Report: The Impact of Social Network on the Experience of Chronic Pain

by

Charles Tardif
#2386180

Nicoleta Woinarosky
#47858

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Mrs. Charlotte Beaudoin, Ph.D.

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Group Report:
The Impact of Social Network on Chronic Pain Experience.

Charles Tardif and

Nicoleta Woinarosky

Introduction

Our research project is on the impact of social network on the experience of chronic pain. This research topic was obtained by combining the interests of Nicoleta (about pain) and Charles (about sociology of health care). This combination resulted in a very topical and interesting research subject. Besides, researching within the bio-psycho-social model requires the kind of multidisciplinary team that we are. Right from the beginning, we were apprehending the task because of the ambition of the subject. However, our interest for the subject matter dragged us fairly quickly to the conclusions.

The goal of this report is to summarize the actions and reflections we had at each step of the research process, advancing from the preliminary phase to the analysis. We will secondly situate the results we found within the other main researches in the field of chronic pain. Finally, we will elaborate on the learning process this exercise allowed us to do.

Preliminary phase

The first task of this exercise was obviously to choose a research topic that interested and suited both of us. One of Charles' concerns with the subject we had chosen was the availability of the subjects. In fact, we needed to recruit at least three persons living with chronic pain, and that is pain of a permanent and irreversible nature. Regrettably, due to a high number of people living with chronic pain, it was not difficult to find participants for this project. Having multiple cases to create patterns of variables was of great benefit to our research project. It enhanced its generalizability and deepened its understanding (Rubin and Rubin, 2005; p.129).

We chose the form of a semi-structured interview, which is typically used for theory elaboration (Rubin and Rubin, 2005; p.5). Further on, we had to design a set of questions for the interview. Initially, we did not feel comfortable enough with the topic of interest, to design a useful and worthy research questionnaire. We therefore did a literature review, which served as a base for our questionnaire. This review is included in the appendices. Every study that we read linked the type of social network to the pain intensity. We therefore decided to find what personal mechanisms and emotions link this social network to the pain experience.

Because the topic of chronic pain and social network is well documented, the kind of interview we are planning to conduct is "Tree and branch" (Rubin and Rubin, 2005; p.145). We divided the research problem into components that are covered by a question each. The preliminary questionnaire was as follow:

1. Do you currently have someone to talk to or share this pain experience with?
2. Tell me how this person reacts to your experience.
3. I am interested in knowing how you feel about his/her reaction.
4. Do you participate in regular social activities?
5. Does the level of pain change after participating in these activities?
6. Is there anything else you would like to tell me about your experience with pain?

However, after a discussion in class and a test on a colleague, we decided to add a question in the beginning, to introduce the topic to the participants. Thus, a broader, non-leading introductory question was suggested in the class readings (Rubin and Rubin, 2005; p.156) and in the associated class discussion:

1. Can you tell me about your pain?

Dunne (1995; p.7) proposes that “a face-to-face meeting is best […] this is the most satisfying way of conducting an interview because your interviewee has set aside a specific amount of time to see you and because you have the opportunity to delve deeper into your subject and gain more information”. As previously discussed, face-to-face interviews will be used to collect data for this study; furthermore, the author of this research acknowledges Kidder and Judd’s (1986; p.231) list of strengths and weakness of the “personal interviews” which are as follows:

- Cost: high
- Data quality. Response rate: high, respondent motivation: high, interviewer bias: moderate
- Sample quality: high
- Possible interview length: very long
- Ability to clarify and probe: high
- Ability to use visual aids: high
- Speed: low
- Anonymity: low
- Dependence on respondent’s reading and writing ability: none
- Control of context and question order: high

The interviews were recorded by means of tape recorder and transcribed manually by the interviewers. Fraenkel and Wallen (2003; p.462), propose that “A tape-recorder […] is often considered to be an indispensable part of any qualitative researcher’s equipment”. According to Dunne (1995; p.21) tape recorders “are particularly good for long interviews where gathering a log of quotes and information is necessary”. Fraenkel and Wallen (2003), and Dunne (1995) suggest to researchers to also carry a notepad and pencil, just in case. Dunne (1995; p.19) provides several advantages for using

a tape recorder during the interview:

- records everything with total accuracy and requires a minimum of effort on your part
- leaves you free to give your interviewee your total attention
- can catch nuances in tone which are lost on notepads
- can play back the interview as many times as necessary
- can give a professional fell to the whole preceding
- can help to create your image as a professional person who takes what they are doing seriously

However, according to Dunne (1995; p.19), using a tape recorder has as well the following disadvantages:

- some people really do not feel comfortable when talking into a tape recorder and may become more concerned about the sound of their own voice on tape
- ask ‘is it alright if I use this’
- because of its professional appearance a tape recorder can be intimidating in particular to ‘ordinary people’
- the opposite can happen – some people feel very important talking into a tape recorder – you may find that your interviewees are less likely to be themselves if they know that they are on tape

As previously indicated, it is the interviewer that will manually transcribe the interviews. Dunne (1995; p.95) suggests that “The golden rule of transcribing is do it as soon as possible” for the following reasons:

- The interview is fresh in your mind
- You are able to see whether anything significant is missing
- The sooner you transcribe the interview to sooner you can get on with writing it up

According to Rubin and Rubin (2005; p.204) “transcribing the interviews yourself forces you to pay attention to what interviewees said and helps you prepare for the next interview”.

