

Self-management Training for People with Chronic Disease: A Shared Learning Experience

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Abstract

The lay-led, Chronic Disease Self-Management Course (CDSMC) is designed to train people in self-management. The present study focused on the experiences of a group of participants attending the CDSMC. Data were collected via interviews with nine participants four months and twelve months after attending the CDSMC. Results showed that participants appreciated the opportunity to share experiences in a reassuring environment. Goal setting was critical in making changes. The CDSMC provided participants with the confidence to select the self-management technique that would meet their needs at a given point in time.

Keywords

chronic disease, patient education, qualitative, self-management

Introduction

CHRONIC DISEASE MANAGEMENT has seen a shift away from paternalistic models of health care that placed patients as the passive recipients of care (Barlow, Wright, Sheasby, Turner, & Hainsworth, 2002). The more active involvement demanded by many patients coincides with the realities of chronic disease, whereby responsibility for day-to-day disease management gradually shifts from health care professionals to the individual. Thus, it is not surprising that the role of psycho-educational interventions in facilitating adaptation to the challenges of chronic disease has received growing recognition. Indeed, a recent review of the self-management interventions pertaining to chronic disease found that the largest proportion of studies was published in the 1990s (Barlow et al., 2002).

The majority of psycho-educational interventions are disease specific. Few interventions have dealt with more than one disease or with the problems of co-morbidity (Lorig et al., 1999). This is somewhat surprising as it has been estimated that people aged 60 years and older have on average 2.2 chronic diseases (Hoffman, Rice, & Sung, 1996) and therefore have to manage these diseases and their consequences simultaneously. Analysis of the self-management tasks faced by people with three of the most common chronic diseases presenting in primary care (i.e. arthritis, asthma and diabetes) show that there are many commonalities (Barlow, Hearnshaw, & Sturt, 2003) including lifestyle change (e.g. exercise, diet), managing the psychological distress engendered by chronic disease and communicating effectively with health professionals. Furthermore, a review by Barlow et al. (2002) found broad similarities in the type of self-management approaches developed for people with chronic diseases, particularly in terms of course content, with many of the most effective approaches using cognitive-behavioural techniques to facilitate change. However, there was also considerable variation and it is acknowledged that there will always be disease-specific management tasks, such as blood glucose monitoring in diabetes and management of inhalers among people with asthma. None the less, courses addressing the generic issues associated with chronic disease

could be an effective means of reaching greater numbers of people.

The Chronic Disease Self-Management Course (CDSMC)

One course that recognizes the common issues faced by many people with chronic diseases is the Chronic Disease Self-Management Course (CDSMC), developed by Lorig et al. (1999). This course is being delivered in several countries including the USA, the UK and Australia. In the UK, delivery of the CDSMC was pioneered by voluntary organizations who are members of the Long-Term Medical Conditions Alliance (LMCA). It has since been adopted as the foundation of the Department of Health's Expert Patient Programme (EPP), which is being rolled out across primary care in England and by the Welsh Assembly in Wales.

The CDSMC is grounded within the theoretical framework of self-efficacy (Bandura, 1977), aiming to enhance self-efficacy through skill mastery, role modelling, persuasion, re-interpretation of symptoms, problem solving, decision making and action planning.

There have been several quantitative studies of the CDSMC focusing on outcomes. A randomized, controlled trial in the USA based on participants with arthritis, heart disease, lung disease or stroke showed that at six months the intervention group had significant improvements on physical and psychological health status (Lorig et al., 1999). A follow-up study showed that benefits remained at two years despite worsening disease (Lorig et al., 2001a). A non-randomized, one-year, follow-up study found improvements in self-efficacy, health behaviours and health status (Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001b). A non-randomized study conducted in the UK based on a more heterogeneous, chronic disease sample found improvements in self-efficacy, some aspects of health status and some health behaviours at four-month follow-up (Wright, Barlow, Turner, & Bancroft, 2003).

While effectiveness data from the USA and the UK are encouraging, there have been no qualitative studies examining participants' experiences of the CDSMC. The present study addressed this omission in a qualitative

investigation of the CDSMC from the perspectives of participants. Specifically, we aimed to gain greater understanding of participants' experiences of the CDSMC and subsequent use of self-management techniques.

