
Mental Health and Cardiovascular Disease: Challenges for Counsellors

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ABSTRACT

Tremendous gains have been made in treating the effects of cardiovascular disease (CVD). Across the last few decades, the survival rates following a vascular accident, that is, a stroke or heart attack, have increased steadily and substantially. Unfortunately, this success has resulted in a corresponding increase in the number of individuals with reduced physical or psychological functioning due to cardiac-related disability. In this paper, we discuss the psychological challenges that confront individuals recovering from such events. In the closing section, we describe the crucial role that counsellors might play in aiding the rehabilitation of cardiac clients.

RÉSUMÉ

Des progrès considérables ont été accomplis dans le traitement des maladies cardiovasculaires. Au cours des récentes décennies, le taux de survie après un accident vasculaire, c'est-à-dire une congestion cérébrale ou une crise cardiaque, a augmenté de manière régulière et considérable. Malheureusement, ce succès a eu pour résultat une augmentation du nombre d'individus au fonctionnement physique ou psychologique réduit en raison des infirmités découlant des accidents cardiaques. Dans cet article, les auteurs étudient les défis psychologiques auxquels doivent faire face les individus lors de leur rétablissement suite à ces accidents. Dans la section finale, les auteurs expliquent le rôle critique que pourraient jouer les conseillers dans la réadaptation fonctionnelle des patients cardiaques.

Heart disease and stroke (cardiovascular disease, CVD) are the number one killers of Canadian men and women. In 1995, 36% of men's deaths and 39% of women's deaths in Canada resulted from CVD (Heart & Stroke, 2000a). Currently, it is estimated that 8 million Canadians have some form of CVD (Heart & Stroke, 2000b). Stated in more personal terms, it is more likely that the reader of this sentence will die of CVD than any other disease.

Given the prevalence of CVD, it is not surprising that substantial resources are being spent on the rehabilitation of clients with CVD. The success of these programs has led to an increased life expectancy for many clients with cardiac disease (Wenger, 1995). Ironically, better rehabilitation and advancements in medicine have also led to increased client disability. Clients now live longer with reduced physical capacities and diminished opportunities.

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Often clients with CVD present with psychological problems such as depression and poor motivation. Other problems frequently include diminished family relationships, reduced social life, and decreased sexuality. Depression is seen in 30% to 75% of clients in cardiac rehabilitation programs, and of those who have experienced an acute heart attack, about 10% to 30% exhibit clinical depression (Taylor & Berra, 1993). Depression is also associated with a poorer prognosis (Con, Linden, Thompson, & Ignaszewski, 1999). Similarly, the motivation to change lifestyle habits can be a problem for these clients, with a contributing factor being a decreased perception of personal agency (Bock et al., 1997). These variables interact with each other and do not exist in isolation. For example, depression can decrease the motivation of a client to help themselves during rehabilitation (Con et al., 1999), and consequently reduce the effects of physical therapy.

It is important for counsellors to understand the psychological impact of CVD. In some instances, counsellors may be called upon to work with physicians and rehabilitation specialists to provide the best psychological care for those suffering from this illness. The increased disability of individuals with heart disease, coupled with an aging population, also makes it important that counsellors in all settings be aware of the psychological difficulties that many individuals with CVD face. With an aging population, more and more frequently clients with CVD will present to counsellors with CVD related problems such as depression. By providing support and counselling within a medical setting or outside of one, the quality of life and the prognosis for many of these individuals can be improved.

The general aims of this paper are twofold. First, the effects of depression and motivation on the recovery process of CVD clients are discussed. Having established the psychological characteristics and needs of CVD clients, the discussion turns to the role that counsellors might play in aiding individuals with cardiac disease. In this section, close attention is paid to counselling approaches that have found recent empirical support in the literature in this area.

DEPRESSION

It is common for people to exhibit a brief depression immediately following an acute heart attack or other coronary crisis. This is a normal grief reaction to a perceived loss of functional capacity and health (Smith & Leon, 1992). However, many individuals with heart disease develop a more serious depression that decreases physical and psychological functioning, which in turn may hasten the progression of coronary disease. Many different studies have shown that the depression that comes after a serious heart attack is independent of disease severity and is predictive of quality of life, disease prognosis, mortality, and return to pre-illness work or other activities (Taylor, Barber, McIntosh, & Khan, 1998).

There is some debate about how and why serious depression manifests itself in individuals who suffer from heart disease or stroke. One explanation is that faced

with the prospect of a life with significant disability, individuals experience a diminished sense of life quality, and subsequently depression (Nickel, Brown, & Smith, 1990).

