

Eating Disorders – A Current Affair An Introduction

An expanded introduction to National Eating Disorder Publications:

An Integrated Response to Complexity
National Eating Disorders Framework 2012

Clarity in Complexity
Strategic Communication to Support the Prevention and Early Identification of Eating Disorders

Eating disorders are a priority mainstream health issue in Australia

Eating disorders are highly complex and serious mental illnesses within our community. They include Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, and Eating Disorder Not Otherwise Specified (EDNOS)¹. These disorders are associated with a high level of morbidity and mortality; in fact Anorexia Nervosa has the highest rate of mortality of any psychiatric illness. They can be long-term, disabling disorders, and they carry substantial costs – economic, social and loss of life. As serious mental disorders with significant consequences for physical health and quality of life as well as mental health, eating disorders require the same quality, breadth and accessibility to research funding, prevention interventions, treatment options, and community awareness programs as other serious physical or mental illnesses.

Eating Disorders have a significant and highly underestimated impact on Australian society:

- Physically, as well as mentally, the person with the eating disorder is profoundly affected. Eating disorders involve wide-ranging medical complications which can affect every major organ in the body. In children and adolescents, eating disorders can affect growth and development. Even after resolution of the eating disorder people may experience significantly higher levels of: infertility, cardiovascular symptoms, digestive disorders, fatigue, pain, anxiety and depressive disorders, and limitations in activities due to poor musculoskeletal health, insomnia, and neurological symptoms
- The tendency for eating disorders to emerge in adolescence or early adulthood means they have a particularly significant impact at this critical time when young people are establishing relationships both within and outside the family and laying the educational ground for their careers and vocations. Apart from the direct burden of the illness, which is substantial, the ramifications of eating disorders include interrupted or halted education, family disruption, workplace disruption and loss of family income (with one parent or other loved one often having to give up full-time work to become a carer), caregiver stress, burnout and emotional strain
- The cost of care is substantial eating disorders are the 12th leading cause of mental health hospitalisation costs within Australia, and the expense of treatment of an episode of Anorexia Nervosa has been reported to come second only to the cost of cardiac artery bypass surgery in the private hospital sector in Australia. Bulimia Nervosa and Anorexia Nervosa are the 8th and 10th leading causes, respectively, of burden of disease and injury in females aged 15 to 24 years in Australia, as measured by disability-adjusted life years (NEDC, 2010).
- There is a substantial, though as yet unquantified, economic toll which goes beyond the cost
 of care the cost of human life; Anorexia Nervosa has a standardised mortality rate that is
 12 times higher than the annual death rate from all causes in females aged 15 to 24 years of

¹ A more detailed description of each type of eating disorder appears on the NEDC website www.nedc.com.au

age. Furthermore, the risk of premature death is increased for people with all types of eating disorders (Arcelus et al., 2011)

Increased Mortality Rates

The risk of premature death relates in part to medical complications associated with the disorder. However suicide has also been identified as a major cause of death (Pompili et al., 2006). Arcelus and colleagues (2011) found that 1 in 5 individuals with Anorexia Nervosa who died prematurely had committed suicide. Research data on suicide in Bulimia Nervosa and EDNOS is scarce but suicide attempts, which are a risk factor for completed suicide, are readily identified in people with Bulimia Nervosa and people experiencing obesity with mental health issues (Pompili et al., 2006).

Comorbidity

People with eating disorders experience higher rates of other mental disorders, with reports of up to 95% of people with eating disorders having a comorbid condition (Hudson, Hiripi, Pope, & Kessler, 2007). Mood and anxiety disorders occur commonly in people with all types of eating disorders. People with Anorexia Nervosa also experience higher rates of obsessive compulsive disorders (Blinder et al., 2006). The use of pharmacological methods of weight control (e.g. laxatives, diet pills, diuretics) is associated with an increased risk of abuse of substances such as stimulants (Corte & Stein, 2000). People with comorbid Bulimia Nervosa and substance abuse are at increased risk of attempted suicide (Fisher & Grange, 2007). Comorbid conditions increase the severity and chronicity of the eating disorder (Blinder et al., 2006).

