

IMPLEMENTATION AND EVALUATION OF THE CHRONIC DISEASE SELF-MANAGEMENT PROGRAM IN THE YUKON

A - GOAL OF THE PILOT PROJECT

In the fall of 1997, Yukon Health and Social Services arranged a contract with the Institute of Health Promotion Research, University of British Columbia to carry out a pilot study to determine if the Chronic Disease Self-Management Program (CDSMP) could be used in the Yukon Territories. The goal of this pilot project was to implement and evaluate a program to assist those experiencing chronic diseases in the Yukon to better understand their disease and to help themselves. This program had been used in several American states since 1996 and a similar program has been used in several Canadian provinces to assist those suffering from arthritis.

The objectives of the project were:

- 1) to determine whether the program is feasible, viable, and acceptable to persons in the Yukon who have chronic health conditions;
- 2) to evaluate this program in terms of changes in behaviour, health status, and health care utilization;
- 3) to determine whether the impact the program has in the Yukon is similar to the magnitude of the impact it had on those who took the program in the United States.

B - PROGRAM DESCRIPTION

The Chronic Disease Self-Management Program (CDSMP) is a 7-week (2.5 hours per week) program taught by pairs of trained lay leaders who follow a Leader's Manual in community settings (senior centers, libraries, hospitals, and recreation centers). Between 10 and 15 people with chronic conditions and their significant others attend each program. The CDSMP teaches the following content:

- X how to develop an exercise program,
- X cognitive symptom management,
- X nutrition management,
- X breathing exercises,
- X problem solving,
- X communication skills (with family, friends, and health care providers),
- X use of medication, and
- X how to deal with the emotions of chronic illness (anger and depression).

Sessions are highly interactive, with emphasis on strategies to help individuals manage more effectively. It includes skills mastery (accomplished through weekly contracting to do specific behaviours and through feedback) and modeling (accomplished by lay leaders with chronic conditions) and uses frequent group problem-solving sessions.

C- PROGRAM IMPLEMENTATION

There were five major implementation activities:

- 1) creating general awareness among seniors and health care professionals;
- 2) establishing a Community Advisory Committee to oversee the implementation and delivery of the program;
- 3) hiring a co-ordinator;
- 4) training persons to deliver the program; and
- 5) ensuring that program materials are available and used appropriately.

1) Creating Awareness

The project started in January of 1998. During January and February, the program was advertised to persons with chronic health conditions and to health professionals. During this period, the project researcher Patrick McGowan made presentations to 12 health professional and seniors' groups in large and small centres in the Yukon.

2) Establishing a Community Advisory Committee

A 15-member Community Advisory Committee was established. The members were:

Lynn Allen - Arthritis Self-Management Program leader
Marian Bakica/Joan Beniman - Lung Association
Dr. Dan Carew - Klondike Medical Clinic/Family Practice Unit
Gail Chester - Yukon Homecare
Dora Cichon - Canadian Diabetes Association
Trish Eccles - CDSMP Coordinator
Pat Gillespie - Canadian Diabetic Association
Sue Higgins - Representative of seniors' group
Cheryl Hobson - Health Promotion - Health and Social Services
Pamela Holmes - Physiotherapist
Jean Kapala - Yukon College Public Health and Safety Department
Sheila Lilles – Workers Compensation Health & Safety Board.
Dr. Robert Wintonyk - Klondike Medical Clinic/Family Practice Unit
Catherine (Kip) Veale - Yukon Homecare
Joyce Young - Yukon Council on Aging

During the course of the project the Community Advisory Committee met three times.

3) Hiring a Program Co-ordinator

The coordinator job description was developed with assistance from the Community Advisory Committee. Trish Eccles, a local resident, was contracted to work 8 hours per week at a rate of \$20 per hour as Program Coordinator. Trish had excellent experience working with adults and seniors experiencing chronic health problems.

4) Training Persons to Lead the Program

To act as lay leaders in the program, interested persons must successfully complete a 3-day, leader-training workshop led by a Master Trainer. They must demonstrate that they can lead the program following the Leaders Manual. In March 1998, three Master Trainers from Vancouver delivered two 3-day workshops training 10 persons from Whitehorse and 15 aboriginal health workers from small communities.

