and it is better for her to share her information on an online platform. Upon further consideration, We decided to put more emphasis on the research and taking the feedbacks from the interviews.

Process

1. Research

We researched on:

- > The attitudes of people towards chronic pain
- > Mental health with chronically ill people



Through research, we found that:

- > Through a study conducted by The National University of Australia, 38% of people who are struggling with chronic pain face stigma about one's self which is a major contributor to mental illness
- > Internalized stigma can be caused by feeling of estrangement or isolation or unhealthy perception of others
- > Feeling of isolation can be triggered by people who suffer from chronic pain themselves because of how they perceive their condition
- > Lower self esteem also reduces the affected parties' belief that they are able to carry out activities despite their pain and their motivation to seek professional care

2. Proposal

To help raise awareness with sufferers chronic pain with the non-sufferers, we came up with the idea of using:

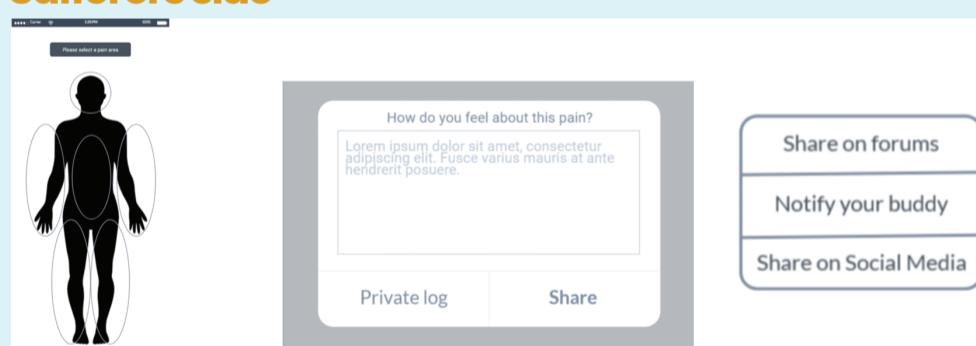
- > A device with lights to put on the sufferer's workplace
- > An app
- > A wearable device

We initially had the idea to have a device that connects from sufferers' pain to non-sufferers' pain, but it was biased for non-sufferers feeling empathy, since we are only increasing empathy on non-sufferers side but not letting them talk about it.

4. Prototyping

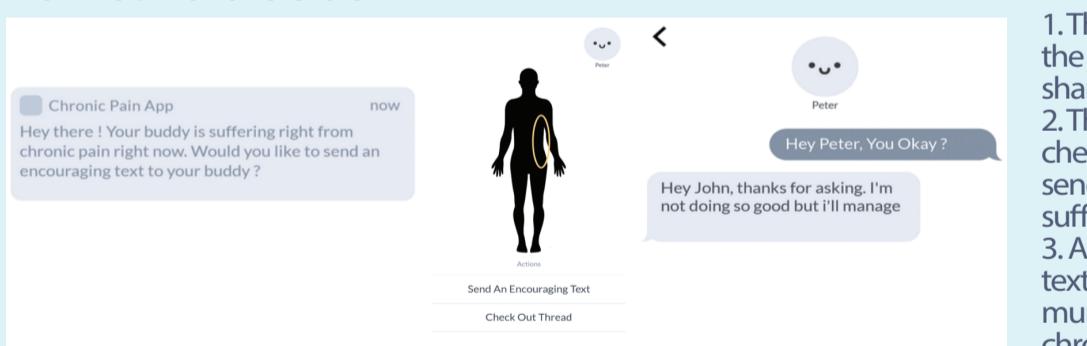
We used Marvel to prototype the app interface. In this case, we focused on the user experience rather than the aesthetic of the prototype.

Sufferers side



1. The wearable device detects pain
2. The app asks sufferers to point out which areas they are feeling pain in. We then give them an option to share how they feel about the pain, then we give them the option to share their pain or not. We then go to the non-sufferers' side of the app.

Non-sufferers side



1. The non-sufferer is notified of the sufferer's pain if they choose to share it
2. The app asks if they want to check out the sufferer's thread, or send an encouraging text to the sufferer
3. Allowing the non-sufferers to text sufferers helps bridge communication barrier in terms of chronic pain between them

5. Research and Interview

We chose to focus more on research to bring our app on fruition.