In parallel with this increase, the development of comorbid obesity with eating disorder behaviours has increased at a faster rate than that of either obesity or eating disorders alone (Darby et al., 2009). Research on adolescent girls has found that those suffering obesity have high rates of disordered eating (Darby et al., 2009). A population survey conducted in South Australia found that one in five people suffering obesity also suffered from disordered eating, mainly in the form of binge eating, but also evident in episodes of strict dieting and purging (Darby et al., 2009).

Prevalence of Eating Disorders

It is estimated that approximately 9% of all Australian women will be affected by an eating disorder that causes clinically significant impairment during their lifetime (Wade, Crosby, & Martin 2006), while up to 20% of females may be affected by subclinical eating disorders (Wade, Bergin, Tiggemann, Bulik, & Fairburn, 2006). For young females, eating disorders represent the third most common chronic illness (Yeo & Hughes, 2011) and the second leading cause of mental disorder disability (Matthews et al., 2001). These estimates are likely to be understated due to the underreporting and secretive nature of the disorders (O'Dea, 2005).

Eating disorders are commonly perceived as being a disorder affecting adolescent girls but this belief masks the fact that they have a significant impact on boys and men. Studies have shown that males may make up approximately 25% of people with anorexia or bulimia and 40% of people with binge eating disorder (Hudson et al., 2007; Weltzin et al., 2005).

Eating disorders are also increasingly being diagnosed in older women, with incidence and severity similar to that in female adolescents and young adults (Fursland et al., 2010; Mclean et al., 2009) and in younger children (Nicholls, Lynn & Viner, 2011). Specific groups in the community may be at increased risk, including people with diabetes (Pereira & Alvarenga, 2007), people who are obese (Darby et al., 2009), migrants (Bhurga & Jones, 2001), and people who participate in competitive sports and fitness activities (Weltzin et al., 2005).

A Growing Trend

The rate of eating disorders in the Australian population is increasing (Hay, Mond, Buttner & Darby, 2008). A study measuring the changes in community prevalence of eating disorder behaviours in South Australia over a ten year period found a two-fold increase in current regular use of three significant eating disorder behaviours in both women and men – binge eating, purging, and strict dieting or fasting (Hay et al., 2008; O'Dea, 2005).

Prevalence of Risk

Disordered eating, dieting, and body dissatisfaction are the most important indicators of risk for eating disorders. The prevalence of risk factors for eating disorders is estimated at much higher levels with disordered eating and body dissatisfaction being common occurrences in adolescence (Russell-Mayhew, 2007).

Many studies show that disordered eating is now normative in Australian society. One Australian study found that 90% of 12 to 17 year old girls and 68% of 12 to 17 year old boys surveyed had already been on a diet of some form, and another found that 1 in 16 adolescent females reported fasting (going without food for a day or more) at least once a week and 1 in 5 reported fasting in the preceding month (NEDC, 2010).

Studies of body dissatisfaction in adolescence have also found varying but consistently high levels. An Australian study found evidence of body dissatisfaction in 70% of adolescent girls (Richardson & Paxton, 2010). Body dissatisfaction was identified in the Mission Australia Youth Survey (2010) as the top ranked issue of concern for young people and in the 2011 survey, body image is one of top three personal concerns for the youth of Australia.

A consultation with young people conducted in 2010 on behalf of the NEDC indicated that most of them know at least one other young person who they think might have an eating disorder, with 84.3% of respondents saying they know one person and 62.8% saying they know up to five people who may have an eating disorder (Inspire Digital, 2010).

Underpinning these statistics is the need to raise eating disorders to being a mainstream health priority in Australia. Mainstream health issues are granted priority in research funding through the National Health and Medical Research Council and other grants – eating disorders need to be included as such a priority, with a corresponding heightened surety of research funding.

Every Australian at risk of an eating disorder has access to an effective continuum of prevention, treatment, care and recovery support

People at Risk: A Broad Demographic

Eating disorders have traditionally been regarded as illnesses which primarily affect adolescents and in particular, girls and young women. While the majority of people receiving treatment for eating disorders are girls or women who experienced the onset of eating disorder symptoms in adolescence, there is evidence which suggests that anyone of any age, cultural background or gender may experience an eating disorder.