In September 1998, another 3-day leader-training workshop was delivered in Whitehorse by Patrick McGowan. At this workshop 3 persons were trained as Master Trainers and became qualified to train leaders in the future. As well, an additional 6 persons were trained to lead the program.

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|--|----|
| Total number of Master Trainers in the Yukon | 3 |
| Total number of Program Leaders in the Yukon | 31 |

5) Program Materials

Program materials consisted of four different resources:

- a) The Leaders Manual. This manual was given to each program leader during the 3-day training workshop. Leaders follow the protocol when delivering the program.
- b) The Master Trainers Manual. This manual was given to the three persons who became trained as Master Trainers. This manual is followed when Master Trainers train new program leaders.
- c) The Course Participant's book. All participants received copies of "*Living a Healthy Life with Chronic Conditions*", a book prepared for use in the program by the program developers.
- d) Program brochures. A supply of program brochures was developed by Yukon Health.

D - PROGRAM DELIVERY

Eight courses were held in Whitehorse between April 1998 and April 1999. Course leaders received \$50 each for leading the sessions. Each class held 8 to 10 participants, except one that had only 4 participants. In total 67 individuals participated in the sessions during the project period. To allow for post-course questionnaires to be completed six months following the course, the pilot project was not completed until September 1999. Analysis then began on the data collected.

As of March 31, 1999 there were 16 persons on the wait list, and another class was scheduled to start in April.

E - PROGRAM EVALUATION

Evaluation of the program was conducted by a research team from the Institute of Health Promotion Research, University of British Columbia, under Dr. Patrick McGowan. A quantitative study based on the pre-course and six-month follow-up questionnaires was carried out. As well, a qualitative study based on in-person interviews with 30 course participants was completed six months post-course.

Quantitative Study

In total 64 course participants completed pre-course impact questionnaires before they started the program, and 37 participants completed it again six months later.

The questionnaire contain three basic types of measures:

- 1) Self-management behaviours;
 - Amount of time doing aerobic exercises,
 - Amount of time doing stretching and strengthening exercises,
 - Coping with symptoms,
- 2) Self-efficacy levels;
 - self-efficacy to perform self-management behaviours,
 - self-efficacy to manage disease in general,
 - self-efficacy to achieve outcomes,
- 3) Outcomes regarding health status and health care utilization;
 - General health,
 - Illness intrusiveness,
 - Depression,
 - Physical abilities,
 - Energy and Fatigue,
 - Health distress,
 - Fatigue,
 - Shortness of breath,
 - Pain severity,
 - Daily activities,
 - Medical care use.

The participant questionnaire is contained in Appendix A. Analysis was conducted with data collected from the 64 participants who completed the pre-course questionnaires and with 37 questionnaires completed by persons who completed both the pre and post-course questionnaires. To allow for the 6-month time period between the pre- and post-program questionnaires, the analysis was not completed until October 1999.

Findings

Sixty-four course participants completed the pre-program questionnaire. The majority of persons (95%) indicated that English was their mother tongue, 41 were married, and 19 persons had more than one chronic health condition. The most common health condition was arthritis or other rheumatic disease. Participant ages ranged between 19 and 97 with the average being 50 years (SD=14). The mean education level was 14 years (SD=3). Fifty-five participants were female.

Pre- and six-month post-program scores on the health measures were compared to calculate whether they were statistically different. Table 1 shows the pre- and post-program scores on each measure as well as t-scores and significance levels.