We did not have any particular hypothesis, according to the spirit of naturalistic inquiry (Rubin and Rubin, 2005; p.22), because the goal was to discover the mechanism in which social support or lack of support impacted on individuals living with chronic pain.

The first interview

Nicoleta conducted two interviews with two males suffering from chronic pain. The first interviewee is involved in a long-term homosexual relationship. He experienced pain from the cancer treatment that was radiation to the head and chemotherapy. The cancer treatment weakened his immune system and he also had extremely painful spasms in his legs caused by shingles flare-ups.

The first interviewee shares his pain experience with his social network (partner, friends, neighbors, coworkers) because this is an outlet for him, he finds it empowering, also he wants to educate the others. On one hand, Nicoleta was happy to hear that he has a good, strong, helpful, supportive social network. On the other hand, Nicoleta was sad to hear details of his painful cancer treatment and the physically sickness that comes with it. Yet, he seemed calm and positive during the interview; furthermore, he shared with Nicoleta a few of his future plans. Nicoleta was delighted to see him wining his fight with cancer. After the interview Nicoleta send him a thank you email and she was pleased to hear that her interview did not increase his level of pain. She also sent the results to every interviewee.

The interview (like every other) lasted ~45 minutes. It provided rich data on the pain symptoms and the kind of support he received from his social environment. The interviewer did several continuation and completion probes (Rubin and Rubin, 2005; p.164) in order to gather precious information on the type of support and the pain itself (symptoms, situations and interference in activities of daily living (ADLs). However, more information could have been collected with elaboration probes on the emotions and personal feelings of the participant towards their pain and their social network.

The quality of the database for the first interview

Quality of the Interview Guide

After the process of the first interview, we were able to evaluate the quality of our interview guide, in order to make the corollary changes for the following interviews. We were able to receive enough depth and detail in our data (Rubin and Rubin, 2005; p.129). However, as stated earlier, more detail on the personal experience and feelings could be obtained with elaboration probes. Additionally, the importance of the pain experience in the life of the participant ensued vivid answers from the interviewee.

The phrasing of the interview guide did not include our pre-conceptions on the anticipated results. They did not include a pre-determined direction, in order to obtain the real opinion of the participant. The idea of beginning with a broad introductory question was of great benefit for us. Lots of information was collected by the means of this questions and the participant was introduced more gradually to the subject.

In conclusion, our interview guide was efficient and easy to understand by the participant. However, there was one aspect to improve in our guide. For several questions, it was possible to answer by “yes” or “no”. For example, “Do you currently have someone to talk to or share this pain

experience with?" is not grammatically an open-ended question. However, the participant provided a rich and extended answer with lots of detail and depth. In consequence, this question did not reveal to be a problem. We decided to keep it as it was.

According to Rubin and Rubin, the difficulty in a tree and branch interview is to "ensure that the transitions between the main questions make sense to the interviewee" (Rubin and Rubin, 2005; p.145). Question 3 and 4 does not appear to have a strong link, but the transition was easy to make because the participant was consistently talking about social activities. Thereof, the conversation pursued fluidly.

Quality of the relationship with participant 1

For the first interview, Nicoletta was not nervous because she knows the participant for several years now and has a good relationship with both interviewees. That helped her to keep close attention and catch important points on which she could follow-up (Rubin and Rubin, 2005; p.91). The same thing seemed to be felt by the interviewee so the environment was favorable for a thoughtful and rich interview.

There is several things that are possible to do in order to build the trust of the participant toward the interviewer (Rubin and Rubin, 2005; p.92). Of course, the friendship they already shared helped greatly to increase this trust. Also, the fact that they both shared a common challenge in life (chronic pain), enhanced considerably the trust of the participant.

Participant 1

We enhanced our credibility by interviewing conversational partners who are experienced about pain since they have first-hand knowledge about pain. For instance, the first interviewee experienced pain from cancer treatment and shingles, the second from severe migraines, and the third from

fibromyalgia. The first interviewee interviewees were very open and honest talking about their pain experience and their social network.

Rubin and Rubin's chapter 4 (2005) stress that the interviews gain credibility by choosing interviewees that has particular characteristics. That is exactly what we tried to accomplish, with satisfying results. Two characteristics are primordial: experienced and knowledgeable. The first interviewee was obviously experienced and knowledgeable with the topic because he has been living with chronic pain for several years already. Of course, the participant was knowledgeable; because, in my opinion, nobody can explain the participant's pain experience better then himself.

Accuracy

Accuracy requires being careful in how you obtain, record, and report what you have heard. In order to increase our accuracy, the transcriptions were all completed the same day by the interviewer. We were both very precise and descriptive in the process. We paid particular attention to transcribing accurately the three interviews because we are both going to code an interview that our colleague has done. Every effort was made in representing what the interviewees have said exactly as spoken and how it happened. Nicoleta noticed several details while transcribing the interviews that were not noticed during the interviews. For example, one participant was tapping his finger on the table as a sign of nervousness or anger.

Having an accurate transcription means to avoid making any mistakes as you transcribe and asking the conversational partners to check your transcription. However, asking the conversational partner to check the transcripts and the results was only done for interview 1, because of time constrains. The first interview said that the transcript was accurate and the results made lots of sense to him. He said it was representative to his experience.