Eating Disorders in Adolescence

Mental disorders often arise for the first time in adolescents or young adults (Kelly et al., 2007). The peak period for the onset of eating disorders is between the ages of 12 and 25 years. This is a period in which the body and brain undergo significant changes. It is also a period of emotional adjustment; identity formation and significant behavioural change. Adolescents are particularly prone to risk-taking behaviour, with potentially injurious consequences for physical health and mental development (Government Office for Science, 2008).

Heightened self-awareness during youth makes adolescents more vulnerable to self-doubt and unfavourable social comparison. Socio-cultural pressures related to appearance and success that activate feelings of inadequacy make identity formation and self-acceptance a difficult task (Shure et al., 2011).

Without the protective factors and environmental supports necessary to successfully negotiate the pressures of adolescence, young people are at risk of developing mental health issues (Shure et al., 2011.) Disordered eating behaviours and eating disorders may result from both risk taking behaviour and the struggle for identity formation in a stressful environment.

Men and Eating Disorders

Current research statistics suggest one in ten people experiencing Anorexia Nervosa and Bulimia Nervosa is male, while EDNOS are somewhat more prevalent in men and rates of binge eating disorder in men may be as high as 4 in ten (Weltzin et al., 2005). An increasing rate of men with eating disorders is being observed in a number of European countries (Nunez-Navarro et al., 2011) and a national study of eating disorders in the US found that men made up 25% of people with Anorexia Nervosa or Bulimia Nervosa and 40% of people with binge eating disorder (Hudson et al., 2007). In a recent study (Swanson et al., 2011), lifetime prevalence estimates for Anorexia Nervosa in adolescents aged 13 – 18 years found no difference between males and females.

There is an increase in reports of body dissatisfaction and eating problems in young males including the use of weight control and weight gain behaviours that may be injurious to their health (O'Dea, 2005). Studies have found that up to 50% of boys want to change the size of their body (Weltzin et al., 2005). Eating disorder symptoms were found in a study of boys aged under ten years, with 10% reporting binge eating and 4.2% reporting self-induced vomiting (Pearson et al., 2010).

Athletes and Eating Disorders

People engaged in competitive physical activities, including sports, fitness and dance, have increased rates of body dissatisfaction, disordered eating and eating disorders. Participation in sport has been identified as a risk factor for males, with a Norwegian study finding that rates of eating disorders are twice as high amongst male athletes as amongst the general population, especially in sports that require low body fat or extremes of weight loss (Weltzin et al., 2005).

The pursuit of 'optimal' fitness and body shape for sport or dance has been identified as a factor in the development of eating disorders, especially in females. Three inter-related medical conditions of disordered eating, amenorrhea and osteoporosis have been called 'the female athlete triad' in recognition of the frequency with which these conditions are diagnosed in female athletes by comparison with the general population (Rocci, 2002).

For both male and female athletes, eating disorders and disordered eating may occur in people who are regarded by society as being extremely fit and healthy.

Older Women and Eating Disorders

Eating disorders and disordered eating are emerging as issues for older women, triggered by stressful life changes such as marriage, pregnancy, menopause, and divorce (Pereira & Alvarenga, 2007).

There is a growing awareness that maladaptive eating attitudes and behaviours are common in older women. Eating disorder symptoms are present in middle to older age women and are similar in severity to those of younger individuals. The estimated point prevalence rate for clinical eating disorders in women over 45 years is 4.5% (Keel et al., 2009). A study of women aged 60 to 70 years found that 80% were trying to control their weight, 3.8% met criteria for an eating disorder and 4.4% reported a single episode of eating disorder (Mangweth-Matzek et al., 2006). Similarly, a study of 200 women aged 35-65 years identified that 17% probably had an eating disorder (McLean et al., 2009). Levels of Bulimia Nervosa have been found to be similar in a comparative study of women over 45 years and younger women (Procopio, Holm-Denoma, Gordon, & Joiner 2006).

