

# Providing Clinical Health Psychology Services in a Primary Health World

**Kirsty Ross, Sarah Malthus, Maria Berrett, & Shane Harvey**  
*Turitea Psychology Clinic, Massey University, Palmerston North*

Individuals with chronic health conditions are at greater risk of emotional and behavioural problems, including mental health issues such as anxiety, depression, risk taking behaviours, body image and eating disorders, as well as social difficulties (Barlow & Ellard, 2006; Berge & Patterson, 2004; Weiser, 2007). These psychological issues can impact on an individual's ability to cope with their physical condition. Family members of an individual with a chronic health condition are also at risk of psychological distress. To date, there has been a notable absence of psychological support services, both for individuals and their families affected by chronic illness. A new MidCentral Health initiative focussed on the provision of psychological services for adults, children and their families with chronic illness has recently been established at Massey University's Palmerston North Psychology Clinic. These Services are among the first of their kind in New Zealand, and have implications for the management of individuals with chronic health conditions in the primary health sector. This article will outline the aims and establishment of the Services, along with a discussion of evidence-based therapeutic interventions, illustrated by case studies.

Chronic illnesses affect tens of thousands of New Zealanders every year. Cardiovascular disease, respiratory illness, and diabetes are amongst the most prevalent of these conditions and are associated with high mortality rates (New Zealand Health Information Service, 2006). Cardiovascular disease is the leading cause of death in New Zealand, accounting for 40% of deaths (around 10,500 each year). Moreover, mortality rates of many of these chronic illnesses appear to be increasing. One example of this increase is shown in the New Zealand mortality data, which records a 57% increase in deaths among males with diabetes between 1987 and 2003, and 40.4% increase for women (New Zealand Health Information Service, 2006).

Chronic illnesses are particularly prevalent among certain ethnic groups. Māori and Pacific people are at greatest

risk of coronary artery disease (New Zealand Heart Foundation, 2008). In 2003, death rates from ischemic heart disease were 120% higher for Māori males than non-Māori males, and 84% higher for Māori females compared with non-Māori females. Similar trends have been observed for other chronic conditions like diabetes. Rates of diabetes mellitus among Māori males in 2003 were 451% higher than those for non-Māori males, and 675% higher for Māori females (New Zealand Health Information Service, 2006).

There is growing recognition among health professionals involved in managing the needs of individuals affected by chronic illness of the reciprocal relationship between mind and body, and the need to address the psychological sequelae of illness. Recent New Zealand data (Scott, Oakley Browne, McGee, & Wells, 2006)

estimates a quarter (25.9%) of adult individuals with a chronic illness have a co-morbid mental illness. This figure is substantially higher than estimates for individuals without chronic illness (15.1%). Moreover, almost two thirds of individuals with mental illness have a chronic physical condition; this is considerably higher than people without mental illness, of whom approximately half (52.9%) have a chronic health condition (Scott et al., 2006). A recent American review of the literature on the prevalence, co-morbidity, aetiology, and treatment of chronic illness (including asthma, cardiovascular disease, and chronic pain) found a substantial body of literature suggesting that chronic illness with co-morbid depression compromises self care and is associated with a heightened incidence of medical illness, complications, and mortality (Roy-Byrne et al., 2008). New Zealand data suggest the association between respiratory illness and mood disorders is particularly significant (Scott, McGee, Schaaf, & Baxter, 2008).

Anxiety disorders are also more prevalent in chronic illness populations (Gatchel & Oordt, 2003; Valenca et al., 2006). Particularly robust associations have been found between cardiovascular and respiratory disease and anxiety disorders. A recent meta-analytic review on the prevalence of anxiety disorders in adults affected by asthma estimated the average prevalence rate in this population to be 34%, with rates of panic attacks (25%), panic disorder (12%), agoraphobia (12%), and Generalised Anxiety Disorder (9%) significantly

higher than in individuals without chronic illness (Weiser, 2007). With regards to the functional implications of chronic illness with co-morbid anxiety, this has been associated with lowered self-efficacy, impaired health status, poor treatment outcomes, reduced survival rates (i.e., Coventry & Gellatly, 2008; Lehrer, Feldman, Giardino, Song, & Schmaling, 2002), and increased reliance on healthcare services (Brinke, Ouwkerk, Bel, & Spinhoven, 2001).

In children and adolescents, chronic physical illness has been associated with a variety of emotional and behavioural problems, including anxiety, depression, difficulties in peer relationships, identity formation, body image issues, (Berge & Patterson, 2004; Blackman & Gurka, 2007; Burns, Sadof, & Kamat, 2006; Erickson, Patterson, Wall, & Neumark-Sztainer, 2005; Hysing, Elgen, Gillberg, Lie, & Lundervold, 2007) and higher levels of risk taking behaviours than their illness-free peers (Erickson et al., 2005). In addition to the impact chronic illness may have on the individual with the illness, family and support networks are also likely to be affected. Parents of young people with chronic illness have been found to have negative consequences in terms of marital satisfaction and cohesion, and difficulties in parenting roles and responsibilities (Berge & Patterson, 2004; Berge, Patterson, & Reuter, 2006). Siblings are also at risk for adverse psychological and behavioural effects of chronic illness (Barlow & Ellard, 2006). Family functioning generally has been found both to impact on the functioning and well being of young people with chronic illness and is positively related to treatment compliance (Berge & Patterson, 2004).