Accuracy also requires avoiding putting words into the interviewees' mouth and not selectively

choosing what the person said. The questions and probing were neutral enough to avoid influencing the responses of the interviewee and everything said in the interview was included in the analysis.

In the attributes of every transcript, additional description and explanation of the research setting could have been displayed in the attributes of the transcript. This was not a considerable error because of the small number of interviews, but would have been very useful for a larger scale study.

Believability

A believable study demonstrates that your interviewees did not construct the information gathered. If the interviewee thinks that he has been pushed beyond what he can or he is willing to tell, he is more likely to tell lies or distorted reality.

Participant 1 was extremely willing to answer. He was open to the questions and seemed honest in his answers. He said several times that he was glad that he was chosen to help in this project and said “So. I’m you’re first Guinea-Pig? (laughing)”. Interviews are more believable when it is clear that the interviewees have had direct access to the information requested, which were obviously the case.

A believable study also shows how the researcher has evaluated the interviewees’ memory, the quality of the evidence, and the bias or slants in each version. The participant did not seem to have forgotten anything and no contradictions was found in his testimony. The wording he was using was representative of a vivid memory.

Coding the first interview

The preliminary structure of analysis

The preliminary structure for our nodes was initially based on the literature review we have done at the preliminary phase. We devised the types of network into the three main categories, which

we organized into a tree node:

1. Positive network:
    1. Distractive
    2. Solicitous
2. Negative network
    1. Punishing

We planned of completing the uncovered aspects of the problem as we code the documents (with open coding), by creating free and tree nodes.

The inter-coder experience

We coded the interviews separately. We both founded that it was very productive to code each question at a time for each interviews. The rationale behind this was to look for emerging themes for each question in different participants. With this method, it was easier to code the same thing under each concept, because it was more recent in our memory. Also, for the same reason, the comparison between each participant was facilitated. The disadvantage of this approach was that we were unable to adjust interviews 2 and 3 consequently to the reflections that emerged from the coding of the first interview.

Nevertheless, we had frequently different perspectives for the analysis, and interesting discussions emerged. For this purpose, NVivo was particularly useful. It allowed changing the categories and sub-categories accordingly to the discussions we had.

The inter-coding experience was useful for us because our views were different but complementary. Nicoleta was more specific in the breakdown of the types of social network (positive and negative) and the description of the pain symptoms. As for Charles, I seemed to be more concerned

with the emotions and personal experiences of the participant toward his pain and his social network. The combination of both perspective helped in making a complete concepts map.

The second interview

We concluded that the 7 questions, accompanied with a few probes, were sufficient to validate our research question; consequently, no new questions were added to it. We believed that one interview is not enough to validate our research question: How does the social network (solicitous, punishing, and distractive), help individuals live with chronic pain? Also, we believed that one interview was not enough to test our interview guide.

The second interviewee is a divorced man with three children; the children are in the Hague with their mother who got a job there. He experienced weekly severe migraines that made him physical ill in the bathroom for half of the week. This occurred around the time the marriage breakdown. He normally does not share his pain experience with anyone other than Nicoletta and her husband for several reasons. First, his ex-wife accused him of inventing his symptoms (being physically ill in the bathroom) and made him feel guilty. Second, he has a “surface relationship” with his social network, and third, he found himself “being distanced” and “learned who his friends are in the face of chronic problems”. Nicleta was sad to hear about what he went through by himself; during the interview Nicoleta even said that she was sorry. As a woman, she felt annoyed and ashamed that another woman can do such things to another person. The ex-wife never offered a Tylenol, a cup of tea, a comforting word when her husband was ill. She accused him of inventing this to avoid working around the house and having sex with her. She moves to Halifax, emptied the house, took the kids and left for someone else. We will name just those events, but even more occurred, all happening in about 4 years. He is angry with her and he should be. But unfortunately after all his ex-wife did to him, he still loves her and he is not yet over her.

All those detail can seem irrelevant to this academic report, but they were included to illustrate how much intensity and emotions can be present in an interview with this topic. It is even more important in these situations to have a relationship deeply founded in mutual trust, openness and understanding. Nicoleta felt extremely sorry to hear that. Nicoleta was not sure how he felt sharing his pain experience with me, but the following day after sending him a thank you email, he replied that being interviewed was a positive experience. Furthermore, he said it was therapeutic.

The quality of the interview the relationship, the probing and the analysis of interview 2 will be analyzed in the discussion.

The third interview

New information gathered

The interview was different itself in a number of ways. Firstly, the interviewer was different, because it was Charles that conducted it. Secondly, the setting was in a closed lab with no time limitation, as opposed to a work environment, with a limited time frame of forty minutes as was the case for the first and second interview. The interview was therefore longer than the other ones. Also, the last two interviewees were men, as this one was a female.

In consequence, with the third interview, we gathered very different information. The interviewee elaborated extensively on the description of her pain (pain caused by fibromyalgia). Lots of effort was put for the coding of the type of pain. However, this information did not reveal to be important for the model we propose. She also described the support she received from everybody in her surroundings, instead of only the main persons, like the two previous interviewees. This richness was of great utility to add aspects in the model. For example, with the testimony of the third interviewee, we discovered the influence of self-induced guilt for a person in contact with a supportive social

network. After coding the first two interviews, we realized that they did not elaborate substantially on the feelings they had about their network and their disabilities. With the third interview, Charles tried to get more of those aspects with several probes in every question.