In a review of 48 cases of women over the age of 50 with eating disorders, over half of whom were older than 65 years, Anorexia Nervosa was the most frequent disorder (81%), then Bulimia Nervosa (10%). Of these 48 cases, 20% died from eating disorder complications (Lapid et al., 2010). A study in Western Australia found that 25% of patients from a community sample experienced onset of their eating disorder after the age of 30. No significant differences were found between the

experiences of women presenting at an older age and those with early presentation (Fursland et al., 2010).

Pregnancy, Early Childhood and Eating Disorders

The physical and emotional changes that occur in pregnancy and postpartum challenge the thinking and behaviours associated with eating disorders. For some women who have suffered from an eating disorder, the motivation to protect the child contributes to symptom reduction or remission, however for some women, the changes in body shape and size associated with pregnancy exacerbates their eating disorder. Fear of weight gain is frequently identified as a trigger for the increasing intensity in eating disorder symptoms.

Unfavourable outcomes have been found for infants of women with sub-threshold Anorexia Nervosa or Bulimia Nervosa, including growth retardation, low birth weight, increased incidence of congenital anomalies, increased risk of premature birth and higher peri-natal mortality. The use of laxatives and diuretics in purging behaviour has been implicated in the development of cancers in the foetus (Newton & Chizawsky, 2006).

The health and developmental experiences of infants and young children play a part in determining whether mental illnesses will develop later in life (Robinson et al., 2008). The development of risk factors for eating disorders in early childhood may be influenced by genetic factors, early health trauma and behaviours role modelled by the parent.

Given the potential severity of risk to the both mother and foetus, Newton and Chizawsky (2006) recommend screening for eating disorders as a routine part of obstetrical assessments.

Younger Children and Eating Disorders

Recent research in the UK identified that eating disorders affect about 3 in every 100,000 children under the age of 13. Of the 208 cases of confirmed early onset eating disorders examined in this study, 37% of the children were diagnosed with Anorexia Nervosa, 43% were classified as having an Eating Disorder Not Otherwise Specified and 19% had symptoms of disordered eating, such as food avoidance and being underweight (Nicholls, Lynn, & Viner, 2011).

Disordered "fussy" eating in childhood is common. Typically, children develop eating fads in which their patterns of eating may be irregular and food choices restricted. Adolescents tend to be impulse eaters and graze. It is uncommon for these behaviours progress to serious eating disorders later in life.

Eating Disorders in Migrant Populations

Eating disorders and disordered eating are increasingly being reported in a wide global distribution (Becker, 2003). Migrant populations in Western societies may be at increased risk of developing eating disorders (Bhurga & Jones, 2001).

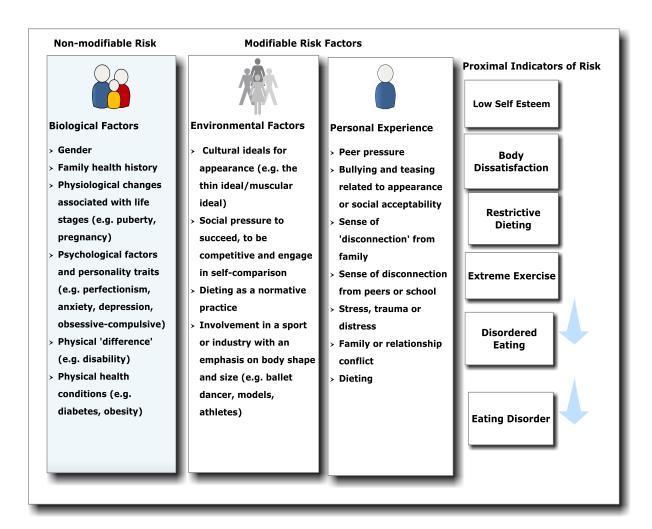
The stress of migration, cultural identity and the social 'fit' within the new host culture have all been suggested as contributors to the development of mental illness in migrants (Becker, 2003), and fits the model of eating disorders such as Anorexia Nervosa, in which an eating disorder develops in a biologically vulnerable individual who is unable to cope with a stressor. Social isolation and stress, together with potential dissonance between ethnic appearances, cultural values of the country of origin and the Western ideals for appearance and success may contribute to the development of eating disorders or disordered eating.