The literature discussed above illustrates how chronic physical illness can produce significant psychological distress for the individuals affected and their families, which in turn affects their ability to cope with the illness. High prevalence rates of chronic illness among ethnic groups in New Zealand means these populations are particularly vulnerable for increased psychological distress as a result of their illness, which may in turn impact on motivation and adherence to recommended medical therapies. Additionally, the experience

of dealing with the health care system may be different for people from various ethnic groups.

Overall, there is growing recognition of the psychosocial impact of physical illness and how psychological distress can have a marked impact on the course and prognosis of illness (Frasure-Smith & Lesperance, 2006). Psychologists can therefore play an important role in illness prevention and maintenance of health, both physical and psychological.

### **The Role of Psychology in the Treatment of Chronic Illness**

Traditionally, medical interventions have been utilised to address medical problems and psychological treatments have been used for mental illness. This has often been referred to as a 'dualistic model' or separation of the mind and body (Gatchel & Oordt, 2003). In recent decades, the concept of a 'biopsychosocial' model, which emphasises the interaction between psychosocial, biological and physiological functioning, has been increasingly recognised and accepted (Gatchel & Oordt, 2003). Acceptance of the model has been paralleled by the growing prevalence rates of chronic medical conditions (Gatchel & Oordt, 2003), leading to greater recognition for the role psychologists can play in healthcare.

Research supports that psychologists can play a significant role in the prevention of chronic illness and the associated reduction of disability, enhancing quality of life, and increasing adherence to, and the effectiveness of, medical treatments. The challenge, however, has been meeting both the physical and psychological health needs of individuals and family/whanau affected by chronic illness "in the context of a health system where specialist mental health and medical services function largely independently of each other" (Scott et al., 2006, p.887).

Although the biopsychosocial model and the important role psychologists can play in primary health is being increasingly recognised in the literature and by medical providers overseas, in New Zealand there has been little in the way of psychological services offering

support and assistance to those with chronic health conditions. This gap in services in New Zealand has been recognised and has led to the creation of new health initiatives focussing on the provision of psychological services for individuals affected by chronic illness. The Asthma Integrated Care programme led by Cheryl Woolley from Massey University ran from 2001-2004 and was a pioneering programme for the inclusion of psychological care in health. The success of this programme in enhancing the health and wellbeing of asthma patients forged the way for the current initiative, and raised awareness of the role psychology can play in primary health. The MidCentral Health District Health Board has subsequently been a strong supporter of such psychological support for patients in the primary health sector and in recent times has provided funding for psychological services for adults, children, and their families at Massey University's Palmerston North (Turitea) Psychology Clinic.

### **Aims and Objectives of the Massey Health Conditions Psychology Service**

The Massey University Health Conditions Psychology Service is one of the first services in New Zealand to be established specifically for the purpose of assisting people to deal with the psychological effects of chronic illness. It is a short to medium term service (6-8 sessions being the average), staffed by Clinical Psychologists, along with Assistant Clinical Psychologists working under supervision. The service is intended to support clients with chronic illnesses and their families to adjust to the requirements and impacts of the illness. The aims of the Service are to: improve the client's motivation; enhance emotional functioning, satisfaction with life, and participation in activities; promote acceptance of lifestyle changes; support self efficacy, communication, and the ability to cope with self management of the condition; reduce helplessness, anxiety, and depression; and decrease distress.

There are three types of health conditions targeted in this MidCentral initiative, namely Cardiovascular disease (heart failure, chest pain, and stroke), Diabetes, and Respiratory illness

(Chronic Obstructive Pulmonary Disease (COPD), Asthma, Bronchiectasis, Cystic Fibrosis, and Pulmonary Fibrosis). For children with chronic health conditions inclusion criteria also include a fourth stream: 'other life-long or life-limiting' conditions. Family members adversely affected by the impact of a loved one's chronic illness are also seen within the Service.

Potential clients are identified by MidCentral hospital based staff as well as GPs, and other community based health professionals. A screening tool is used by the referrer and is filled in with the client. This tool assesses distress, impact of the health condition on functioning, and identifies the nature of the client's concerns (i.e. physical, family, emotional, practical, and spiritual). This assists in the referral and triaging process, with those who meet criteria being accepted into the Service and priority being given to those with more urgent situations. Across all age groups, those exhibiting severe symptoms of psychosocial distress, higher frequency clients, and clients with low adherence to treatment and medication regimens are prioritised.

One of the emerging patterns in the Service has been the eagerness of health agencies to refer clients with a wide range of health conditions, some of which fall outside of the Service criteria, for example, neurological, gastrointestinal and chronic pain conditions. This has highlighted how psychological Services might assist a wider range of people than we are currently contracted for. In these cases, referrers have been assured that this feedback regarding the broader demand for psychological Services will be given to MidCentral Health.

Given the substantial variations in prevalence and mortality rates of chronic illness among different ethnic groups in New Zealand, the Service recognises the need to respond specifically and appropriately to different ethnic groups. Developing and maintaining strong communication links with Māori/Iwi, Pacific, and Asian networks is a priority in the early development of the Service.