We did more research while finding a chronic pain sufferer to interview for our app and concept. We are starting to lean more towards microblogging primarily as a solution, mainly because of an article (microblogging.pdf, found in Github) that describes how microblogging can alleviate emotional pain and stress, as well as stigma. We found out that microblogging can build relationships and develop a safe environment for sharing, especially with the option of being anonymous. Sufferers have the choice to be anonymous by posting onto the app "public" page, or they can choose to reveal their identity through posting on social media.

We did a 'think aloud' and interview on one person suffering from chronic pain.

The feedback gathered was as follows:

- For sufferers,
- > Having the option to make their profile private because they might be sensitive when it comes sharing their pain to a stranger
 - > Having a group function where both sufferers and non-sufferers to communicate together instead of waiting for their buddy to reply
- For non sufferers,
- > Purpose of the prototype was unclear to the user
 - > Narrowing it down for specific body parts for pain analysis or zooming it in so that it will be clearer for non-sufferers to view where the pain is (Zooming in, Search Button)



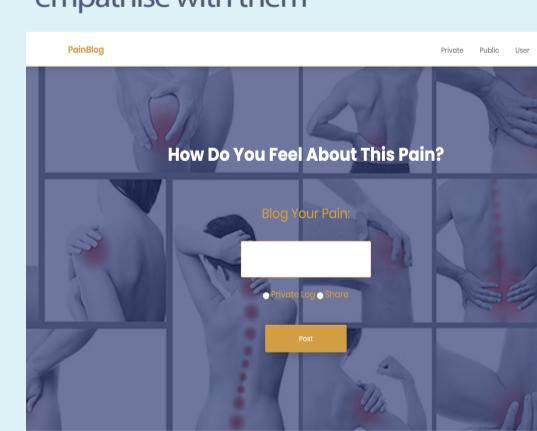
6. Final Prototype

After research and interview, we incorporated some changes to the first iteration of the Marvel app.

Non-sufferers side

We now:

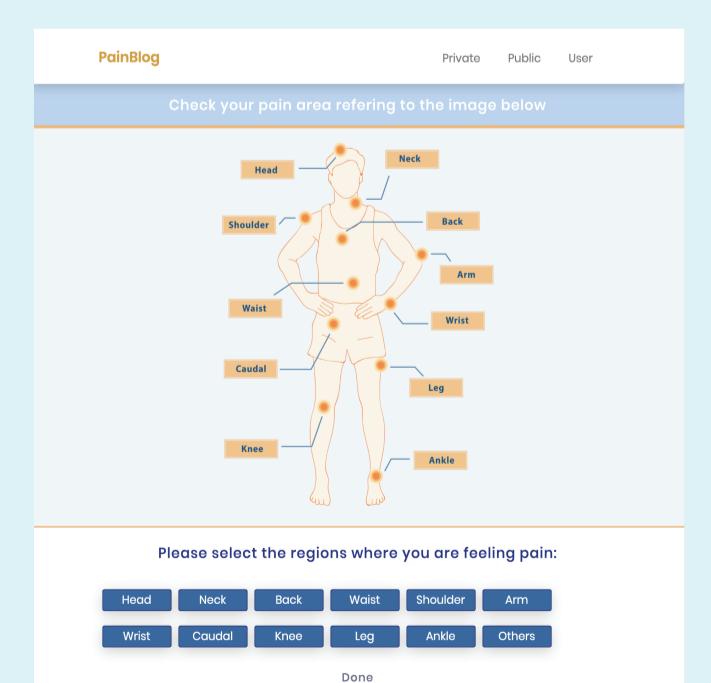
- > Allow them to empathise sufferers' pain visually from the journals
- > Allow them to send emoticons to the sufferers as an encouragement
- > Allow them to build that connection with the sufferers through the use of microblogging, therefore allowing sufferers to have the opportunity to allow the sufferers to express themselves freely as well as getting non-sufferers to empathise with them



Sufferers side

We now:

- > Allow them to journal their pain on the social platform
- > Have the option to post their journal publicly or privately (anonymously)



7. Future Work

Since our current prototype is only testing one aspect of our app, we plan to:

- > Test specific body parts being highlighted
- > Give our body more dynamic rather than aesthetic body view
- > Implement sending messages alongside emojis
- > Adding forums, and give sufferers option to be anonymous in the forums when they post their pain publically

References:

Icons referenced from Flaticon. Retrieved from <https://www.flaticon.com/>