Risk Factors

No single cause has been identified for eating disorders. Like most other psychiatric and health conditions, a combination of several different factors increases the likelihood that an individual will experience an eating disorder at some point in their life (NEDC, 2010).

Biological factors in the individual, such as gender, genetic susceptibility, and physiological changes associated with transition stages in life such as puberty have been identified as contributory risk factors. Individual psychological factors and personality traits are also identified, with risk associated with low self esteem, anxiety, depression, perfectionism and obsessive-compulsiveness. Life experiences also contribute to the development of eating disorders, with an emphasis on the sociocultural thin ideal, and environmental experiences such as peer pressure, bullying, relationship conflicts and dieting as specific risks for the development of eating disorders.

Rather than existing in isolation, there is a tendency for these risk factors to be linked in a developmental sequence prior to the onset of an eating disorder. Each person is different and there is no single consistently identifiable pathway into an eating disorder. The following diagram illustrates the most commonly identified risk factors for the development of an eating disorder.



Modifiable Risk Factors

Socio-cultural, and environmental risk factors, and to some extent the experience of psychological risk factors, may be modifiable, and amenable to change. The modifiable risk factors for eating disorders are identified as: body dissatisfaction, extreme weight loss behaviours, low self-esteem, adoption of the socially endorsed thin body ideal as a personal standard, and placement of an undue emphasis on weight and shape in the evaluation of the self and others (Jacobi et al., 2004).

Dieting and Disordered Eating

The most important proximal indicator of onset of an eating disorder is disordered eating. Disordered eating is a disturbed and unhealthy pattern of eating that can include fasting and skipping meals, eliminating food groups, and restrictive dieting with accompanying bingeing consequences. It can be accompanied by purging behaviours such as laxative abuse and vomiting, and excessive exercise. It presents increasingly as a societal norm in Australia with one study showing a doubling in disordered eating behaviour within the past decade. This upward trend is apparent for both males and females, and cuts across age groups from youth to older adult. Even at sub-clinical levels, disordered eating can result in significant impairment mentally, physically and socially (NEDC, 2010).

The act of starting any diet increases the risk of eating disorders. Research conducted in Australia has shown that adolescent females who diet at a severe level are 18 times more likely to develop an eating disorder within six months than someone who has not done so (Daee et al., 2002; Yeo & Hughes, 2011). Though not everyone who diets will develop and eating disorder, it would be rare to find an individual with an eating disorder who has not had a history of dieting and disordered eating.

Unhealthy weight loss dieting is also associated with other health concerns including depression, anxiety, nutritional and metabolic problems, and, contrary to expectation, with an increase in weight (Paxton et al., 2002). Among girls who dieted, the risk of obesity is greater than for non-dieters (Daee et al., 2002; O'Dea, 2005). In addition, young people who engage in unhealthy dieting practices are almost three times as likely as their peers to score high on measures assessing suicide risk (Daee et al., 2002).

Negative Body Image or Body Dissatisfaction

Body dissatisfaction is major indicator of risk for developing an eating disorder as is importance of shape and weight to the person's evaluation of their self-worth. In our society, dissatisfaction with the body has become a cultural norm and this is integrally tied up with the belief that losing weight will improve body satisfaction. Individuals with poor body image are more likely to engage at some point in their lives in dangerous dietary practices and weight control methods, excessive exercise, substance abuse, and unnecessary surgical interventions to alter appearance.

Body dissatisfaction is also associated with depressed mood and low self-esteem and therefore represents a significant mental health issue. Long term poor body image is a predictor of reduced mental and physical health on multiple indices, as well as lowered social functioning and poor lifestyle choices in both Australian males and females, and at different ages.