Other explanations focus on psychosocial factors. Depression is particularly prevalent in cardiac clients with low income, less education, and in those who are socially isolated (Nickel et al., 1990). Age can also mediate depression and heart disease. Nickel et al. (1990) found that younger clients with higher incomes were at less risk for depression. This may be because the elderly are more likely to be socially isolated, poor, and less well educated. Also, because heart disease usually strikes women ten years later in life than men (Wingate, 1995), and women outlive men by an average of seven years, older women may be at a higher risk for heart disease-related depression. To further worsen the situation, Status of Women Canada reports that there is a high proportion of elderly women living in poverty (Townson, 2000).

Gold (1996) reported that when clients developed depression after coronary artery bypass graft (CABG) surgery it was often a severe depression. Further, one-third of cardiac clients who were not depressed before surgery were found to be so after the procedure and that social isolation was the only significant predictor of depression following surgery. This finding suggests that it would be useful to screen clients for social isolation before surgery. Moreover, by providing socially isolated clients with support before they undergo a surgical procedure, their postoperative psychological well-being might be improved.

When cardiac clients are depressed they may report more pain and reduced perception of their capabilities (Con et al., 1999). Pain can be a reminder to individuals of their perceived fragility, which may be further depressing and result in even less motivation to self-help in a cardiac rehabilitation setting. These clients can benefit from counselling that aims to break this cycle of thinking in order that their physical and psychological capacity might be improved.

Counsellors should also be aware that depression might also lead to heart disease rather than being a consequence of the illness. Jacobs and Sherwood (1996) reviewed a twelve-year Swedish study that found that depressed women were five times more likely to develop heart-disease related chest pain than were women who did not have depression. However, if the depression follows the coronary crisis, it may not be necessarily linked to a previous depression. Depression is common in clients with heart disease who have no history of psychological difficulties (Gold, 1996). Regardless of whether the depression is a contributor to, or a result of, cardiac illness it is a significant problem that needs to be addressed by the medical and mental health communities who encounter these clients.

The assessment of depression in cardiac clients is particularly difficult. Many of the common symptoms of depression, such as decreased interest in everyday activities, that is, anhedonia, can be a direct physical result of the illness, rather than a psychological problem (Smith & Leon, 1992). Further, it is important to distinguish between a clinical depression and a brief reaction to the illness. Using a rigorous diagnostic tool developed for the diagnosis of depression in clients

with coronary artery disease, researchers have found that 18% of clients had a major depressive disorder that could be distinguished from manifestations of the physical illness (Carney et al., 1987).

In summary, it is evident that careful monitoring of individuals with heart disease is necessary in order to screen for depression. Counsellors should be aware that clients with heart disease might be at a high risk for developing depression and should be aware that the depression might be masked by other symptoms related to the illness. By providing support for these clients, their prognosis and quality of life can be improved. In a busy medical setting, other practitioners might not be available to help these individuals deal with psychological problems and it is important that help for a depressed client be available. Counsellors also have an opportunity to educate medical practitioners that they are well equipped to aid clients with psychological problems associated with CVD.

MOTIVATION

As already discussed, depression may influence an individual's motivation to reduce risky behaviour such as smoking, or to take part in a rehabilitation program (Jacobs & Sherwood, 1996). Lack of motivation can also be present when the client is not depressed. Such general motivational problems are manifested in numerous ways. For example, adherence rates to medical regimes and rehabilitation programs are low, with an estimated 50% of rehabilitation participants dropping out in the first year, and an estimated 16-50% of cardiac clients with hypertension stopping their medications within one year (Burke, Dunbar-Jacob, & Hill, 1997). Women in particular are likely to drop out of rehabilitation programs or to not participate at all (Wenger, 1995); only 20% of participants enrolled in cardiac rehabilitation programs are women (Burke et al., 1997). Ironically, participating in such programs can increase a client's motivational readiness (Bock et al., 1997). Motivating individuals to change health-related behaviours is an important area when working with clients with CVD.