Methods

Sample

Delivery of the CDSMC was organized by the LMCA, an umbrella organization for over 100 national voluntary organizations in the UK. CDSMC participants were recruited in the community by each participating voluntary organization (i.e. Diabetes UK, Haemophilia Society, ME Association, Action for ME and British Polio Fellowship), through various sources, including information placed in general practitioner practices and public service announcements in local media. A total of nine participants (seven women and two men) who

had attended all six sessions on the CDSMC were purposively selected for interviews to represent a mix of diagnoses, age and gender. (See Table 1 for participants' characteristics.)

The intervention: the Chronic Disease Self-Management Course (CDSMC)

The CDSMC comprises six, weekly sessions, each lasting approximately two hours, and is delivered by pairs of lay leaders trained in CDSMC delivery and guided by a manual to ensure consistency of content. Topics covered are listed in Table 2. Each course was open to anyone with a chronic disease; membership of the voluntary organization was not mandatory.

Data collection

Data were collected via interviews at 4 months and 12 months after attending a CDSMC giving a total of 18 interviews. This number of

Table 1. Participant characteristics

<i>Participant</i>	<i>Characteristics</i>
Participant 1	Fifty-six years old, single female. Diagnosed with PPS. Other illnesses include dislocation of right hip and arthritis. Due to pain and fatigue she has limited mobility and is unable to work
Participant 2	Fifty-three years old, married female. Born with Von Willibrands Disease (vWD). Other illnesses include degenerative bone disease and arthritis. Unable to work as she cares for children with the same disease
Participant 3	Sixty-seven years old, married male. Diagnosed with polio aged two and recently diagnosed with PPS. Other problems include no strength in shoulders and stiff left hip. Retired
Participant 4	Forty-six years old, female, widower. Diagnosed with diabetes. Other illnesses include high blood pressure, arthritis and obesity. She is currently employed as a supply teacher, however is unable to work full time
Participant 5	Fifty-five years old, female, married. Diagnosed with diabetes aged 47. Other problems include panic attacks and tiredness. She is employed at a local supermarket and is a volunteer at a community centre looking after elderly women
Participant 6	Seventy-three years old, female, widower. Diagnosed with diabetes aged 58. Other problems include high blood pressure. Retired
Participant 7	Sixty-seven years old, female, married. Diagnosed with PPS aged 4. She does not work
Participant 8	Forty-eight years old, female, recently separated from partner. Diagnosed with ME aged 28. Other problems include headaches, underactive thyroid and panic attacks. She is unemployed as a result of her illness symptoms
Participant 9	Forty-six years old, male, married. Diagnosed with ME aged 44. He is unemployed as a result of his illness symptoms

Key: PPS = Post Polio Syndrome
 ME = Myalgic Encephalomyelitis

Table 2. Topics covered on CDSMC

Topics

Adoption of exercise programmes
 Use of cognitive symptom management techniques (e.g. guided relaxation and distraction)
 Nutritional guidelines
 Fatigue and sleep management
 Use of medications and community resources
 Dealing with the emotions of fear, anger and depression
 Training in communication with others, including health professionals
 Health-related problem solving
 Decision making
 Living wills
 Contracting (goal setting)

interviews is broadly consistent with the prevailing trend among qualitative interview studies (i.e. 15 ± 10) (Kavale, 1996). The purpose of the interviews was to gain greater understanding into the experience of the CDSMC and use of self-management techniques.

Telephone interviews

Telephone interviews, rather than face-to-face interviews, were necessary due to the geographical dispersion of the participants. It is acknowledged that telephone interviews have certain limitations compared to face-to-face interviews for establishing rapport and observing non-verbal signals. At the beginning of each interview, participants were informed about the purpose and their consent to be audio-taped was obtained. Topics explored at four months included the experience of attending the course, current practice of self-management and perceived confidence in ability to sustain self-management skills. Interviews at twelve months mainly focused on determining whether participants had been able to maintain use of self-management techniques, or initiate new self-management techniques during the previous eight months. The interview format was sufficiently flexible to allow participants to raise and discuss other issues, which had personal relevance. Questions were not asked in a mechanical sequential manner, as often the participants spontaneously introduced areas of concern without prompting.