## **Interventions**

Once a referral has been accepted into the Service, an initial assessment

takes place to identify particular needs and gather baseline data regarding psychological distress and physical well-being. Assessment of children typically involves multiple members of the family (and sometimes the wider system - school or pre-school - as well) as research indicates parents and siblings are also often affected (e.g., Barlow & Ellard, 2006; Berge & Patterson, 2004; Berge, Patterson, & Rueter, 2006). The Service assesses members of the family alongside the young person, with a view to optimising family functioning and the child's wellbeing. Similarly, research suggests that spouses, particularly those who take on a caregiver role, are negatively affected by their partner's chronic health condition (Eriksson & Svedlund, 2006), and therefore interventions also need to recognise and address their needs.

As a short to medium term service, identifying and addressing the needs of the family and spouses within this timeframe is an ongoing challenge. When family members and spouses have been identified as having their own individual or relational/interfamilial issues, opening separate files for these additional individuals is one way of managing the session numbers, whilst still achieving optimum outcomes for all of the family members. Another way in which the Service has addressed the session timeframe limitations has been to design referral forms that elicit a specific referral problem/issue. This places focus on the potential intervention from the outset, whilst still leaving room for thorough clinical assessment.

Interventions are delivered according to the clients' individual issues and needs identified by the referrer and through the initial assessment. Although many of the basic treatment principles are applicable across conditions (Von Korff, Glasgow, & Sharpe, 2002), the literature emphasises the need to tailor and target interventions to meet the needs of the client/s and their condition (Elkin & Stoppelbein, 2008; Petersen, Schmidt, Bullinger, & DISABIDS Group, 2006). For example, gender and age are important variables in health related quality of life (Petersen et al., 2006). It is particularly important to consider and incorporate into treatment the developmental stage of the client

and the corresponding developmental tasks (Petersen et al., 2006). This extends across the life span, such as for elderly clients who might be engaging in a life review negotiating Erikson's psychosocial stage of ego integrity versus despair (Sadock & Sadock, 2007).

The Service utilises a variety of empirically validated therapeutic approaches which have increasingly been found to be useful for the treatment of those affected by chronic illness. Interventions that have been demonstrated to be effective include Psycho-education, Relaxation Training, Motivational Interviewing, and Cognitive Behaviour Therapy, including problem solving and, assertiveness training (Gatchel & Oordt, 2003), either in an individual or group format.

## **Psycho-education**

Psycho-education for family members of young people with chronic illnesses has been shown to be beneficial for both the family members and the client (e.g., Last, Stam, Onland-van Nieuwenhuizen, & Grootenhuis, 2006; Lobato & Kao, 2005). Providing explanations of the psychosocial aspects of chronic illness helps to normalise the emotional experiences of the clients. Such information also increases awareness of those things people can do to help themselves and the resources available. Psycho-education strategies may involve educating the client and family members regarding the impact of stress on their condition (i.e., increased heart-rate and premature ventricular contraction), and teaching adaptive stress management skills, as well as providing education regarding the importance of medication adherence and lifestyle factors that may be impacting on medical status/prognosis. Psycho-education can be provided in a variety of ways including individually, with family members and through groups.

The Service currently delivers psycho-education during sessions with individuals and family members. Plans are also underway to deliver psycho-education in group format through seminars for particular age groups, health conditions and family sub-groups. For example, group interventions for siblings of children with chronic illnesses have been found to increase their knowledge

and understanding of their sibling's condition, as well as increasing their own level of psychosocial adjustment (Lobato & Kao, 2005). The Service is liaising with existing support groups and community organisations that conduct education evenings to join in with their programmes so as not to double up on existing information groups. In addition to establishing groups within the Service, there is an intention to provide psycho-education to existing community based groups.

### *Relaxation training*

Physical symptoms can produce considerable distress in individuals with chronic illness. Research has shown that psychological interventions can also alleviate and/or help individuals cope with physical symptoms, and relaxation training is one form of intervention that has been found to be useful in this respect. Relaxation training involves a variety of techniques including diaphragmatic breathing, progressive muscle relaxation, and visualisation.

A review of the efficacy of relaxation techniques by Gatchel and Oordt (2003) indicated these strategies were effective for decreasing blood pressure, sympathetic arousal, and anxiety levels in adults with chronic illness. Research with chronically ill children (such as those with asthma) has reported similar results (Kibby, Tyc, & Mulhern, 1998).

It is very important to integrate with medical professionals in a variety of ways, and relaxation therapy is no exception. For example, the Service is involved with the MidCentral Respiratory Services team, including Physiotherapists, to ensure information and training on breathing and other relaxation techniques for respiratory clients (for example, those with COPD) is accurate and consistent.

### *Motivational Interviewing (MI)*

Motivational Interviewing is an emerging force in the area of management of chronic health conditions and eliciting behaviour change in clients who need to make lifestyle changes (Rollnick, Miller, & Butler, 2008). The primary objective of MI is to enhance the client's motivation to change. MI is particularly useful for clients who are ambivalent about change or are at the

pre-contemplative or contemplative stages of change (Resnicow et al., 2002). MI utilises a variety of techniques to promote change including reflective listening, agenda setting, and eliciting self-motivational statements and change talk. There is no direct attempt to convince or persuade the client to change. The objective is to help clients recognise and express the personal risks and benefits of change, identify how their current health behaviours diverge from their health goals, and address the extent to which their current behaviour moves them toward or away from their life values.

The therapist attempts to elicit 'self motivating statements' from the client, the goal being that over time the client (as opposed to the therapist) will identify a need to change their behaviour. When resistance to change is encountered, the therapist attempts to "roll" with it, rather than confront it. Importantly, motivational interviewing is not an alternative to other psychological interventions. It is best used prior to implementing these techniques, to enhance the client's readiness to change and ability to benefit from the interventions (Britt, Blampied, & Hudson, 2003).