It is disconcerting that women have such poor participation rates in rehabilitation programs. Toobert, Strycker, and Glasgow (1998) provide a thorough review of the literature on lifestyle change in women with CVD and report that women are referred less to cardiac rehabilitation programs, and are also more likely to refuse to participate. LaCharity (1997) found that participants in a study looking at the experience of women with CVD expressed concern about problems encountered when changing their lifestyles. These problems included discomfort, dislike, worry about being too old to exercise, and problems with exercising in cold weather. Toobert et al. (1998) also reported studies that found that women were significantly more likely than men to report transportation, weather, physical inability, and distance to the program as barriers to participation. They reported on literature that found that older female cardiac clients had poorer self-esteem and higher anxiety, and that female CVD clients in general

had more medical problems, higher anxiety, and more time conflicts than men. The younger women may have dropped out because of commitments to family, especially children that still live at home. Similarly, LaCharity (1997) found that for women with CVD being the role of caregiver in the family was stressful, and that participants continued to do heavy housework. Participants in this study found that being able to share their experiences of CVD with family and friends was an important source of support. It is also possible that self-efficacy is a contributing factor as women with lower self-efficacy participated less in rehabilitation (Toobert et al., 1998).

Self-efficacy is a central construct in motivation. It is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). As such, it is a concept that relates not to actual performance capability, but rather to how one feels about what one is capable of with the skills that one already possesses. Self-efficacy can affect how long an individual spends on a task and how persistent the individual is on difficult tasks (Bandura, 1997; O'Leary, 1985). For example, a difficult medical program might be better adhered to by clients who believe that they can engage in activities that will affect their health (O'Leary, 1985). Similarly, King et al. (1992) hypothesized that self-efficacy, when coupled with outcome expectancies, is the critical variable in determining whether clients attempt behavioural change and persist in such changes. King et al. (1992), in reviewing the literature of self-efficacy and its role in the physical activity of individuals with heart disease, concluded that self-efficacy most accurately predicts behaviour when it is applied to a small range of behaviours within a defined period of time. This provides support for Bandura's (1986) contention that perceptions of self-efficacy are behaviour and situation specific.

Self-efficacy enhancement has been shown to be a fundamental component of cardiac rehabilitation programs. Ewart (1995) found that self-efficacy mediated changes in physical activity. Specifically, it was found that adherence to a prescribed exercise routine was better predicted by clients' self-reported ability to jog, than performance on a maximal treadmill test. Ewart (1995) concluded that studies support the idea that much of the disability clients suffer following a heart attack is due to an inaccurate appraisal of their abilities to do physical activity. Similarly, researchers found that the success of a program designed to help women with coronary heart disease reduce their dietary fat to 10% of their caloric intake was initially successful and that this was correlated with self-efficacy ratings (Toobert, Glasgow, Nettekoven, & Brown, 1998). However, over twelve months, as it became clear how difficult this low-fat diet might be to maintain, self-efficacy ratings worsened as did the women's diet. If individuals do not believe that they are capable of doing an activity, then the motivation to participate will be very low.

Self-efficacy can also be mediated by age. One group of researchers divided participants in a community-based heart disease prevention program by age and perceived self-efficacy (Winkleby, Flora, & Kraemer, 1994). They found that

older adults with the highest blood pressure scores also had high self-efficacy and showed a high level of positive behaviour change. Interestingly, a younger group with higher self-efficacy showed less behaviour change than a younger group with lower self-efficacy. Although this is contrary to much of the literature examining self-efficacy and behaviour change, the authors speculate that the young, high self-efficacy group was also the healthiest at baseline and had a low perceived risk, therefore members of this group might not have seen the need to change many of their behaviours. In a study of lower socio-economic people in Ireland, it was found that although older men were well informed about diet and fat intake, they were unlikely to see themselves as able to change (Nic Gabhainn et al., 1999). The findings of these studies reflect the need for specific interventions to help clients improve their self-efficacy to change their diet and to increase their physical activity. Simple health education is not necessarily enough; specific interventions are necessary for individuals to make positive lifestyle changes.

Locus of control can also influence an individual's motivation. An interesting study by Low, Thoresen, Patillo, and Fleischmann (1993) found that causal attributions were an important factor in recurrence rates of heart attacks. Specifically, women who attributed their heart attacks to a bad marriage or to their spouses behaviour were more likely to have another heart attack within eight years. Also, although 75% of the women had a history of smoking, only 9.6% of them attributed their medical problems to personal behaviours. This external locus of control may influence the motivation an individual has to change. Counsellors can work with clients to recognize the impact their own behaviour has on their illness and life situation. In other words, counsellors can aid clients in moving from an external locus of control to an internal locus of control, that is, from disempowerment to empowerment. In doing so, counsellors will help change maladaptive attribution patterns and aid clients in the development of a heightened sense of their efficacy to change.

In summary, self-efficacy plays an important role in disease management as evidenced by the literature just discussed. Self-efficacy in chronic disease relates to the perceived ability to organize and integrate cognitive, social, and behavioural skills to meet various rehabilitative purposes (Lorig et al., 1996). Self-efficacy mediates client's motivation to change and as such, it is central to the therapeutic goals of medical or mental health practitioners. Similarly, by helping clients increase their internal locus of control, while also helping them achieve greater self-efficacy to change their exercise, nutrition, and smoking habits, counsellors can play a vital role in the improving the psychological health of individuals with CVD. This role is discussed in greater detail in the following section.