Protective Factors

Protective factors that reduce the likelihood of the development of an eating disorder often represent the opposite experience to that associated with risk. For example:

Risk Factors	Protective Factors
Low self esteem	High self esteem
Negative body image/body dissatisfaction	Positive body image
Anxiety, stress, negative affect	Emotional well-being
Disconnection from peers or school	School achievement, good social skills
Acceptance of cultural 'ideals' such as thinness, muscularity, or success Disconnection from family	Critical processing of cultural and media messages

(Adapted from NEDC, 2010)

The protective factors for eating disorders are consistent with general protective factors for youth mental health (Commissioner for Children and Young People WA, 2011).

Ideal Standard of Care

The interplay between all of these factors results in a dynamic illness with different presenting symptoms throughout the course of illness. The experience of an eating disorder is highly individual. A mono-therapeutic "one size fits all" approach to treatment is unlikely to adequately address the needs for those with an eating disorder.

All treatment issues need to be underpinned by the principle that people with a lived experience and their carers deserve the same rights as other health care users: the right to an accessible, informed, competent health care system that is educated to respond to their specific needs across a spectrum of care, in a variety of treatment and non-clinical settings, in a coordinated and planned manner that engages them to develop an individualised and flexible treatment plan that reflects their needs without stigma and prejudice.

Everyone who has or is at risk of developing an eating disorder and those who care for them need to have access to a network of skilled practitioners, evidence-based treatment and support at all stages of prevention, illness and recovery. The most appropriate treatment approach for eating disorders is a flexible stepped model with options to step treatment up or down through the continuum of care and to exit and enter treatment at any level on the continuum, in response to the development of the illness. This has been described as the "ideal standard of care" (AED, 2011).

While this has been recognised as the "ideal", one of the most significant and ongoing challenges of the field is being able to provide accessible and seamless delivery of treatment services across the full continuum of care. Increasing access will require action in the following areas:

- Geographic access to services: increasing existing public service capacity to provide access to identification, referral, assessment and treatment options for all individuals and families irrespective of where they live
- Clear signposting of referral /care pathways which promote available resources and services:
 with the complexities of multi-disciplinary treatment options, one of the most difficult things
 for people seeking help is determining the entry point. There needs to be coordinated
 pathways across the sector and consistent options of models of care across the full spectrum
 of eating disorders
- Integration between care providers; child, adolescent and adult services; and public and private health care settings
- Access to evidence-based information for those living with an eating disorder and health and education professionals that is of high quality; is collaborative across disciplines, sites and areas of expertise; and delivers outcomes that inform practice
- Education, training and support for health professionals and carers, and ongoing specialist support and training from tertiary services to disseminate best practice

- Removing specific diagnostic criteria as a point of access to services and adopting more lenient criteria for referral that do not exclude any eating disorder diagnosis
- Utilising technology in the delivery of care including videoconference, email, telephone, online services, DVD/telephone counselling formats, whilst retaining the opportunity for face-to-face services
- Increasing regional and remote access through training of rural professionals, and improved access to city based treatments through the provision of accommodation and support for rural individuals and families when a patient is in hospital
- A review of health fund practices is required to ensure that people with eating disorders
 have access to the range of treatments and the duration of treatment that they require at
 every stage in their illness and ongoing recovery

To meet the differing individual levels of need for intensity of treatment, there are six components that must be included in the continuum of care:

- 1. Primary, secondary and tertiary prevention
- 2. General outpatient support provided in both hospital and community settings with flexible access to a range of services delivered with variable frequency of access, with particular emphasis on relapse prevention / early intervention.
- 3. Intensive outpatient support for people living with their family or other support structures who require intensive clinical support
- 4. Day programs, providing a more structured program, including group therapy
- 5. Residential programs, providing 24 hour support ideally located in the community. This level of care provides a step down or step up level following or before hospitalisation and is imperative for those who may not have a significant support structure in their homes
- 6. Inpatient services for medical intervention and stabilisation; intensive, structured inpatient programs to address severity and co-morbidity

All of these components are essential to provide access to effective care at each stage in the development of and recovery from an eating disorder. They must be delivered with a step up, step down flexibility.