Literature on the efficacy of MI for the modification of chronic illness behaviours is still in its early stages. However, preliminary results are promising. A review of research on the effectiveness of MI found it effective for the modification of diet and physical activity levels, smoking cessation, and medication adherence (Resnicow et al., 2002). This approach is also gaining support for use with young people, particularly those with diabetes (Channon, Huws-Thomas, Gregory, & Rollnick, 2005), although further research in this area is still needed.

Perhaps one of the challenges of MI is the stance that the client has the right to choose. Hence, as clinicians, our job is not to induce change, but to elicit change statements from the client. Health professionals inevitably feel frustration when their clients are resistant to the optimum medical treatment regime and health professionals often seek psychological input to bring about adherence. The expectations from stakeholders and other

agencies of what the Health Conditions Psychology Service provides, and what constitutes a "successful" outcome are difficult and thought provoking issues that require ongoing consultation and communication.

### *Cognitive Behaviour Therapy (CBT)*

The service provides specialised interventions for such issues as needle phobias which involve CBT interventions within a short to medium term timeframe. Traditional cognitive behavioural interventions focus on restructuring maladaptive beliefs that may be acting as barriers to effective functioning and compromising health behaviours. CBT also promotes engagement in new behaviours designed to challenge the legitimacy of maladaptive beliefs and enhance health and wellbeing. These interventions (delivered in both individual and group formats) have been found to be effective in the treatment of chronic illnesses such as COPD and Diabetes (Sperry, 2006).

Cognitive behavioural interventions have also been found to be useful for the treatment of anxiety and depression associated with chronic illness. For example, a recent study by Kunik and colleagues (2008) found cognitive behavioural group treatment for COPD clients significantly enhanced quality of life and improved symptoms of anxiety and depression. These improvements were maintained over a 12-month period.

When treating individuals affected by chronic illness, it is important to keep in mind that their emotional distress is often associated with issues such as the functional disability, role changes associated with their condition, changes in family dynamics, existential/ end of life issues, and the impact of the illness on whānau and significant others (Gatchel & Oordt, 2003). Moreover anxiety symptoms (such as palpitations and shortness of breath) are often difficult to differentiate from symptoms of the illness (particularly for clients affected by cardiovascular or respiratory illness), which can increase confusion, frustration, and fears about the future. Therefore therapy may involve teaching clients to identify and manage anxiety symptoms, while being careful not to dismiss potentially life threatening signs

that warrant medical attention.

Cognitive behavioural therapy (CBT) is by far the most promising psychological intervention for children with chronic illness (Barlow & Ellard, 2004; Elkin & Stoppelbein, 2008; Kibby, Tyc, & Mulhern, 1998; Last & Grootenhuis, 2007; Petersen et al., 2006). This type of therapy has been found to be effective for enhancing self-efficacy, self management of their illness, family functioning, psychosocial well-being, social competence, knowledge, and hope; reducing feelings of isolation; decreasing school absenteeism; enhancing lung function in asthmatics; and increasing metabolic control in diabetics (Elkin & Stoppelbein, 2008; Kibby, Tyc, & Mulhern, 1998). Increased coping has also been associated with reduction in pain levels (Martin, McGrath, Brown, & Katz, 2007; McQuaid & Nassau, 1999; Walker, Smith, Garber, & Claar, 2006), increased compliance with treatment, and enhanced quality of life (Barlow & Ellard, 2004; Elkin & Stoppelbein, 2008; Last & Grootenhuis, 2007; Petersen et al., 2006).

In addition to the more traditional cognitive behavioural modes of therapy, a new wave of cognitive behavioural therapies (such as Acceptance and Commitment Therapy (ACT) and Mindfulness based therapies) is being trialled with chronic illness populations. Rather than teaching clients to 'control' illness-related thoughts and feelings as a means of reducing or eliminating distress (as has been the focus of traditional CBT interventions), strategies teach them to accept feelings, and defuse or create distance from the content of distressing thoughts - by focusing mindfully on the process of thinking itself. This allows clients to focus on goal-based action that is congruent with life values and promotes mental/physical health and wellbeing.

Results of studies assessing the efficacy of these approaches with clients affected by chronic illness have produced promising results (Classen et al., 2001; Gregg, Callaghan, Hayes, & Glenn-Lawson, 2007). A recent study examining the management of Type 2 Diabetes through acceptance, mindfulness, and values found that compared with clients provided with diabetes medical management training

alone, those assigned to an acceptance and commitment therapy condition reported enhanced diabetes self-care. They were also more likely to have blood sugar levels in the target range (Gregg et al., 2007).

#### *Group and family therapy*

Research has demonstrated the efficacy of group therapy for young people with chronic health conditions (for example, Curie, Bradford, Thompson, & Cawthorn, 2005). Groups have been found to be particularly helpful with adolescents, for whom acceptance, support and preparation for normal life within society is important (Berntsson, Berg, Brydolf, & Hellstrom, 2007). Group therapy has also been effective in reducing feelings of isolation and increasing positive coping in young people (Curie et al., 2005). A variety of cognitive behavioural techniques, such as modelling, problem solving, and enhancing peer interactions have been beneficial when used in a group context (Barakat, Gonzalez, & Weinberger, 2007). This latter effect is particularly useful for adolescents with chronic illness, for whom peer relationships are often adversely affected (e.g., adolescents with epilepsy: Cheung & Wirrell, 2006).