Table 1. Pre- and six-month post-program scores on outcome measures.

| MEASURES | Pre | Post | t | Sig. (2-tailed) |
|---|-------|-------|-------|--------------------|
| Time doing aerobic exercises (min.) | 190 | 240 | -1.66 | .11 |
| Time doing stretching/strengthening exercises | 48.65 | 57.57 | -.70 | .49 |
| Coping with Symptoms | 1.63 | 2.16 | -3.68 | .001 |
| Self-efficacy to manage symptoms | 5.63 | 6.66 | -2.44 | .020 |
| Self-efficacy to control/manage depression | 5.70 | 6.73 | -1.83 | .07 |
| Self-efficacy to manage the disease | 6.46 | 7.41 | -2.24 | .031 |
| General Health | 2.95 | 2.68 | 1.22 | .23 |
| Illness Intrusiveness | 41.51 | 34.35 | 2.00 | .053 |
| Depression | 24.34 | 15.80 | 3.90 | .000 |
| Physical Abilities | .28 | .29 | -.19 | .85 |
| Energy/Fatigue | 2.21 | 2.56 | -2.32 | .026 |
| Health Distress | 2.08 | 1.43 | 3.07 | .004 |
| Fatigue | 5.51 | 4.43 | 2.49 | .017 |
| Shortness of Breath | 2.89 | 1.59 | 3.42 | .002 |
| Pain Severity | 4.65 | 3.41 | 2.33 | .026 |
| Daily Activities | 1.78 | 1.24 | 2.98 | .005 |
| Medical Care Utilization | 2.95 | 3.49 | -3.09 | .004 |

Statistically significant changes (bolded) were observed in 12 of the 17 outcome measures. At six-months post-program, participants:

- were practicing more ways of coping with their symptoms;
- had higher levels of self-efficacy to manage their symptoms and to manage their disease;
- were less bothered by their illness;
- were less depressed;
- had more energy;
- were less distressed about their health condition;

- were experiencing less fatigue and shortness of breath;
- were experiencing less pain;
- were less limited in their daily activities; and
- had better communication with their doctor.

There were differences in the number of times participants used medical services. Table 2 shows these frequencies.

Table 2. Use of medical services pre and post Chronic Disease Self-management Program.

| Medical Service | Pre | Post | T | Sig. (2-tailed) |
|---|------------|-------------|----------|----------------------------|
| Number of doctor appointments in the past 6 months | 6.57 | 4.62 | 1.64 | .110 |
| Number of times hospitalized in the past 6 months | .30 | .14 | 1.03 | .310 |
| Number of nights spent in the hospital in the past 6 months | 2.05 | .51 | 1.14 | .261 |

Although it appears there was a decrease in the use of these services, the changes in means were not statistically significant. The analysis of change in medians using the Wilcoxon Two-Related-Samples Test also failed to detect a significant difference. The lack of significance using both procedures was due to low levels of utilization at the pre-test stage.

Qualitative Study

The qualitative survey was based on in-person interviews with a convenient sample of 30 of the 64 program participants. Six months after participants had completed the program they were contacted and asked if the researcher could interview them to discuss the program. All the interviews were conducted by Patrick McGowan in October 1998 with persons who had taken the program at different times during the implementation period.

A set of interview questions (Table 3) was developed by the researcher in consultation with program leaders and then reviewed and modified by the Community Advisory Committee.

Table 3. Chronic Disease Self-Management Program qualitative study interview questions.

What did you get out of the course?
Has it helped you cope with or manage your condition? (Please explain)
What are the main things you learned - the things that have stayed with you the most?
How has it changed your future outlook? (Please explain).
What are you doing differently now than you were before taking the course?
What did you get out of the course that you have not been able to get elsewhere?
What was it like taking the course as part of a group? What part did you like the best/the least?
If you wanted a friend to take this course, what sorts of things would you say about it?
Since taking the course has the way you communicate with others changed? If yes: a) with whom; b) exactly, what has changed?; and c) why (from what aspect in the course) do you think it changed?
Since you began to communicate differently with some people, how have they responded?
Have you discussed this with this(se) person(s)?

With subjects' approval, the interviews were taped. The interviews ranged from 30 to 60 minutes in length, with an average of about 45 minutes for each interview. The tapes were then transcribed for analysis. An analysis of all interviews was conducted individually by the project researcher and the research assistant. The interpretations and summaries for each question were mailed to appointed members of the Community Advisory Committee who reviewed the raw data and summaries. In this manner, members of the Community Advisory Committee participated in the analysis of the information. At a subsequent group meeting, the team then reviewed each other's analyses and came up with a consensus about themes and findings from the interviews.

Findings

Question 1. What did you get out of the course?