However, as discussed in class, continuation probes could sometimes have been used more, especially when the interviewee became more emotional. Indeed, Charles tended to change the subject of the conversation when the participant started to show tears or strong feelings. He had the impression that he did not have the right to go that far for the project. Precious information could have been lost because of this automatic response of the interviewer. A solution to that could have been to include in the introduction that the interviewee is free at any time to abort the interview or to refuse to answer if he did not feel the need to do so. That way, the interviewer would have been much more comfortable to probe on this subject.

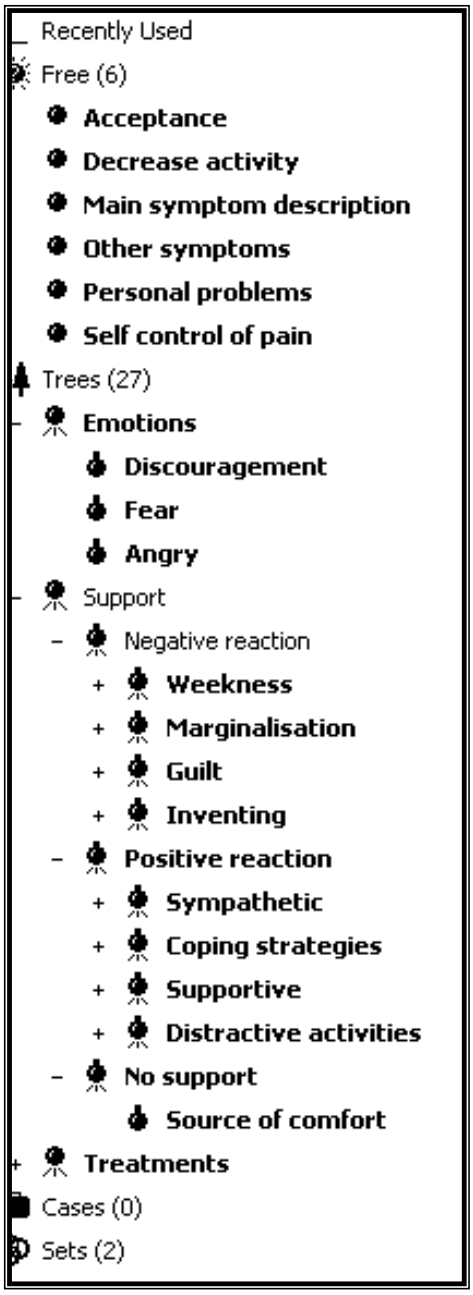
The quality of the interview, the relationship, the probing, and the analysis of all interviews will be analyzed in the discussion.

The coding

As explained earlier, we did the coding of all interviews at the same time, question per question, with the advantages and inconveniences it brings about. We had our preliminary structure, but it did not stay intact very long. We did lots of open coding to construct one set of nodes adapted to our interviews.

We did the tree nodes directly as we read the transcripts. The categories we had done did not change greatly after the coding. We classified under some tree nodes the emotions of the participants towards their pain and their social network. We also classified under tree nodes the type of support the interviewees received from their social environment. The child nodes are illustrated at the right of the next page.

The free nodes represent the pain symptoms of the participants, the social activities, and the impact the social network had on their pain. We also tagged with a free node the personal problems the pain experience created.



Uses of NVivo

We used the most common features of NVivo. We both did open coding with the NVivo coder screen, using free and tree nodes. The program was particularly useful at the time of combining our interpretation of the structure. We were able to combine some sections, change the names of others, and easily add some codes to a text abstract. For the analysis, we used nodes reports for each node and nodes reports for each participant. This enabled us to rapidly notice patterns and recurrent emerging themes.

The analysis

The process of analysis

To understand the meaning of the coded data, we need to understand the core concepts of the situation and the particular themes in action.