Skills training in a group context enables clients to gain core skills that will be useful in dealing with any distress they may be experiencing. These skills include progressive muscle relaxation, guided imagery, how to ask the right questions from their health professional, how to communicate emotional, physical, and informational needs to family members and health professionals, and appropriate means of expressing their emotions. Such problem solving and assertiveness training empowers clients to manage situations that may be exacerbating interpersonal stress (Gatchel & Oordt, 2003).

Involvement of other family members in therapy may also be useful. Family interventions have been found to be promising for improving illness symptom in asthmatics (McQuaid & Nassau, 1999). Given the reciprocal impact of family functioning on illness management and sequelae (Berge & Patterson, 2004), it is important that this intervention be considered as part

of a tailored intervention for the young person and their family.

#### *Professional intermediaries*

A further intervention provided by the Service involves assisting clients with the transition between various hospital services, such as from paediatric to adult services, and health to palliative care. These changes require substantial adjustments for both clients and health professionals, who have often formed strong attachments to patients who have been with their team for a lengthy time. Recognition of the potential sense of loss for both patient and health professional is important in helping all involved adjust to the change in health care team.

The Service is also in a unique position of being able to provide an interface between different agencies in the primary and secondary health sectors involved in an individual's care. This includes enhancing communication and interconnection between these services, for example, through facilitating meetings. One of the major tasks upon setting up the Service has been to identify the large number of individuals and organisations involved in the delivery of health care to people with chronic conditions, as well as their roles and how we can interface with them most effectively. This is a substantial task; however these important links cannot be overlooked as they provide clinicians, and more importantly clients, with access to additional supports and long term assistance for their conditions.

#### *Research*

Importantly, further research examining the efficacy of therapies for individuals with chronic illness is needed and the new and unique Health Conditions Psychology Service is well placed to contribute to the growing research in the area. A key aim of the Service is to evaluate the efficacy of interventions being used with individuals experiencing various chronic health conditions through on-going research.

The research capability of the Service is enhanced by the potential involvement of post-graduate students from the School of Psychology, particularly those enrolled in the Doctor of Clinical Psychology programme and

the Health Psychology programme. Massey University has a sound reputation for producing quality research and the School of Psychology has a number of internationally recognised clinical and health researchers on staff. It is anticipated that there will also be opportunities for collaborative research with other medical and health staff concerning psychological aspects of their work.

### *Training*

Networking with other health professionals and agencies has been crucial for the establishment of ongoing reciprocal training. The Service collaboratively liaises with multidisciplinary health professionals, and provides workshops, training, and education to: medical and nursing staff (physicians, nurses, dieticians, physiotherapists); volunteers and general support staff; and allied professional and support agencies, including community organisations. In addition to the formal training provided, members of the Service are ready and available to interact and provide information regularly and informally. We have a reciprocal arrangement with key stakeholders who also provide the Service with training on particular medical conditions.

### **Case Studies**

The following case studies illustrate the nature of clients seen through the Massey Health Conditions Psychology Service and the types of interventions implemented. The details of these people have been altered to protect their confidentiality. First, a child and family intervention is detailed, followed by an adult case.

#### *Alice*

Alice is a 7-year-old girl with cystic fibrosis. She was referred to the Service by a home care nurse for assistance with managing needle phobia. This had severely impacted on her medical treatment, preventing her from getting blood tests necessary for appropriate monitoring and treatment of her condition. Any medical intervention requiring needles was extremely traumatic for both Alice and her parents, John and Linda. A form of exposure therapy had been attempted by the referrer, without success. Linda felt

that the exposure had not been regular or increased in intensity enough to have the desired effect of reducing Alice's anxiety around needles.

During the first session it was revealed that John also had a severe needle phobia, and experienced vasovagal reactions (he fainted when simply discussing procedures involving needles). This was a major factor in Alice's needle phobia, as she had begun to model his responses. It was also apparent when talking to both Linda and John that John's inability to be present during medical procedures was a cause of tension within their relationship. Given these factors, we considered it vital to have John involved in Alice's treatment.

Initially, Alice was extremely resistant to engaging in therapy. Hence, the first three therapy sessions focused on building rapport and gaining Alice's trust in order to be able to begin the anxiety exposure aspect of therapy. Before beginning the exposure component of therapy with Alice, an individual session was held with John to discuss his phobia and ascertain his willingness to be involved in treatment. John expressed motivation to learn strategies to help him cope with his phobia and allow him to be more involved in Alice's medical care. During this session, psycho-education was provided regarding the predisposing and perpetuating factors involved in his condition, Relaxation and applied tension techniques were also taught to help counteract the fluctuations in blood pressure he experienced when around needles.

Subsequent sessions focused on implementing exposure therapy with both John and Alice. This involved creating a hierarchy of feared situations and then gradually exposing John and Alice to these. Small, inexpensive Bratz toys were provided as rewards after successful completion of particularly difficult exposure activities (such as going to the medical lab and observing the therapist having a blood test).

Therapy was successful when, after 10 sessions, Alice underwent a blood test. As a final reward, Alice was given the Bratz board game which was used during sessions as a means of rapport building. Using rewards which were meaningful and had 'currency' for Alice

was a powerful incentive for her to move up the exposure hierarchy. Having John involved in exposure activities also brought a strong modelling component to therapy and served to reduce marital tension between John and Linda, enabling them to both participate more effectively in Alice's treatment.