Respondents mentioned several different highlights from the course, but the two recurring themes were (1) feelings they experienced while taking the course and (2) knowledge and awareness they gained from the program.

People mentioned they felt comfortable in being able to talk about their condition and their personal feelings. Most liked the group format. Being with others who have the same or similar conditions provided a feeling of comfort and fellowship within the group. As one participant summarized:

"Sitting in a room with people who have chronic conditions is helpful because you don't have

to explain things - they already understand."

Participants also mentioned the support they received. Support came from other group members as they were all going different stages of similar things and they gave and received encouragement from each other. Several people mentioned they felt that they were being supported by the program itself, the sponsor, staff, and leaders.

Participants said they learned new skills and techniques to manage their health. Coping techniques were regarded as especially useful. Participants said they shared their own coping strategies and they also learned techniques, which were taught in the course.

Another important topic was the setting of goals and the rating of how confident they were to accomplish their goals. Some participants said they continue to use this technique to pace themselves and to structure their daily schedule.

They also changed their perception of what they could or could not do because of their illness. They said their knowledge and awareness was enhanced through the program and now they felt they were not so helpless and had greater control. They said they were taking more responsibility in managing their life, their future, as well as their health condition. As one participant mentioned:

"There are tools that can be learned to make life easier and richer in quality."

One participant had just learned about his chronic condition before starting the course. For him the course provided a new understanding of people with chronic conditions and of how his future life will be affected by this.

Another aspect mentioned was that participants found they learned better ways of communicating and to express things more directly and clearly, especially with relatives and doctors:

"I feel now I have eased the pressure that I have put on myself to try and hide things. So that if I'm not feeling well I just say I'm not feeling well rather than try to hide the fact that it's hurting today."

Question 2. Has it helped you cope or manage your condition?

An important area mentioned by participants was "a change in attitude towards their condition." They felt that they were not victims of their disease but rather they realized there are things they need to do, can do, or do at a different level.

"I don't feel a victim so I'm pushing myself beyond limits that I didn't think I had."

One participant said the course helped participants to think in a long-term perspective and to manage the condition without losing the focus on daily activities.

Respondents said they learned to accept their limitations with their condition. For most, this had a calming effect. Now, they were also feeling more comfortable telling others about their limitations, (e.g., telling others they needed a rest).

Respondents said they now had better communication with their doctors. They said that because they now had more knowledge and confidence in their ability to ask questions, they felt more comfortable interacting with their doctor. The improved knowledge helped them communicate openly and frankly.

The coping strategies taught in the program were again regarded as very useful. One participant stressed that the course especially helped with emotional coping:

"It hasn't really made any change in how I'm feeling physically but emotionally I'm doing better with it. I'm not as hard on myself as I was before. Like I've learned to talk nicer to myself."

The respondents felt the program helped them to initiate changes in their daily lives. They stated that the course provided the encouragement and opportunity to start with small changes within the protective atmosphere and support from the group. The methods they learned were useful and easily put into practice, especially the action plans and relaxation techniques.

Question 3: What are the main things you learned - the things that have stayed with you the most?

By far the most important thing participants learned was they were able to intervene to a certain extent in their disease process, and they were not helpless.

"Going into that course, I realized that YES, I could do it at a different level - at a slower level and there was nothing wrong about it so it helped me start again to do small exercises that I wasn't doing before."

Other important elements were exercising and relaxation techniques. Participants said the course made them realize that exercising, even at a lower level, was essential in helping them to deal with their condition. One participant said the course helped her to accept help from others.

Other respondents said they learned to organize their daily routine. They now were more active -- getting out and doing things and meeting people. They were using techniques they learned in the course, such as making an action plan and setting goals.

Respondents who did not have chronic conditions (that is, spouses, friends, and relatives who participated in the course) remarked that they now had a better understanding of people having

these conditions.

Other key phrases mentioned were: understanding of personal feelings and emotions and improved communication. People learned to communicate more clearly with their doctors and said that writing down a list of questions before an appointment helped them to work with the physician more readily.

Question 4: How has it changed your future outlook?