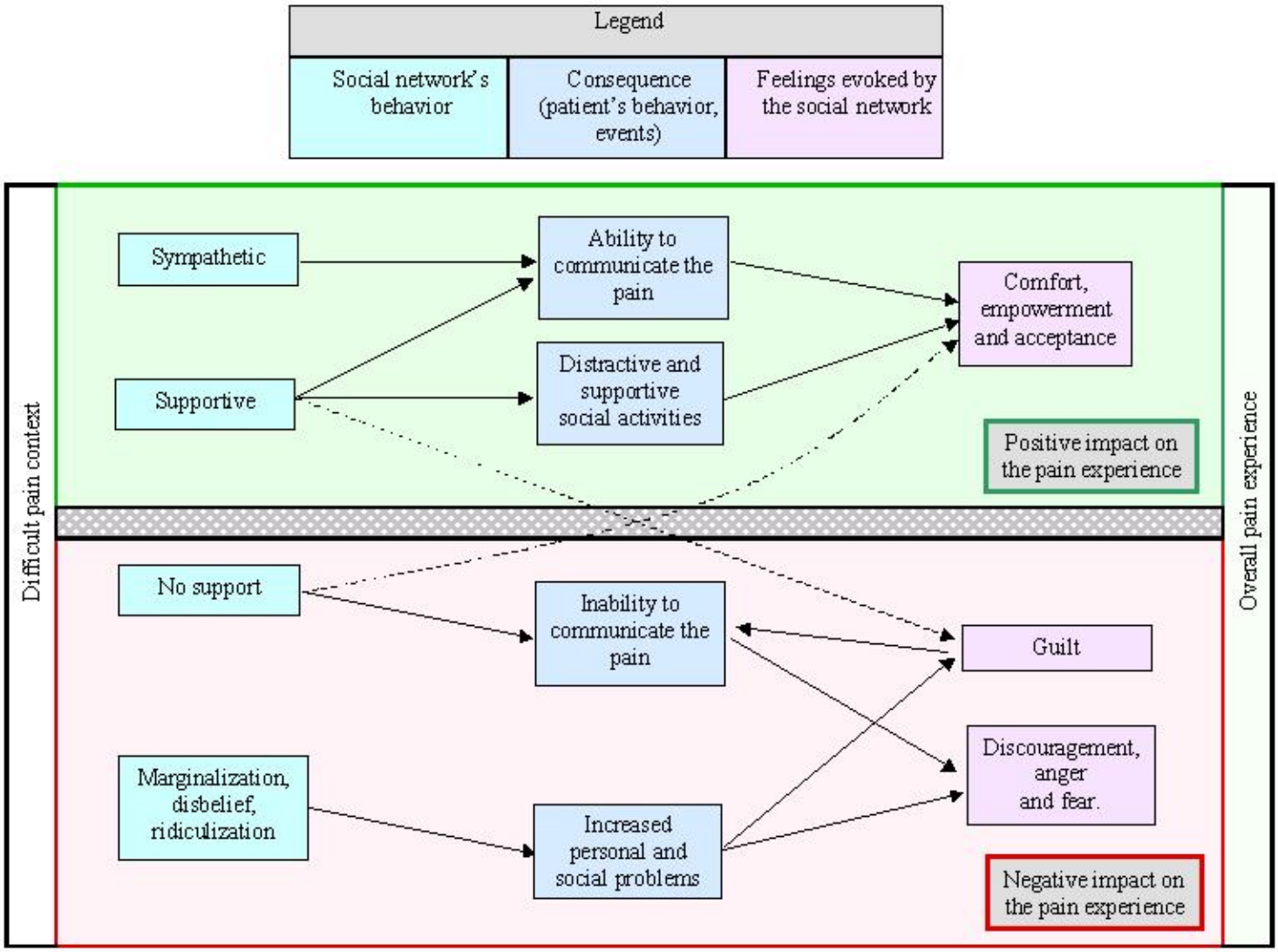
We firstly combined all the concepts drawn from coding the transcripts. Two main categories were initially created: positive and negative support. We first tried to put them in a continuum, but that seemed impossible with the data we had collected. Consequently, we decided that this dimension of

social network (positive/negative) was going to be nominal. The names were also changed to positive and negative impact on pain (see concept map on the following page).

Because this dimension of pain is really general, we completed the model with another dimension, divided into three categories: Social network's behavior, Consequence of the social network on the person and the feelings evoked by the social network. These categories were also obtained with a combination of the coded concepts.

The main concepts of these three categories are described in the concept map we placed below. After, we looked for places in our transcripts where two or more themes are discussed together. That's how the links between the concepts were conceived.

The final model



Discussion

Quality of the database

The participants

Their combined view about pain and their social network provided us with a balanced perspective that helped us test our research question: How does the social network help individuals live with chronic pain? Three characteristics are important to consider in the selection of our participants

(Rubin and Rubin, 2005; Chapter 4):

1. Experienced

The participants we have chosen have had the pain for over 3 years and were diagnosed as being permanent and irreversible.

2. Knowledgeable

It is common sense to acknowledge that our participants are knowledgeable about their own situation and experience with pain.

3. With a Variety of Perspectives

Reality is complex; therefore you need to gather contradictory or overlapping perceptions and nuanced understandings that different individuals hold. Our sample was very heterogeneous:

- 2 men, 1 woman
    - Men and women, because of sociological reasons, do not interact with their social network the same way.
- 1 homosexual men in a stable relationship
- 2 heterosexuals (1 is divorced and single with children, 1 is married without children)
    - Homosexual and heterosexual couples, because of sociological reasons, tend to represent themselves differently and might interact with their surroundings differently.
    - The marital status obviously has an impact on the social network.
- 1 cancer, 1 fibromyalgia, 1 migraines
    - The health condition has an important impact on the pain experience and might change the way they socialize with others.

- Social network: 1 negative, 2 positive
    - The diversity of social networks makes the model more robust.

The saturation point

With the three interviews we made, we were far from attaining the saturation point. A lot of new information was still being collected at the third interview (for every category of concepts). However, for the scope of the exercise, we decided to stop at the third interview.

Thoroughness

Thoroughness in our data was enforced by the different views of the participants of the study. We made a particular effort to find nuances and to discover all the relevant opinions with our probing. With the second and third participants, we adjusted the probing of our interviews in order to gather more information on another path, which are the emotions of the participants towards their support. Pursuing this new direction was very beneficial for the thoroughness of our data.