Analysis

Data were analysed using content analysis to identify themes following the stages of analysis as suggested by Smith, Jarman and Osborn (1999). After the initial reading of the first interview transcript, any interesting or significant points were noted in the left side of the margin. Following a second reading, emerging theme titles were noted in the right margin (i.e. key words that captured the essential quality of what was being said in the text). The second stage of analysis involved the grouping of all emerging themes. Once these clusters of themes had been formed, validity was checked by referring back to the original transcript and making sure connections were evident. A master list of themes, which included the participant ID number, transcript page and line reference, was then produced. The second transcript was analysed using the master list and any new themes were compared to the earlier transcripts. Two researchers analysed the data independently and a consensus over categorization of data was achieved through discussion with a third researcher. The quotations included in the article are typical of the views expressed and are used to exemplify emerging themes. Results for four-month and 12-month follow-up interviews were very similar in terms of the changes participants had made following course attendance. Hence, in order to avoid repetition, results of both follow-up interviews are presented together.

Results

Experience of attending the CDSMC

Supportive, reassuring environment All participants spoke of the experience of being with similar others and sharing and comparing common experiences. Indeed, after the course most participants maintained contact with each other, either on an informal level (e.g. over the phone, Internet chat) or through their respective voluntary organizations. Several participants felt reassured that other course participants understood their illness experience. Emotional support and the 'tools' to make changes were valued aspects of the course experience:

Because sometimes you think, "oh I'm the only one who feels like this", and the course showed that we weren't you know, that we all had problems and it gave us a way of tackling them. (Participant 6, diabetes)

In some instances, participants contrasted the support received from other course members with that provided by health care professionals:

I never felt there was any support that helped you actually. You know it's like 'go away and exercise, do this, do that'. But I felt the course gave me the wherewithal to go and do these things. Because when the hospital tell you they just say 'oh go and do it'. (Participant 4, diabetes)

I think with my situation, you've got to be your own self-manager but particularly where there is not a lot coming from medical professionals and there are a lot of things that you can do to help yourself. But yeah I thought it [the course] was good and I think you know the health service doesn't provide that much emotional support for people. (Participant 9, ME)

Participants and tutors share information on the course. One participant with ME found that learning about services that were locally available had helped him to cope on a day-to-day basis and was one of the most useful aspects of the course. A participant with PPS came to realize that her symptoms were due to a second, slowly progressive, degenerative phase of polio. After attending the course, this participant had a greater understanding of her symptoms but

also had an awareness of how course members (with and without PPS) coped with similar problems such as fatigue:

I mean before I came back to England I didn't even know what post-polio syndrome was. I wouldn't necessarily have realized that such and such could be down to a post-polio thing and I would put it down to something else. Certainly being on the course, you know kind of highlighted that for me. (Participant 1, PPS)

The three interviewees with diabetes reported that they were more aware of the complications that can arise from not taking medication regularly after comparing themselves with other participants with diabetes. They all reported that they take either insulin or tablets on a regular basis as well as adhering to strict dietary guidelines following course attendance. One interviewee in particular compared herself with participants with diabetes who she perceived were 'worse off' and this had resulted in a greater resolve to manage her condition more effectively:

You just used to think you can get away with things until you went to the course and listened to people that didn't sort of keep to the diet or didn't take their tablets. They had all got serious things wrong with them. They were all on tablets and I thought 'I don't want to go down that path'. (Participant 5, diabetes)

Another participant with diabetes said that listening to others talk about their injecting regimen gave her the confidence to change from her current regimen to the one proposed by the diabetic nurse:

They've [health care providers] been asking me to change my insulin for quite a while and it was only speaking to other people and realizing that the insulin I was using was getting a bit out of date and it needed updating. . . . because living on your own, any change, you are rather fearful of it – going into the unknown, changing from one thing to another. But yes, I did do it and I think it was through gaining confidence on the course that gave me the sense that I must do it. (Participant 6, diabetes)

Comparisons were drawn not only within diagnostic groupings but also across diagnostic

boundaries. The commonality of chronic disease became evident to some interviewees:

We had somebody on the course who had spina bifida and somebody else with severe back problems and although they were different types of disability some of the stuff that came out were identical, which in its own way was interesting. (Participant 3, PPS)

Initiating successful self-management

Participants found that by setting themselves incremental, achievable targets during the course they were able to initiate and sustain important self-management activities such as exercise:

Because I think, sometimes, I know even with exercise, you sort of think 'oh it's a life commitment'. But if you can set little goals you can slowly get into it. You don't have to change your whole life. (Participant 4, diabetes)

I used to give myself a goal each week and if things start to get on top of me. Now if I start to sink down I give myself goals again. (Participant 2, vWD)

Since the course I am more aware of things and I know how to go about doing them [self-management techniques]. I am trying to set myself targets in all sorts of ways with the house and with other things. (Participant 3, PPS)

Several participants felt that having to provide feedback to the rest of the group on the success, or otherwise, of weekly goal setting provided the motivation for action. However, it was clear that feelings of guilt emerged if participants were not able to achieve their weekly goals:

Goal setting made me pledge to do things that I wouldn't have done otherwise and it also made you feel very guilty if you didn't do it. (Participant 4, diabetes)

With all the best will in the world you think, I'll do it tomorrow. But once you've committed yourself and you've told somebody else. To go back and say, well I didn't do it, you feel guilty. To actually commit yourself

to doing something and doing it makes you feel quite proud of yourself. (Participant 6, diabetes)

Other participants who had successfully achieved their weekly goals throughout the course had inspired one interviewee to do likewise. Several interviewees mentioned that course tutors acted as positive role models irrespective of shared diagnosis, and that the information and assistance they provided was helpful and inspiring:

Yeah they had different problems to what I had but I used to speak to [name of tutor] if I had any problems, you know, and they put me in the right places and things like that and it was very, very helpful. Yes it gives me more confidence, the confidence I lost over the years not being able to get out. It gives me the confidence back to get up and be more assertive definitely. (Participant 2, vWD)

One participant found it was hard to maintain motivation to undertake goal setting after the course ended and attributed this to no longer being in a supportive group environment:

I think the biggest problem is trying to keep it up, to try and continue. I think when you are in a group you can motivate yourself easier than when you try things alone. It's like everything else you tend to drop behind, it's difficult to keep it up. (Participant 3, PPS)

Two-thirds of the participants felt more in control of their disease and expressed confidence in their ability to manage their condition despite no improvement in their symptoms:

I am never without pain but I manage a lot better now, I manage to go to one of the supermarkets to do my shopping there and they deliver the shopping for me where before I used to rely on my husband for everything. (Participant 2, vWD)

At four-month and 12-month follow-ups, all participants mentioned using specific self-management techniques that they learnt on the course and expressed confidence in their ability to perform these. Some participants found that the course reinforced existing knowledge of techniques that they had used in the past. For example, several participants explained how they

were already aware of some self-management behaviours (e.g. breathing, relaxation) and the course acted as a reminder, encouraging them to transform 'the idea' into practice.

Participants learnt to pace their activities to avoid overexertion. The two ME participants found pacing particularly beneficial for providing the necessary commitment to perform various self-management tasks:

Before I used to push myself to the very limit which is non-productive really because it's [the course] taught me to take things in small steps . . . Just hold on to the chair and just swing your legs backwards and forwards. Just doing it twice is better than not doing it at all. (Participant 8, ME)

The majority of participants began using positive thinking and relaxation techniques to help manage illness symptoms, such as pain and fatigue. Some participants found that various self-management techniques provided them with the necessary tools to help cope with life events unconnected with their primary chronic condition. One participant with diabetes experienced the death of her husband after the course and used relaxation and breathing to combat stress-related increases in glucose levels during this time. Prior to attending the CDSMC, two participants reported having panic attacks in addition to their main condition. At four-month and twelve-month follow-ups they were both using distraction and relaxation techniques to manage this problem:

It is really good because distraction and learning to distract my mind when I got a panic attack. I think has been a great help as I feel safe in controlling the panic now. (Participant 8, ME)

If you have a panicky situation, you know to sit down and do some deep breathing and relaxing. You know how to get rid of the tension. (Participant 6, diabetes)

Several participants expressed confidence in communicating with others (e.g. health care professionals, friends and family members):

Yeah well now you see, I can speak now and I say what I want and I go to the right places and I get the treatment straight away. I demand straight out 'I want to see a Haematologist

please', whereas before I would have just seen any other doctor who wouldn't know what he was doing. It gives me the confidence back to get up and out and be more assertive definitely. (Participant 2, vWD)