THE ROLE OF THE COUNSELLOR

There is a clear need for counselling cardiac clients. Counsellors can help individuals who suffer from depression as a part of their illness. They can also help

clients to make the lifestyle changes that are often required of individuals with heart disease. These changes often include significant behavioural adjustments in diet, activity levels, and smoking that are not easy for many clients to make. Why these changes are so difficult for many individuals to make is not yet clearly understood and the interactions between variables involved are often complex. Smoking, for example, is more prevalent in depressed clients, and the quit rate is less for depressed clients than for nonsmokers (Glassman, 1993). By helping clients increase their self-efficacy to change, disease progression might be slowed. One possible way of achieving this is through the helping relationship that is the hallmark of counselling.

When counselling this population, it should be kept in mind that cardiac clients' needs are unique. Halperin (1996) notes that cardiac clients are less likely to admit to psychological problems. Even when individuals realise that counselling may be needed, they are likely to continue to underestimate the severity of difficulties and their need for continued therapy.

Although there are no empirically validated counselling therapies specifically for the psychological problems of clients with heart disease, one approach that shows promise is cognitive-behavioural therapy (Smith & Leon, 1992). Depressive symptoms can be a direct result of the coronary crisis. Cognitive-behaviour therapy, with its focus on the reduction of negative thinking in order to help the client deal with conflicts about loss and fewer pleasant events in their lives, can be particularly powerful. Cognitive-behaviour therapy can also prove useful in reducing stress which is thought to be a contributor to heart disease. By reducing stress, other risk factors such as smoking and diet might also be positively affected (Baum & Posluszny, 1999). Stress has been shown to be associated with the amount a client smokes and a clients' tendency to eat more and to seek out comfort foods that will make them feel better (Baum & Posluszny, 1999). By using cognitive-behavioural techniques to help clients reduce their levels of stress, counsellors may contribute to the reduction of risk factors.

The counsellor can also be a valuable source of emotional support. An often-cited contributor to depression is social isolation (Glassman, 1993). The caring role of therapists becomes even more important when they provide support for the depressed cardiac client. It has been reported that women who reported feeling lonely, socially isolated and bored were twice as likely to have a heart attack than those who reported having social support (Toobert, Strycker, & Glasgow, 1998). These researchers also reported that living alone or being divorced presented as risk factors. Studies cited in Jacobs and Sherwood (1996) report that social networks are predictive of CVD. It has also been found that women with more social support had a quicker return to employment and had significantly better quality of life after a heart attack (Wingate, 1995). Wingate also found that social support was correlated strongly with quality of life. This is a role that can be taken on by a counsellor. However, it should be cautioned that although social support is predictive of better quality of life following a heart attack (Wingate, 1995), older women with CVD were significantly more

depressed when they only had nonfamily members to rely on for emotional support (Friedman, 1993). Thus, the counsellor may not be able to completely substitute the support that a family would be able to provide; nevertheless, the social-emotional support role that counsellors play cannot be over emphasised.

Although counsellors can be a source of social support, it should be emphasised as well that this role is necessarily limited; after all, counselling is generally a relatively brief process. With this in mind, an aim of counselling some cardiac clients will be to increase their social contacts and support networks. This might entail social skills and assertiveness development. It will almost certainly include offering clients information on how to navigate the various medical and community support resources. Counselling along these lines will ensure that clients can muster support for themselves long after counselling has ceased.

It is also important that medical personnel be educated in the importance of referring clients with CVD for counselling, and for providing care and empathy in their own right. The amount of information provided to a client with CVD about exercise, nutrition, and medical procedures can be overwhelming. Ewart (1995) found that self-efficacy increased in clients following interpretative counselling by a cardiologist or nurse who helped the clients understand what they were experiencing when exercising. This could indicate the role that a counsellor might play in the rehabilitation of cardiac clients: helping a client understand what is happening, and why, and thereby facilitating an increase in the client's self-efficacy and sense of control. Other researchers found that physicians were the most important source of support for lifestyle change for women and men, although women were more dependent on their healthcare providers for support than were men (Mosca, McGillen, & Rubenfire, 1998). However, the authors recognize that the physicians in their study were part of a CVD prevention program and so were possibly not a representative sample. For many physicians and nurses the time they must devote to medical crises may result in a lack of their ability to provide emotional support for individuals with CVD. It is important for physicians and other medical personnel to understand that counsellors can be an important source of support for clients with CVD. Clients who are poor, socially isolated, or depressed might not seek out emotional counselling on their own and physicians can provide a valuable service by referring clients to counsellors. Similarly, counsellors can contact physicians and let them know the services they can provide for clients who are suffering from CVD-related depression, anxiety, or lack of motivation.