For the scope of the project, we did not have the chance to complete follow-up questions and increase our thoroughness.

Accuracy

The same precautions as mentioned above in the first interview were taken in the second and third interviews to improve the accuracy of the transcripts.

Believability

Every participant was extremely willing and open to answer all our questions. In every situation, the interviewees did not look uncomfortable to answer the questions. They did not say any contradictions in their testimonies and their recollections seemed fresh in their memory, because the

participants were profoundly marked by their pain experience. This suggests that they were not constructing their answers.

Transparency

We do not plan to publish any paper on our study but we however tried to ensure that our data is transparent by confidentially keeping notes and recordings of our interviews. We also did not make any documents to explain our results. In consequence, in this report, we did not carefully back up each explanation or conclusions with evidences from the interviews because the goal was not to disseminate the findings.

However, with this report, the reader is able to see how the data were collected and analyzed. It also allows the reader to assess the thoroughness of the work.

Quality of the relationships

As for interview 1, interview 2 and 3 were conducted with friends of the interviewer. In consequence, it was easy to establish a trusting relationship between the conversational partners. The interviewers were not stressed or anxious at all before or during the interviews. However, the introductions were too brief. With strangers, they would not have permitted to put the interviewee into a complete state of openness. As well, if the interviewer would have explained to the interviewee that he was free to refuse answering to a question at anytime he wants if he feels too uncomfortable to share this in the interview. However it is also important to precise that everything gathered in the interview is confidential and anonymous.

The trust and openness between the conversational partners was very facilitated in interview 2 because, as for interview 1, the fact that they both shared the common challenge of living with chronic pain enhanced considerably the trust of the participant. As for interview 3, the interviewee was aware

that the interviewer is a practicing physical therapist. The participant felt comfortable to share her feelings to someone whose vocation in life is helping people with pain and disabilities. By this fact, she was also confident that the interviewer would not put a judgment on her and would manifest complete empathy and reflexivity.

Our results within the literature

Our three interviews confirmed our finding from the literature review mentioned above, that is different types of social network have different impact on the pain experience. On one hand, the second interviewee's social network with its punishing characteristics had a negative impact on his pain level. Several times during the interview he said that his ex-wife behavior made everything worse. On the other hand, the first and third interviewees' social networks with its solicitous and distractive characteristics had a positive impact on their pain levels. They explained that in the company of their partners, good friends and/or while engaging in enjoyable activities they forget about their pain or the pain disappears. Even the second interviewee mentioned that with the right group of people he does not experience pain.

Conclusions

The study

The first and the third interviewees felt guilty toward their spouse for not being able to do more. However, the spouse of the second interviewee made him guilty for not doing more.

The experience of inquiry

Nicoleta's both interviewees were glad to share their pain experience with her. As previously pointed out, they were both very open and honest talking about their pain experience and their social

network. Nicoleta felt that at times it was hard for both, the interviewees to go deep down into their pain experience and talk about it as well as for Nicoleta to hear about these painful experiences during the interview and during the transcription. Nevertheless, Nicoleta feels very appreciative that these men took from their time to answer her questions. Furthermore, she feels privileged to have interviewed them about their very personal lived experiences of pain and provide her with insightful information. Nicoleta found both interviews to be inspiring experiences.

Charles also appreciated the experience. He realized that the process of qualitative interviewing requires a lot of concentration and attention in order to make the appropriate probing and have as much depth and nuance as possible in the information gathered. For his part, he found that a long interview can be very tiring for both conversational partner. That stresses the importance, I think, to have a relaxed and convivial atmosphere during the interview.

Contributions to the master's project

We gained experience in conducting interviews. Rubin and Rubin (2005) stresses that, in qualitative research, participants should not be called “subjects” but rather “conversational partners”. However, we noticed that the process was different than having a simple conversation. For instance, we used interview guides, semi-structured questions, tape recorders, we transcribed, coded, and analyzed the interviews. Beyond those differences, qualitative inquiry requires to search for detail, depth, nuance, vividness, and richness in the participants’ testimony. This skill develops with practice and experience and this project brought us one step closer to our MA thesis.

We learned to use NVivo, which is a software for qualitative data coding and a help for the analysis.

References

Dunne, S. (1995). Interviewing techniques for writers & researchers (1st ed.) (pp. 7, 19, 21, 95). London, UK: A & C Black.

Fraenkel, J., R., & Wallen, N., E. (2003). How to design and evaluate research in education (5th ed.) (p. 462). New York, NY: McGrew-Hill.

Kidder, L., H., & Judd, C., M. (1986). Research methods in social relations (5th ed.) (p. 231). Toronto: Holt, Rinehart and Winston.

Massey, A. and Walford, G. (Eds.) (1999) Explorations in Methodology Studies in: Educational Ethnography, Vol.2, Stamford, JAI Press, 183-197.

Miles, B.M. and Huberman, M.A. (2005) An Expanded Sourcebook, Qualitative Data Analysis.(2nd Ed.), Thousand Oaks, CA: Sage Publications.

Rubin, H.J. and Rubin, I. S. (2005). Qualitative Interviewing: The art of hearing data. (2nd Ed.), Thousand Oaks, CA: Sage Publications.