Respondents reported changes in their feelings. They had a more positive outlook toward the future. They had less fear and depression and more confidence, self-esteem, optimism, and hope. One participant said:

"In changing my outlook, I think there's less fear of the future and less uncertainty and I feel more confident that I can deal with whatever comes next."

Another participant said:

"I love the future now. I have knowledge, not just a hope. I have a knowledge that I'll be able to cope with the future because I feel much stronger within myself. I have more confidence. I have more self-esteem."

In addition to this, they perceived they had more control and responsibility of managing their condition.

"I can do things and it's up to me to do it. It's up to me to go find help if I need it."

As well they said they had a different way of coping. They said they were more accepting of their personal situation, and believed they could influence their quality of life.

Question 5: What are you doing differently now than what you were doing before taking the course?

Most frequently, participants referred to changes they had made in their daily habits, such as planning activities more carefully and exercising more diligently. After taking the course, individuals paid more attention to exercise and were enjoying it. They were now also paying more attention to relaxation while exercising or during other activities.

Four participants said that they changed their eating habits (e.g., planning a balanced diet).

Other techniques participants incorporated into daily life were planning, time management, and positive self-talk. Participants said they now had a more positive attitude toward their condition.

As well, some participants said they changed a few of their social habits. One participant said:

"Now I have a more positive outlook on life and enjoy more socializing. I'm not such a loner anymore; I now go out and enjoy being with people. I am enjoying life where I wasn't before."

Question 6: What did you get out of the course that you have not been able to get elsewhere?

In their responses, participants stressed three main things:

- the benefit of being able to compare oneself with others who have similar health conditions;
- the benefit of learning through group experiences compared to learning by reading books;
- the benefit of being able to share feelings.

The first point refers to feelings of normalcy participants developed when they were able meet others with similar health conditions and share experiences and feelings. They said they now felt they were not alone and that their feelings were real and legitimate:

"This is real and the others help by giving clues why you are feeling the way you are."

"It made me realize that there was worse cases and there were better cases but you are an individual and this is who you are now and you have to accept it if you want to keep going."

"You got a bit of a bond with other people that are the same as you. And even though you don't necessarily keep that friendship going, you still feel okay because there are other people out there like me."

"I think the big thing of the course was discovering people that knew exactly how you felt."

Participants said they were able to learn through the group experience. They felt they benefited by being able to help others as well as getting help from other group members.

They appreciated the combination of getting information through the course materials as well as from the group. The sharing included both information and knowledge about managing their condition as well as their feelings and emotions.

Some participants said it was the first opportunity they had to share their emotions and feelings with others who understood.

Others said it benefited them by just getting them out of the house and socializing more.

"That was a bit of a step for me because while I've been sick, I've been quite a recluse. My life has really shut down and I'm just going back out to the world again so that was a step for me that way."

Lastly, for some it was the finding of a direction to concentrate their efforts.

"I now focus more on what I should be doing."

Question 7: What was it like taking the course as part of a group?

The main advantages of taking the program as part of a group were the giving and getting of support and ability to share thoughts and getting to know other peoples' understanding of their conditions.

"I think we were meeting our own needs in helping others to meet their needs. The group itself bonded very quickly. People felt very comfortable with one another."

Respondents said that the group provided motivation. For example, it helped them follow their plans more carefully because they knew they were going to report to the group at the next session. Also, seeing others achieve their goals encouraged them to work towards reaching their goal. Additionally, after taking the course as part of a group, people said they became more tolerant of other people.

Some participants said they felt uncomfortable in the beginning but after the group bonded felt at ease and part of the group. Others reported difficulty in identifying themselves as a part of the group, partly because language (this participant's mother tongue was not English), and because some participants didn't have a chronic condition. Participants said they felt uncomfortable in some parts of the program.

People appreciated the opportunity of being able to compare themselves with others who had similar conditions. This helped them share ideas and experiences and balance their views of their own condition.

One participant missed contact with the group members between the group sessions. This was one aspect that she/he would have liked changed: a better cohesion within the group.

They also liked the "buddy system" which encouraged them to accomplish their plans. A few of the participants were still keeping in contact and meeting on a regular basis six months following the program. For most participants, the group was a "safe place" to frankly discuss problems and try new behaviors.