With one of the important general goals for clients with heart disease being behaviour change, Halperin (1996) recommends homework assignments and having each therapeutic session aim toward learning new behaviours. Similarly, Ewart (1995) proposes that one of the most effective ways to reduce a client's perceived disability and inability to change is to use behaviour therapy and modelling. Although the foci of behavioural therapy in this context is behavioural change, it should be emphasised that cognitive changes occur concomitantly. When clients are, for example, guided through a carefully sequenced hierarchy of

physical activities, they build a sense of mastery. This ultimately aids individuals in making more realistic appraisals of their capacities.

Modelling by others can also be used to decrease negative ideation. An ideal place for this is in-group counselling, a form of therapy also recommended by Halperin (1996) as an effective and inexpensive treatment for cardiac clients. He suggests that within the group, positive modelling by individuals with heart problems can be a strong source of efficacy-enhancing information to others. Similarly, Allan and Scheidt (1998) report on a number of different cardiac rehabilitation programs that included group therapy. One program, the Lifestyle Heart Trial, included group therapy designed to help clients identify similarities among themselves, promote bonding and reduce social isolation. Individuals in this program had greatly reduced angina (chest pain) and improved myocardial functioning when compared to a control group. Participants in a study by Treloar (1997) reported that the primary benefits of a cardiac rehabilitation program were the opportunities to exercise with others and to meet others who had been in similar situations as themselves. These findings suggest that support groups or other group therapy approaches could be very beneficial to clients with heart problems.

Family therapy is an important component of counselling intervention. Treloar (1997) found that the spouses of individuals with heart disease were very involved in their partner's care, and that the couples spent a great deal of time together during and after hospitalisation. She also found that spouses tend to take control once the client returns home. In particular, spouses try to attenuate stressors, such as too many visitors and loss of income. Spouses are often understandably fearful of losing a loved one and are hypervigilant in ensuring that their spouse does not do too much. This can have the regrettable consequence of the spouse doing too little and limiting recovery. Further, it may serve to undermine client self-efficacy. Family therapy can be useful to alleviate some of these fears and to communication difficulties between the client and the spouse.

When counselling clients with CVD, the most important psychological intervention point is early in the treatment of the physical illness. It is at this point that problems with adherence to medication, lifestyle changes, and rehabilitation programs are most likely to occur (Burke et al., 1997). Adherence is not an insignificant problem. Burke et al. (1997) review studies that indicate that 16-50% of individuals with hypertension stopped taking prescribed medications within the first year of treatment. They also report that up to 79% of individuals resume smoking within six months and that 50% of individuals stop attending cardiac rehabilitation programs in the first year. Behavioural skill training, self-monitoring and self-efficacy enhancement are among treatments that have been shown to be the most successful in a cardiac rehabilitation setting and can be implemented early in treatment (Burke et al., 1997). However, most of these interventions tend to be provided by nurses or rehabilitation specialists; there are no studies that evaluate the therapeutic effects of counsellors. It is likely that behavioural and cognitive interventions provided at an early stage in treatment by counsellors

may prove at least as valuable in increasing adherence rates in clients with heart disease, perhaps even more so.

There are many ways in which a counsellor can intervene to help someone with heart disease. By using focused cognitive and behavioural interventions in individual and group work, the practitioner can help not only clients' psychological well being, but their physical well-being as well. Counsellors also have a crucial role in the prevention of CVD. Lifestyle changes, exercise management and adherence to therapeutic regimes are all areas in which counsellors can provide support for clients and help them meet their goals before and after a coronary crisis.

CONCLUSION

This paper reviewed depression and motivation in cardiovascular disease and suggested interventions that a counsellor might consider when working with clients. Depression and motivation are only two of the many psychological difficulties that an individual with heart disease might experience. Others might include anxiety, loneliness, and emotional exhaustion. None of these exist in isolation and each contribute to one another and to physical disease. Counselling may, in the near future, be an important treatment modality for cardiovascular disease and serve as a powerful adjunct to surgical intervention and other medical therapies. It is therefore necessary that there are counsellors who are educated in the psychological complications that accompany cardiovascular disease so that individuals have the best resources available to help them in the recovery from their illness.

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