Appendix 1

Literature review

Introduction

Pain is one of the symptoms seen most frequently by medical professionals. Pain is commonly addressed from a physical and physiological point of view and the psychosocial aspect of the experience is repeatedly ignored. This tendency towards the conventional pharmacological solution to pain is a result of the traditional biophysical model in medicine. However, popular interest recently expands towards alternatives and adjuvant solutions. An interdisciplinary approach to pain management is increasingly accepted among health professional: the biopsychosocial model.

As illustrated in figure 1, the outcome of a person living with chronic pain is greatly influenced by his/her psychological state and social conditions, as well as his/her biologic and physiologic characteristics (Boyd and Schweisgutj, 2005).

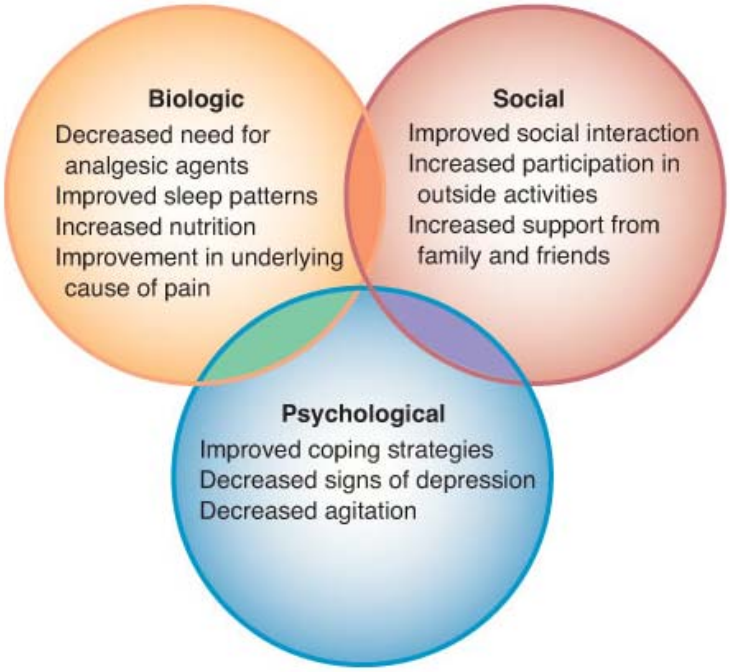


Figure 1: Biopsychosocial outcomes for patient with pain (Boyd and Schweisgutj, 2005)

According to the International Association for the Study of Pain (IASP), pain is defined as "An unpleasant sensory an emotional experience associated with actual or potential tissue damage, or described in terms of such damage.". This definition of pain has the particularity of including affective as well as the sensory elements of pain.

> "Many people report pain in the absence of tissue damage or any likely pathophysiological cause (…). If they regard their experience as pain and if they report it in the same ways as pain caused by tissue damage, it should be accepted as pain. This definition avoids tying pain to the stimulus. Activity induced in the nociceptor and nociceptive pathways by a noxious stimulus is not pain, which is always a psychological state, even though we may well appreciate that pain most often has a proximate physical cause" (Holtzman et al., 2004).

A second particularity of this definition is the experiential nature of the pain process. Indeed, the perception of a nociceptive stimulus by the person affects his behavior towards his/her pain and his/her behavior of daily life.

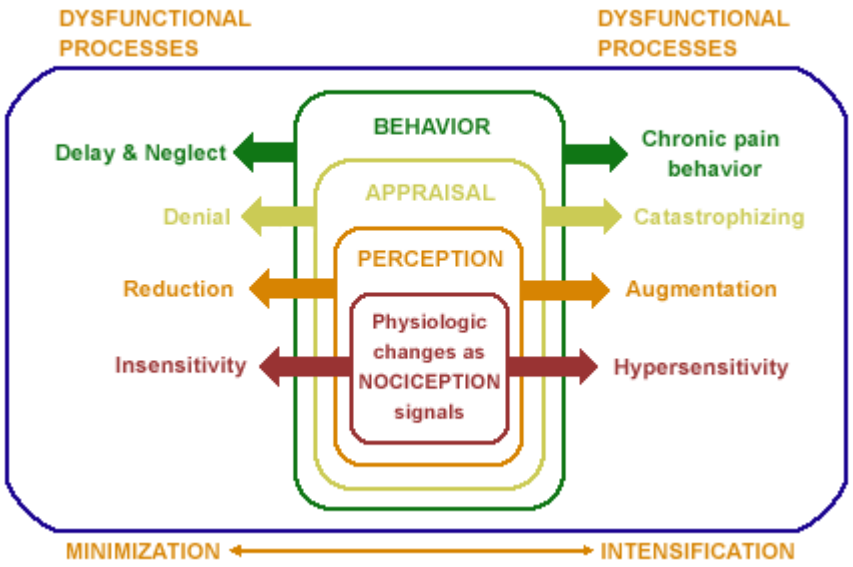


Figure 2 Behavioral responses of chronic pain (Dworkin, Von Korff and LeResche, 1992)

Using this definition, Waddell et al. (1984), went even further with the inclusion of social interactions in a model to construe behavioral patterns of a person living with chronic pain. Figure 2 illustrates how the active psychological individual behaves in relation to his/her social environment.