Throughout the process of therapy, regular contact was maintained with the home care paediatric health team involved in Alice's care, informing them of progress and in turn, obtaining information about any changes they had observed in Alice's functioning, as well as additional information about how the family was coping. Engaging the support of the local medical laboratory and explaining the process and rationale of the exposure therapy to staff was also crucial in the success of the treatment.

#### *Barry*

Barry is a 50-year-old man recently diagnosed with heart failure and has been affected by chronic asthma since childhood. Barry was referred to the Massey Health Conditions Psychology Service by his Cardiologist who requested assistance for Barry's self-reported feelings of hopelessness and difficulty adjusting to his diagnosis.

During the initial assessment, it became clear that Barry's illness had a major impact on his life. He reported constant breathlessness and fatigue, and experienced significant sleep disturbance as a result of high levels of anxiety. Barry described himself as a "ticking time bomb." He reported experiencing extreme episodes of breathlessness on waking, which led him to fear he was having a heart attack. His GP had been unable to find any medical explanations for the attacks and believed they may be due to anxiety.

Prior to his diagnosis, Barry was employed as a drain layer, but this occupation was no longer possible for him physically. He and his wife, Lorna, were currently surviving on a sickness benefit, creating extreme financial pressure. Lorna reported that the lifestyle changes related to his illness had also been stressful for her, especially as she has been obliged to obtain full-time work. This placed significant strain on their marriage including their sexual relationship. Barry and Lorna

reported having little in the way of social supports, and were reticent about discussing their feelings with others as they felt others would either “not understand” or think they were “losing the plot.”

Barry attended six weekly therapy sessions through the Massey Health Conditions Psychology Service. Three of these were also attended by his wife. The initial therapy sessions focussed on helping Barry cope with his anxiety symptoms as these were a significant source of concern for him and having a major impact on his ability to sleep and function effectively through the day. These initial sessions focused on providing Barry psycho-education regarding his symptoms of anxiety and how these can be differentiated from symptoms of heart attack. Attempts were also made to normalise his experience of anxiety given the significant life changes he had experienced in the last 5 years (i.e., deterioration in health, loss of job, change of role within his relationship). The therapist then taught Barry strategies to help him manage his anxiety and breathlessness, including controlled breathing exercises, progressive muscle relaxation, guided visual imagery, and passive relaxation. Barry subsequently reported significant improvements in his sleep, energy levels, and symptoms of breathlessness. His anxiety attacks in morning completely resolved after the first three weeks.

Subsequent sessions focused on identifying Barry’s life values (across a variety of domains, such as work, intimate relationships, spirituality, family etc) and clarifying the extent to which his current actions were aligned with these values. The two key areas where Barry most struggled were in the domains of work and marriage. Thus, therapy focused on creating behavioural goals to start moving him in the direction of these values. Sessions focussing on adaptive methods of communicating thoughts and feelings also proved effective in improving the couple’s relationship.

Referrals to family and social support agencies provided Barry and Lorna with regular support for housework and cleaning, and budgeting. With regards to extending Barry and Lorna’s social network, we provided

them with information and links to peer support groups for individuals with similar health difficulties to Barry (i.e., the Cardiac Rehabilitation Support Group). This served to extend their social network, provided them an outlet to discuss issues related to Barry’s health condition (which they did not feel comfortable discussing with their non-ill friends), and enhanced their knowledge of his illness.

### Future Challenges

The above cases illustrate the role psychologists can play in promoting adherence to medical procedures, reducing psychological distress in individuals and families affected by chronic illness, and assisting both primary and secondary health professionals to effectively treat and manage their clients. The Service has an important role in providing psychological interventions within a multi-disciplinary framework in the primary health sector.

Ongoing liaison with other professionals and organisations is an important part of building a solid foundation for the Service; juggling this with meeting the needs of our clients via therapeutic sessions remains a challenge, however these linkages with other professionals also enable us to deliver optimum care for our clients.

Liaison is especially important in helping to meet the needs of particular ethnic groups, for whom prevalence rates for chronic health conditions are particularly high. Given the large numbers of potential clients within Māori and Pacific populations, targeting psychological therapy to meet their needs is an ongoing challenge, as is increasing access for these groups to our Service. Building networks with Māori and Pacific health providers is an important avenue through which we hope to resolve these issues.

A further challenge is meeting the needs of a large DHB, both in terms of population and geographical locations. The Service is in the process of establishing outreach clinics, with a clinician attending the clinic once a week. In practice, this means that all referrals for that particular area are picked up by that clinician, which has logistical implications in terms

of workload and case management. Particular areas have few support services or community organisations and therefore have higher demands in terms of psychological support; meeting those needs within the funded services and supporting the clinicians in the Service is a delicate balance that requires continual management.

An important and ongoing issue that faces the Service is where we sit within a health system which identifies primary, secondary and tertiary health sectors. While our core business is assisting the management of clients within a primary health setting, the levels of severity of the issues some clients present with fall within the need for secondary intervention. Additionally, our clinicians have a level of expertise and training that fits comfortably within the secondary health sector. The identity of the Service is an emerging and evolving one, including finding our place within the primary-secondary health spectrum. Determining where we best fit also raises questions for us about how our key stake-holders and partner agencies view us, their expectations of our clinicians and the Service, and how we work together in the most efficacious way to provide the best possible treatment for our clients to optimise their health. Future evaluation research with regards to the role and perception of the Service will assist us in addressing these issues.