Treatment of eating disorders on the Australian landscape therefore requires the development of a 'hub and spoke' model of care:

• This promotes integrated, coordinated options for treatment across Australia

- Major population centres need specialist eating disorder units providing excellence in care and resources to provide support for the development of peripheries of competence in rural and remote settings
- City centres in area health regions have the capacity to link with clinicians in the public and
 private sectors and with university based professional units to provide seamless care across
 the age spectrum and duration of illness for Australians with eating disorders. They are able
 to innovate and evaluate clinical outcomes as well as provide satellite support to urban and
 remote areas

Effective, targeted prevention and intervention strategies will reduce the incidence and duration of the illness

Early and Equitable Access to Treatment and Support

In light of the increasing prevalence, severity and impact of eating disorders in Australia, early identification and prompt intervention, based on appropriate, evidence-based, multi-disciplinary approaches, are urgently needed. Eating disorders must be recognised as a significant priority within mainstream health, requiring a partnership of care approach between primary care, acute care, specialist care, families and communities.

Timely Access to Services

It is imperative that early identification and intervention strategies address the key points in the development of both the disorder and help-seeking:

- Early in development where behaviours are recognised as being risk factors for an eating disorder. Recognition and response to early signs and symptoms (that are fewer than, or less intense than, those required for a diagnosis) is a requirement for early intervention. For early access to treatment and support, there is a need to broaden the definition of eating disorders beyond the existing diagnostic criteria. Replacement of diagnostic criteria as the point of access to services with evidence-based proximal risk factors is desirable to ensure that people receive treatment early in the development of the disorder
- Early in help seeking where the person is identifying that they have an eating disorder and has made the decision to seek help. A prompt response and access to treatment early in help seeking may assist the person to engage with and pursue treatment. Given the reluctance to seek help experienced by most people with eating disorders, a request for help may be the only 'window of opportunity' to intervene early. There is evidence the length of time waiting for treatment predicts the likelihood of drop out of treatment at a later stage (Byrne, Fursland, Allen, & Watson 2011). People who seek help early should be validated with a prompt response
- Early in subsequent presentation where the person has previously received treatment and has experienced relapse or recurrence. Recovery is a challenging experience in which relapse

should be anticipated. Prevention and early intervention are as important during relapse or recurrence as at other stages of illness, potentially reducing the risk of chronicity

Principles of Prevention

Prevention interventions are founded on the theory that if particularly salient risk factors are reduced within individuals or environments, then the likelihood of developing an eating disorder will also be reduced. The risk factors for eating disorders occur within the context of everyday life — perinatal influences, family relationships, interpersonal relationships, the home environment, schools, workplaces, recreational and sport activities, media and social influences.

The principles underlying all prevention interventions include:

- Prevention initiatives require thorough piloting and evaluation to ensure that they are safe
- Prevention approaches include targeting those most at risk of developing an eating disorder, including school aged children and young adults, together with the people who can positively influence them including families, educators, youth services, fitness and sports instructors, and the media
- Effective prevention approaches need to be assertively disseminated over an extended time period to schools, service providers, and community groups, accompanied by appropriate training and support in order to maximise reach and effectiveness
- The dissemination and implementation of evidence-based interventions and treatments require state and territory health services and public and private health sectors to be communicating and collaborating with each other
- Messages related to obesity prevention must be reviewed to ensure that they also promote healthy body image and healthy eating patterns and do not contribute to the development of poor body image, disordered eating and eating disorders
- Engagement of people with a lived experience in the development of promotion and prevention programs, including obesity prevention programs

First Point of Contact

The eating disorder sector's awareness of the need to intervene early and the success of treatment approaches make it essential that the Australian health system develops the capacity to provide evidence-based eating disorder treatments delivered by trained health professionals.

The essential elements to support early intervention include professional awareness of early signs and symptoms of disorder, proactive screening of people at risk, access to accurate information and referral pathways and, perhaps most importantly, professional attitudes that are supportive and non-judgemental.