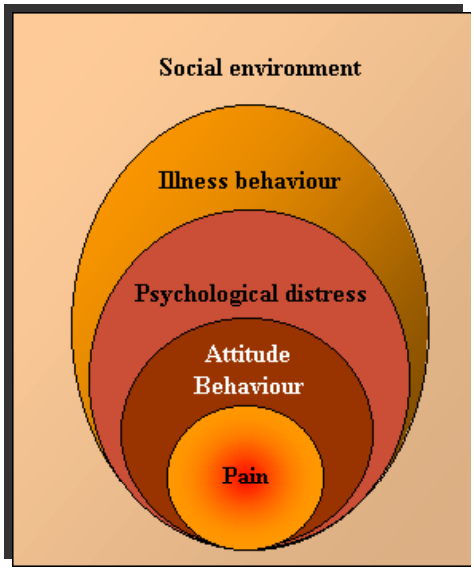


Figure 3: Biopsychosocial model of chronic pain (Waddell et al., 1984)

When the abnormal sensibility persists, a "chronic pain syndrome" or a "chronic pain behaviour" is often developed. Hence, the pain is not only a symptom but it is an illness per-se. Besides, persistence of pain has innumerable consequences on the affective (anxiety, depression), relational (aggressiveness, intolerance) and social conditions (isolation, loss of job) of the individual.

The length of time required for the utilization of the chronic pain terminology should be variable because the psychological and social situation of each individual is unique. For this reason, only a portion of individuals will develop a chronic pain syndrome secondary to chronic pain. However, for methodological reasons, most of the studies conducted to this day defined chronic pain as being present for more than three months.

Social support and chronic pain

According to Peat et al. (2004), social support refers to a) the quantitative structural aspects of social networks or in other words "the number and type of social ties and the frequencies of contact" and b) the qualitative functional aspects of social networks or "social context in which coping and

adjustment to pain takes place". Social support includes spouse, partner, attendant, roommate, parent, other family, and friends (Giardino et al., 2003).

In fact, social support was associated with lower levels of pain frequency and intensity (Montoya et al., 2004). "When faced with a stressful situation, social support may help individual alter the meaning of the situation, the individuals` emotional or behavioral response to the situation, and/or the situation itself" (Holtzman et al., 2004).

Social support was also associated with chronic pain behaviour as well as health outcome and interference with activities of daily living (ADLs) (Peat et al., 2004). The type of social support is determinant on the impact it will have on pain perception (Holtzman et al., 2004) and coping strategies (Evers et al., 2003). Effectively, positive support has a positive impact on pain, but a negative support, the contrary effect for the individual living with chronic pain (Holtzman et al., 2004).

Giardino examined the association between catastrophizing and social interactions. He concluded that the phenomenon is an interpersonal form of coping, "directed toward obtaining social proximity, support, or assistance" (Giardino et al., 2003). In addition, the structure of the social phenomenon, such as the nature and number of social actors), has a significant impact on the pain experience and interference on ADLs (Peat et al., 2004).

From the knowledge of the authors, all the studies conducted at this day are associating the type and structure of social support networks with:

- 3 main chronic pain behaviour (distractive, solicitous, punishing)
- pain coping strategies
- pain intensity and frequency as well as
- interference with ADLs.

However, no study were found by the author concerning the subjective and personal experience if

social individual living with chronic pain. The goal of this study is to explore the impact of social support by people living with chronic pain. Their perspective is crucial for the understanding of the mechanisms underlying the impact of social support on the experience of chronic pain.

References

Dworkin S.F., Von Korff M., and LeResche L. (1992) Epidemiologic studies of chronic pain: A dynamic-ecologic perspective. Annals of Behavioral Medicine, 14, p.3-11.

Evers, A.W., Kraaimaat, F.W., Geenen, R., Jacobs, J.W., and Bijlsma, J.W. (2003). Pain Coping and Social Support as Predictors of Long-term Functional Disability and Pain in Early Rheumatoid Arthritis. Behaviour Research and Therapy, 41 p.1295–1310

Giardino, N.D., and Judith, A.T. (2003). Social Environment Moderates the Association Between Catastrophizing and Pain Among Persons With a Spinal Cord Injury, Pain, 106 p.19–25.

Holtzman, S., Newth, S., and Anita D. (2004). The Role of Social Support in Coping with Daily Pain among Patients with Rheumatoid Arthritis. Journal of Health Psychology, 9, (5). p. 677–695

IASP Task Force on Taxonomy. (1994) Classification of Chronic Pain, Second Edition, edited by Merskey, H. and Bogduk, N. IASP Press, Seattle, pp. 209-214.

Mary Ann Boyd, and Dyane Schweisgutj (2005). Psychiatric nursing, contemporary approaches

Montoya, P., Larbig, W., Braun, C., Preissl, H., and Niels Birbaumer. (2004). Influence of Social Support and Emotional Context on Pain Processing and Magnetic Brain Responses in Fibromyalgia. Arthritis & Rheumatism, 50 (12), 4035-4044.

Peat, G., Thomas, E., Handy, J., and Croft, P. (2004) Social Netwoks amd Pain Interference With Daily Activities in Middle and Old Age, Pain, 112, 397–405.

Waddell, G., C. Main, et al. (1984). Chronic Low-Back Pain, Psychologic Distress, and Illness Behaviour. Spine 9, (2). p.209-213.