### References

- Barakat, L. P., Gonzalez, E. R., & Weinberger, B. S. (2007). Using cognitive behavioural group therapy with chronic medical illness. In R. W. Christner, J. W. Stewart, & A. Freeman (Eds). *Handbook of cognitive behavioural group therapy with children and adolescents: Specific settings and presenting problems* (pp 427-446). New York: Routledge.
- Barlow, J. H., & Ellard, D. R. (2006). Psychosocial well-being of children with chronic disorders, their parents and siblings: An overview of research evidence base. *Child: Care, Health & Development, 32*, 19-31.
- Barlow, J. H., & Ellard, D. R. (2004). Psycho-educational interventions for with chronic disorders, their parents and siblings: An overview of research evidence base. *Child: Care, Health & Development, 30*, 637-645.
- Berge, J. M., & Patterson, J.M. (2004).

- Cystic Fibrosis and the family: Review and critique of the literature. *Families, Systems & Health*, 22, 74-100.
- Berge, J. M., Patterson, J. M., & Rueter, M. (2006). Marital satisfaction and mental health of couples with children with chronic health conditions. *Families, Systems & Health*, 24, 267-285.
- Berntsson, L., Berg, M., Brydolf, M., & Hellstrom, A-L. (2007). Adolescents' experiences of well-being when living with long term illness or disability. *Scandinavian Journal of Caring Sciences*, 21, 419-425.
- Blackman, J. A., & Gurka, M. J. (2007). Developmental and behavioural comorbidities of asthma in children. *Journal of Developmental & Behavioral Pediatrics*, 28, 92-99.
- Brinke, A. T., Ouwerkerk, M. E., Bel, E. H., & Spinhoven, P. (2001). Similar psychological characteristics in mild and severe asthma. *Journal of Psychosomatic Research*, 50, 7-10.
- Britt, E., Blampied, N.M., & Hudson, S.M. (2003). Motivational interviewing: A review. *Australian Psychologist*, 38, 193-201.
- Burns, J. J., Sadof, M., & Kamat, D. (2006). Managing the adolescent with a chronic illness. *Psychiatric Annals*, 36, 715-719.
- Channon, S., Huws-Thomas, M. V., Gregory, J. W., & Rollnick, S. (2005). Motivational interviewing with teenagers with diabetes. *Clinical Child Psychology and Psychiatry*, 10, 43-51.
- Cheung, C., & Wirrell, E. (2006). Adolescents' perceptions of epilepsy compared with other chronic diseases: Through a teenager's eyes. *Journal of Child Neurology*, 21, 214-222.
- Classen, C., Butler, L. D., Koopman, C., Miller, E., Dimiceli, S., Giese-Davis, J., Fobair, P., Carlson, R. W., Kraemer, H. C., & Spiegel, D. (2001). Supportive expressive group therapy and distress in patients with metastatic breast cancer. *Archives of General Psychiatry*, 58, 494-501.
- Coventry, P. A., & Gellatly, J. L. (2008). Improving outcomes for COPD patients with mild-to-moderate anxiety and depression: A systematic review of cognitive behavioural therapy. *British Journal of Health Psychology*, 13, 381-400.
- Curie, C., Bradford, J., Thompson, J., & Cawthorn, P. (2005). User's view of a group therapy intervention for chronically ill or disabled children and their parents: Towards a meaningful assessment of therapeutic effectiveness. *Clinical Child Psychology & Psychiatry*, 10, 509-527.
- Elkin, T. D., & Stoppelbein, L. (2008). Evidence based treatment for children with chronic illness. In R. G. Steele, T. D. Elkin, & M. C. Roberts (Eds). *Handbook of evidence based treatments for children and adolescents: Bridging science and practice* (pp 297-309). New York: Springer.
- Erickson, J. D., Patterson, J. M., Wall, M., & Neumark-Sztainer, D. (2005). Risk behaviours and emotional well-being in youth with chronic health conditions. *Children's Health Care*, 34, 181-192.
- Eriksson, M., & Svedlund, M. (2006). 'The intruder': Spouses' narratives about life with a chronically ill partner. *Journal of Clinical Nursing*, 15, 324-333.
- Frasure-Smith, N., & Lesperance, F. (2006). Coronary heart disease and depression: The next steps. *Canadian Journal of Psychiatry*, 51, 727-729.
- Gatchel, R. J., & Oordt, M. S. (2003). *Clinical health psychology and primary care: Practical advice and clinical guidance for successful collaboration*. Washington DC: American Psychological Association:
- Gregg, J. A., Callaghan, G. M., Hayes, S. C., & Glenn-Lawson, J. L. (2007). Improving diabetes self-management through acceptance, mindfulness, and values: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 75, 336-343.
- Hysing, M., Elgen, I., Gillberg, C., Lie, S. A., & Lundervold, A. J. (2007). Chronic physical illness and mental health in children: results from a large scale population study. *Journal of Child Psychology & Psychiatry*, 48, 785-792.
- Kibby, M. Y., Tyc, V. L., & Mulhern, R. K. (1998). Effectiveness of psychological intervention for children and adolescents with chronic medical illness: A meta-analysis. *Clinical Psychology Review*, 18, 103-117.
- Kunik, M. E., Veazey, C., Cully, J. A., Soucek, J., Graham, D. P., Hopko, D., Carter, R., Sharafkhan, A., Goepfert, E., Wray, N. J., & Stanley, M. A. (2008). COPD education and cognitive behavioural therapy group treatment for clinically significant symptoms of depression and anxiety in COPD patients: A randomized controlled trial. *Psychological Medicine*, 38, 385-396.
- Last, B. F., & Grootenhuys, M. A. (2007). Enhancement of coping skills and compliance to treatment in adolescents with a chronic serious disease. *Clinical Therapeutics*, 29(Supplement C), S107-108.
- Last, B. F., Stam, H., Onland-van Nieuwenhuizen, A-M., & Grootenhuys, M. A. (2006). Positive effects of a psycho-education group for children with chronic disease: First results. *Patient Education & Counseling*, 65, 101-112.
- Lehrer, P., Feldman, J., Giardino, N., Song, H-S., & Schmalings, K. (2002). Psychological aspects of asthma. *Journal of Consulting and Clinical Psychology*, 70, 691-711.
- Lobato, D. J., & Kao, B. T. (2005). Brief report: Family-based group intervention for young siblings of children with chronic illness and developmental disability. *Journal of Paediatric Psychology*, 30, 678-682.
- Martin, A. L., McGrath, P. A., Brown, S. C., & Katz, J. (2007). Children with chronic pain: Impact of sex and age on long-term outcomes. *Pain*, 128, 13-19.
- McQuaid, E. L., & Nassau, J. H. (1999). Empirically supported treatments of disease-related symptoms in paediatric psychology: Asthma, diabetes and cancer. *Journal of Pediatric Psychology*, 24, 305-328.
- New Zealand Health Information Service (2006). Mortality and Demographic Data 2002 and 2003. Ministry of Health Report. Retrieved from <<http://www.nzhis.govt.nz/moh.nsf/pagesns/7/>><http://www.nzhis.govt.nz/moh.nsf/pagesns/7/>.
- New Zealand Heart Foundation (2008). Heart Disease Facts. Retrieved from <http://www.nhf.org.nz/index.asp?pagelD=2145837311>
- Petersen, C., Schmidt, S., Bullinger, M., & DISABKIDS Group (2006). Coping with paediatric health conditions and health-related quality of life. *European Psychologist*, 11, 50-56.
- Resnicow, K., Dilorio, C., Soet, J.E., Borelli, B., Hecht, J., & Ernst, D. (2002). Motivational interviewing in health promotion: It sounds like something is changing. *Health Psychology*, 21, 444-451.
- Rollnick, S., Miller, W. R., & Butler, C. C. (2008). *Motivational interviewing in health care: Helping patients change behaviour*. New York: Guilford Press.
- Roy-Byrne, P. P., Davidson, K. W., Kessler, R. C., Asmundson, G. J., Goodwin, R. D., Kubzansky, L., Lydiard, R. B., Massie, M. J., Katon, W., Laden, S. K., & Stein, M. B. (2008). Anxiety disorders and comorbid medical illness. *General Hospital Psychiatry*, 30, 208-225.
- Sadock, B. J., & Sadock, V.A. (2007) *Kaplan & Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry (10th ed.)*. Philadelphia: Lippincott Williams & Wilkins.