Question 8: What part did you like the best?

Participants' responses were mainly grouped into four categories:

- the way the course was presented;
- the skills they were able to learn;
- the gains in self-responsibility; and
- the encouragement and support they received.

a). The way the course was presented. The majority of participants said the leaders were competent and appreciated how they presented the information in a clear and concise manner. They liked that volunteers presented the course and felt that the facilitators were good role models, who encouraged the group to work together.

b). The skills participants learned. Participants mentioned the action plans, relaxation techniques, problem solving techniques, and how to deal with anger and frustration. People also liked the book *Living a Healthy Life*, which summarized techniques and skills that were taught in the course.

c). Gains in self-responsibility. Course participants said they liked the way they were encouraged to take more responsibility and control in managing their condition. As one respondent said:

"Making my action plan and committing to my contract - those were my responsibilities and it wasn't like I was being spoon-fed anything. The course is not designed to make me feel good, it was designed for me to help myself feel good!"

d). Encouragement and support. Respondents said they felt there was no pressure in the course and people appreciated the encouragement and support they received from the group. As well the course offered an opportunity to interact with others with similar problems.

Some also said they appreciated that the course was offered at no charge. Others liked the fact that they got to meet new people and that they were "getting out".

Question 8 also asked: What part did you like the least?

A majority of respondents said they felt that those participants who did not have a chronic illness (spouses, relatives, friends) weren't really able to understand what was talked about. This made those with chronic conditions feel a little intolerant and impatient. A few participants felt they were being observed rather than understood. However, one participant (who had a chronic condition) said:

"I know it's good for them because they're learning a lot about us."

For some of the participants, the fact that the course was being held in the evening was a problem. They were too tired and could not participate the way they wanted. One person felt that

some members didn't feel comfortable in a group with men and women.

Another area that respondents disliked were the time limitations for certain activities in the sessions. As well some respondents felt there was a lack information for some chronic conditions or that some conditions were experienced in a negative way.

In the beginning some participants reported difficulties in speaking in front of the group.

Question 9: If you wanted a friend to take this course, what sorts of things would you say about it?

Respondents described the course as:

- being easy to follow,
- being confidential,
- reinforcing knowledge they already knew,
- encouraging them to take control over their own health care,
- getting them out of the house and among people,
- enabling them to learn from others,
- giving them an opportunity to meet people with the similar health conditions,
- giving them better control over their lives,
- making them feel better about themselves, and
- offering support.

Further Information from Respondents

The project researcher and research assistant began analyzing the interviews before all the interviews were completed. They found that in the first 18 interviews some respondents reported that the way they communicate had changed after taking the course. However, people gave no further precise information. The research team decided to try to elicit more information about these communication changes.

In the final 12 interviews, additional questions asking for more specific information about "changes in communication" were incorporated into the interview guide to determine whether or not participants' communication had in fact changed, with whom, and which specific aspects had changed. The additional questions were:

Question 10: Since taking the course, has the way you communicate with others changed? If yes a) with whom (person); b) exactly, what has changed? and c) why (from what aspect in the course do you think it changed)?

Question 11: Since you began to communicate differently with some people, how have they responded?

Question 12: Have you discussed this with this(these) person(s)?

Responses revealed some interesting highlights. In 10 of the 12 final interviews, participants reported they perceived an altered way of communicating. The more in-depth questioning then provided the following:

Respondents mentioned they talked now with different persons and that they talked in a different way. Most reported changes in talking with their friends. Some participants mentioned that they now prepared lists with questions for their doctors, which helped them to talk to them and also helped to clarify health problems or discuss questions about their treatment. Others said they now talked differently with members of their families or their colleagues.

The most important change could be found within the persons themselves, even before communication starts:

"I have a better understanding of what's happening with my own body and mind. In that respect I may be clearer in expressing it."

It seemed that through the course people had an opportunity to clarify their own state of mind and their needs and demands. This enabled most of them to clearly express what they felt and to be more comfortable with their feelings.

They also could accept other people's concerns better. People reported:

"I am more relaxed about admitting that I have problems and they can put me at ease by expressing concern."