I have decided more with friends and family just to try and inform them about what is wrong with me, I think it has helped in a sense. Um yeah, I mean it's a delicate line really between appearing self-absorbed and um, I feel I can communicate with people. It's quite useful. I give people leaflets now. (Participant 9, ME)

A main finding that emerged from the follow-up interviews is illustrated in one participant's problem-focused, coping efforts at 12-month follow-up. She showed increased confidence and assertiveness when dealing with her twin daughters being victimized at school: 'This course helped me get a letter to the education department, they give me the confidence and help me to do it all whereas before I would have never had this confidence' (Participant 2, vWD).

Four participants mentioned taking regular exercise at 12-month follow-up such as walking and swimming. One participant with diabetes described how she walks her dog for an hour every morning since being on the course. In contrast, other participants felt the impact of chronic disease (e.g. ME, polio) on physical functioning made exercise inappropriate for them. In addition, contrasting views were expressed about some of the other topics covered, particularly living wills. One interviewee found the living wills session very distressing whereas another would have liked more information on this topic:

I think the living wills was a no go area, because I noticed a number of people were very, very concerned about it and got really uptight. (Participant 2, vWD)

Discussion

This first qualitative investigation of the Chronic Disease Self-Management Course (CDSMC) has shown that a key feature appreciated by participants was the sharing of experiences with similar others in a supportive, reassuring environment. This finding accords with earlier

studies of self-management and group interventions (Barlow, Cullen, Davis, & Williams, 1997; Turner, Barlow, & Williams, 2002). Sharing involved the reciprocal activities of providing support to others and receiving support oneself. In addition, participants exchanged information about specific chronic diseases and generic coping strategies for common symptoms such as fatigue. Sharing engendered feelings of peer belonging and acceptance, thus, participants realized that they were not alone. They not only felt reassured that they were understood but also appreciated the emotional and practical support provided by other members of the group including tutors. This support helped when making changes to their self-management repertoire.

It was clear that participants were using social comparison in the group setting: they compared themselves to other participants and tutors who shared the same condition as themselves and also to others with different chronic conditions. There is evidence that people with a chronic disease can derive hope and inspiration from those whom they perceive to be coping well with their problems, described as upward social comparison (Buunk, 1995). Furthermore, Buunk, Frederick and Gibbons (2002) suggest that social comparison with others in a group setting may encourage goal setting. It was evident that the tutors especially were perceived to be good role models in that they were evidently not letting their chronic condition overwhelm them because of the commitment required to deliver the CDSMC. Modelling is one of the main efficacy enhancing strategies underpinning the CDSMC.

Studies have shown that chronic disease patients can derive comfort and reassurance from making downward social comparisons (Buunk, Collins, Taylor, van Yperen, & Dakof, 1990). However, downward comparisons may also serve to increase anxiety as they serve to highlight the potential for future worse deterioration (Buunk et al., 1990). This appears to have occurred among the participants with diabetes in this study. However, they used their anxiety-provoking, downward comparisons positively to initiate self-management techniques to prevent their condition deteriorating to the same extent as the target of their comparisons. The exchange of information and the use of social comparison within and across diagnostic groupings fuels the debate concerning the benefits of specific versus

generic self-management interventions. The possible drawback of a generic course is that by including participants with very dissimilar conditions the opportunity for making relevant and informative comparisons may be compromised. It is not hard to imagine, for example, that two arthritis participants awaiting a total knee replacement surgery would find each other's experiences more informative than that of a person awaiting cancer surgery. However, there is evidence from other studies that comparisons are not restricted to people having the same condition. Wood, Taylor and Lichtman (1985) found that although cancer patients' comparisons were predominantly made with other people with the same condition, nearly a quarter (19%) of patients made comparisons with people with other physical illnesses and disabilities. In the context of this present study it may be that course tutors need to emphasize repeatedly and strongly some of the similarities in living with and managing a chronic illness in order to encourage meaningful comparisons to be made among participants with dissimilar conditions. Alternatively, running courses for people with the same or similar conditions may lead to a more specific discussion of common issues (e.g. use of insulin in diabetes).