- Scott, K., McGee, M. A., Schaaf, D., & Baxter, J. (2008). Mental – physical comorbidity in an ethnically diverse population. *Social Science and Medicine*, 66, 1165-1173.
- Scott, K. M., Oakley Browne, M. A., McGee, M. A., & Wells, J. E. (2006). Mental-physical co-morbidity in Te Rau Hinengaro: The New Zealand mental health survey. *Australian and New Zealand Journal of Psychiatry*, 40, 882-888.
- Sperry, L. (2006). *Psychological treatment of chronic illness: The biopsychosocial therapy approach*. Washington DC: American Psychological Association.
- Valenca, A. M., Falcao, R., Freire, R. C., Nascimento, I., Nascentes, R., Zin, W. A., & Nardi, A. E. (2006). The relationship between the severity of asthma and comorbidities with anxiety and depressive disorders. *Revista Brasileira de Psiquiatria*, 28, 356-392.
- Von Korff, M., Glasgow, R. E., & Sharpe, M. (2002). ABC of psychological medicine: Organising care for chronic illness. *British Medical Journal*, 325, 92-94.
- Walker, L. S., Smith, C. A., Garber, J., & Claar, R. L. (2007). Appraisal and coping with daily stressors by pediatric patients with chronic abdominal pain. *Journal of Pediatric Psychology*, 32, 206-216.
- Weiser, E. B. (2007). The prevalence of anxiety disorders among adults with asthma: A meta-analytic review. *Journal of Clinical Psychology in Medical Settings*, 14, 297-307.

**Corresponding Author:**

Kirsty Ross, PhD  
Clinical Psychologist,  
Health Conditions Psychology  
Service  
Psychology Clinic PN 319  
Massey University  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
Phone: 06 350 5180 (Reception)  
K.J.Ross@massey.ac.nz

**Acknowledgement**

The Massey Health Conditions Psychology Service would like to gratefully acknowledge the ongoing contribution of Cheryl Woolley to our Service in her role as a mentor at a governance level, and as a source of knowledge and advice for our clinicians.