"I am not trying to put on a brave front, I allow my body language and verbal expression to be congruent."

"If they [my friends] ask me how I'm feeling, then we can talk about it and I'm more open [now]."

For some respondents, the open discussions in the group sessions were perceived as a major factor that encouraged changes in communication with others, both inside and outside the group. In the group, which most of the people regarded as a "safe place," participants could speak openly about their feelings, concerns, and problems. Through the discussions an atmosphere of trust evolved and an open exchange of thoughts developed. They experienced other participants reflecting their own thoughts and problems, which "justified" their own feelings.

When asked their opinion about what might have caused improved communication, some also referred to certain communication techniques they learned in the course (e.g., brain storming, sessions or chapters in the book that dealt with support and relationships).

When asked "When you began to communicate differently with some people, how did they respond -- and how did this make you feel?" most respondents commented on their own feelings toward other peoples' reactions. Most of the participants discovered that they were now communicating with friends and relatives in a more relaxed way. They feel easier about talking about their condition. It seems that a better understanding of themselves and their improved ability to express things more clearly led to improved patterns of communication.

One person said:

"She [a friend] made point of telling me last week that my personality changed. She said: You were [before the course] so focused internally, now, when I talk to you, I know you're there, you're not out in la la land somewhere."

Several people said they felt more at ease in talking to others and felt that others seemed to react to it. One participant reported that he felt more comfortable about his disease (diabetes), which in turn helped him to openly talk about his condition with his friends.

"I was trying to avoid telling people for a month or two until I got through the better part of the course and it's helped me open up a lot more about my disease for sure. All my buddies know [now] how to deal with my problems. Knowing that the crowd I'm hanging out with is prepared for things that can happen to me [makes me feel good]. I'm a lot more confident around my friends and my peers right now. It makes me feel good to tell people what's going on."

The majority of the people interviewed did not directly discuss a change in communication with their friends:

"I just went by the feeling that I felt I was communicating better rather than asking them."

However, some people did get feedback regarding changes in their behaviour and this seemed to make communication easier for both sides:

"People have been really noticing that I've been a little more relaxed about it. You see it also in their response to me and in the ease in talking with me". I think they're more at ease because I'm more at ease about it."

A summary of the analysis suggests that the program provided an atmosphere where people with similar conditions could exchange thoughts and feelings. Participants saw that others have similar problems and the giving and receiving of suggestions to solve these problems helped

many people to reflect on their condition. This "putting thoughts in order" in turn helped people to express themselves more directly and clearly. Now, they were able to say "what was the matter."

Participants were now also communicating more openly with others. In the communication model this would refer to the "self disclosure" side of the model. People now accepted their condition and were not ashamed to admit to problems. People were now more able to speak about their feelings and concerns, which in turn clarified the recipient's understanding of the message and the sender's intent. Through a better understanding of themselves, participants now can also send clearer messages on the "demanding side":

"I'm more demanding. More clear on what I'm saying. I tell him [doctor] exactly how I'm feeling and what's going on. I'm not embarrassed to say, 'I need something for the pain'. I didn't want people to know I was in pain before, now I'm feeling that it's okay."

Another important comment from a respondent relates to the congruency between verbal and non-verbal language to avoid communication errors:

"I'm not trying to put on a brave front when I'm in pain. I'm more able to allow my body language and my verbal expression to be congruent rather than say nothing, grit my teeth and through body language, show the pain."

F - CONCLUSIONS

This pilot project demonstrated that the Chronic Disease Self-Management Program is a viable and feasible program in the Yukon. Volunteers and health professionals worked collaboratively and accomplished all the implementation activities and developed the community infrastructure required for the program which was delivered at a pace appropriate to the population and needs of Yukoners. The quantitative study showed participants had statistically significant improvements in 12 of the 17 outcome measures. Through the qualitative evaluation, participants' testimonials indicated that their independence and quality of life had been improved.

G - RECOMMENDATIONS

1. That the Chronic Disease Self-Management Program continue to be offered in the Yukon.
2. That funds be made available to support the 8 hours per week coordinator position and honorariums for program leaders when they deliver the program.