Participants learned new self-management techniques and found that the course acted as a reminder of techniques they had used in the past. Goal setting is used as a catalyst for change on the CDSMC and is practised throughout the six sessions. Skills mastery is considered to be the most important efficacy enhancing strategy (Gonzalez, Goepfing, & Lorig, 1990). It was clear that goal setting was an important factor in initiating and achieving change throughout the course. Many referred to the difference between recommendations received in health care settings, such as the need to make dietary changes or to exercise more, and the guidance and support received on the course. The latter provided them with the means, or 'tools' with which to enact changes in a supportive environment and the confidence to select the self-management technique that best suits their needs at a given point in time. The notion of transferable skills emerged as participants applied the techniques learned to other situations in their lives that were not associated with chronic disease.

One problem is that after the end of the course, the motivational and supportive aspects are no longer readily available and some people may find it difficult to maintain changes without continued support. Lorig and Holman (1989) have tested the value of booster sessions in the context of arthritis self-management courses and found no difference in outcomes. None the less, strategies such as establishing a post-course buddy system may assist some people in maintaining hard-won changes. Reference to feelings of guilt associated with not achieving weekly goals may indicate a simultaneous desire to succeed and a reluctance to disappoint other participants and tutors. This latter point is consistent with studies showing an association between guilt and responsibility (Izard, 1991) and guilt and prosocial behaviour (Tangney, 1991). It is possible that what the participants referred to as 'guilt' could be linked to social persuasion, which is one of the ways of enhancing self-efficacy (Gonzalez et al., 1990).

In a very early study conducted in the USA, Lenker, Lorig and Gallagher (1984) attempted to explain the absence of a relationship between changes in health behaviours and health status among participants attending an arthritis self-management programme (ASMP). They found that participants who had improved health status were more likely to report feeling in control of their arthritis than those participants who reported worse health status. In our study participants reported feeling more in control of their disease management despite the presence of painful, often unremitting symptoms. This sense of control was referred to as 'confidence' and is in keeping with a previous qualitative study of a similar ASMP (Turner et al., 2002).

Aspects of the CDSMC that caused the most diversity of views were exercise and living wills. Some interviewees felt they were already exercising (diabetes) while others felt that they were too restricted physically to cope with exercise (ME, PPS). It is important that participants are encouraged to form their own exercise programme and adopt a broad view of exercise that includes everyday activities such as walking, rather than feel pressured to perform a prescriptive regime. The diversity of views needs to be considered in future course delivery among heterogeneous chronic disease participants and suggests that the exercise component

of the CDSMC needs to take account of prior experience, level of physical functioning and beliefs about exercise capability. The diversity of exercise beliefs may partly explain the failure of the Wright et al. (2003) study to detect increased use of exercise following the CDSMC. Given the extreme difficulties involved in initiating and maintaining exercise among young, healthy populations it is perhaps not that surprising that a six-week, group-based Chronic Disease Self-Management Course, comprising mainly older adults is unable to demonstrate consistent exercise benefits. Exercise programmes comprising a comprehensive cognitive component addressing exercise barriers, benefits and motivations may be more successful in this respect and may help to change the strongly held beliefs such as those expressed by some participants in the present study.

There are a number of caveats that need mentioning. First, the study was based on volunteers who attended all of the six weekly sessions—behaviour indicative of a group who were highly committed and motivated to make changes. Educational interventions demand considerable time, effort and commitment from participants (Barlow, 2002). Indeed, enrolment on such courses may be considered the first step towards becoming a more successful self-manager. Further, the interview process itself may have served to encourage participants in this study to maintain self-management over time. It will be important to understand more about why people do not come forward for such courses and also why some people fail to complete sessions. The use of telephone interviews was a pragmatic decision. However, this may have limited the depth of insight available due to the lack of opportunity to observe non-verbal communication during the interview. Finally, group-based interventions are not an acceptable learning environment for everyone. Thus, it is important that alternative means of providing self-management training are explored, such as computer-based programmes that can be accessed at home.

Given the commitment made by the UK government in ensuring that this programme becomes a widely available and widely used intervention, it is important that more qualitative studies attempt to record the views of participants and indeed of tutors. These data

may highlight the key mechanisms and processes through which participants either report improvement, or lack of, in their chronic disease self-management leading to continuing course development.

In conclusion, the CDSMC provides participants with a cognitive behavioural tool-kit from which they confidently select the most appropriate 'tool' that meets their needs. A key feature of the course is the shared learning environment where reciprocal support is offered unreservedly among participants and tutors with similar and dissimilar conditions. Social comparison, as well as self-efficacy, appears to play a part in effecting change.

References

- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barlow, J. H. (2002). Self-management comes of age. *Rheumatology*, *41*, 593–594.
- Barlow, J. H., Cullen, L. A., Davis, S., & Williams, B. (1997). The hidden benefit of group education for people with arthritis. *British Journal of Therapy and Rehabilitation*, *4*, 38–41.
- Barlow, J. H., Hearnshaw, H., & Sturt, J. (2003). Self-management interventions for people with chronic conditions in primary care: Examples from arthritis, asthma and diabetes. *Health Education Journal*, *61*, 365–378.
- Barlow, J. H., Wright, C. C., Sheasby, J., Turner, A. P., & Hainsworth, J. (2002). Self-management approaches for people with chronic conditions: A review. *Patient Education and Counseling*, *48*, 177–187.
- Buunk, B. P. (1995). Comparison direction and comparison dimension among disabled individuals: Towards a refined conceptualization of social comparison under stress. *Journal of Personality and Social Psychology*, *59*, 1238–1249.
- Buunk, B. P., Collins, R. L., Taylor, S. E., van Yperen, N. W., & Dakof, G. A. (1990). The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology*, *59*, 1238–1249.
- Buunk, B. B., Frederick, X., & Gibbons, A. D. (2002). The relevance of social comparison processes for prevention and health care. *Patient Education and Counseling*, *47*, 1–3.
- Gonzalez, V. M., Goepfinger, J., & Lorig, K. (1990). Four psychosocial theories and their application to patient education and clinical practice. *Arthritis Care and Research*, *3*(3), 132–143.
- Hoffman, C., Rice, D., & Sung, H. Y. (1996). Persons with chronic conditions: Their prevalence and costs. *Journal of American Medical Association*, *276*(18), 1473–1479.
- Izard, C. E. (1991). *The psychology of emotion*. New York: Plenum.
- Kavale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. London: Sage Publications.
- Lenker, S. L., Lorig, K., & Gallagher, D. (1984). Reasons for lack of association between changes in health behaviour and improved health status: An exploratory study. *Patient Education and Counseling*, *6*, 69–72.
- Lorig, K., & Holman, H. R. (1989). Long-term effects of an arthritis self-management study: Effects of reinforcement efforts. *Social Science and Medicine*, *2*, 221–224.
- Lorig, K., Ritter, P., Stewart, A., Sobel, D., Brown, B., Bandura, A. et al. (2001a). Chronic disease self-management program: 2-year health status and health care utilization outcomes. *Medical Care*, *39*, 1217–1223.
- Lorig, K., Sobel, D., Ritter, P., Laurent, D., & Hobbs, M. (2001b). Effectiveness of a self-management program on patients with chronic disease. *Effective Clinical Practice*, *4*, 256–262.
- Lorig, K., Sobel, D., Stewart, A., Brown, B., Bandura, A., Ritter, P. et al. (1999). Evidence suggesting that a chronic disease self-management program can improve health status while reducing hospitalization: A randomized trial. *Medical Care*, *37*, 5–14.
- Smith, J. A., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. In M. Murray and K. Chamberlain (Eds.), *Qualitative health psychology: Theories and methods* (pp. 218–240). London: Sage Publications.
- Tangney, J. P. (1991). Moral affect: The good, the bad and the ugly. *Journal of Personality and Social Psychology*, *61*, 598–607.
- Turner, A. P., Barlow, J. H., & Williams, B. R. (2002). The impact of an arthritis self-management programme on psychosocial wellbeing. *Health Education*, *102*, 95–105.
- Wood, J. V., Taylor, S. E., & Lichtman, R. R. (1985). Social comparison in adjustment to breast cancer. *Journal of Personality and Social Psychology*, *49*, 1169–1183.
- Wright, C. C., Barlow, J. H., Turner, A. P., & Bancroft, G. V. (2003). Self-management training for people with chronic disease: An exploratory study. *British Journal of Health Psychology*, *8*, 465–476.