A Skilled Workforce

A continuum of care from prevention to early intervention, treatment and recovery support is predicated on the availability of a skilled workforce appropriately trained in evidence-based approaches to eating disorders. This workforce includes not only specialists in eating disorders, but also other health professionals, teachers and educators, and those from other relevant fields such as the fitness, fashion, modelling, advertising and weight loss industries.

Eating disorders can be hidden illnesses for long periods unless there is someone with the necessary expertise to identify signs and symptoms. Accurate early identification and prompt responding can have a significant impact and influence on access to treatment and support. It is therefore imperative that basic professional training in eating disorders be mandatory for all health service providers to ensure they can identify and intervene appropriately when they encounter someone with an eating disorder.

Barriers to Early Intervention

When mental illness is recognised and treated early, there is an expectation that long-term outcomes will be improved (Kelly et al., 2007). In practice however, people with eating disorders often do not seek help, or only seek help after a long period of illness (Kelly et al., 2007; NEDC, 2010). Regardless of age of onset or gender, there is typically a long delay between onset and time of first treatment, with some individuals spending months or years living with the illness before receiving a correct diagnosis (NEDC, 2010). Hart and colleagues conclude that "if symptom severity, associated disability and economic burden are to be reduced, the very poor health service utilization of those experiencing eating disorder behaviours must be addressed" (Hart et al., 2009).

A continuum of care for eating disorders must address the known barriers to early intervention and on-going engagement with treatment. These include:

- Stigma associated with eating disorders people with eating disorders experience the stigma related to specific misconceptions or lack of awareness of eating disorders in the community. Anorexia Nervosa has been shown to be more stigmatized than schizophrenia, with the public blaming the sufferer for their condition (Stewart et al., 2006). Stigma may be an external experience, in the form of teasing, bullying, criticism or exclusion from social groups all of which are identified as risk factors for the development of eating disorders. Stigma may also be an internal experience in which the person adopts the dominant ideas of their culture and these ideas combine with other personal risk factors for eating disorders, such as low self-esteem or perfectionism, to create a fear of rejection by others
- Denial of illness a characteristic of eating disorders is that they are at least partially ego-syntonic (Newton & Chizawsky, 2006) which is often expressed as denial of illness or concealment of behaviours (Tury et al., 2010; Vandereycken & Humbeeck, 2008). Hepworth and Paxton (2007, cited Hart et al., 2009) identified that a person's ability to recognise their behaviour as a problem is an important precursor to help seeking. Vandereycken and Humbeeck (2008) found that people with eating disorders were aware of eating disorders as an illness but did not apply the concept to their own experience

- Demographic influences males in all age groups are less likely to seek help for eating disorders than females (Rickwood, Deane, & Wilson, 2007; Weltzin et al., 2005). However, even amongst females, only approximately 40% are likely to access services for any mental health problem (Women's Health Policy) and this level may be reduced by the phenomena of denial and shame in eating disorders
- Socio-economic factors eating disorder behaviours can be masked by the socially accepted desire to be thin and misconceptions about healthy eating and exercise
- Lack of awareness or understanding of eating disorders, including lack of awareness of: warning signs; the achievability of recovery and the effectiveness of treatments; and the range of people who may be affected by eating disorders
- Other factors which reduce help seeking include the need to meet diagnostic criteria before referral to eating disorders treatment, rural location, lower education levels and lack of sufficient financial resources

Community education about eating disorder warning signs, improved attitudes towards treatment and clearly identified 'soft entry' access points located in the community are needed to overcome these barriers and facilitate early access to treatment and support. Strategies are required to provide affordable prevention, early intervention and treatment services for the full duration of illness, including relapse prevention.

Public health awareness campaigns to change our culture will develop resilience in our young people and reduce the risk factors for developing an eating disorder

Community Awareness and Understanding of Eating Disorders

Eating disorders are often poorly understood and underestimated in contemporary society. There are mistaken beliefs that eating disorders are about vanity, a dieting attempt gone wrong, an illness of choice, a cry for attention, or a person "going through a phase". Eating disorders are also frequently believed to affect only adolescent girls (NEDC, 2010). While there may be strong dissonance between the community's understanding of eating disorder and that of mental health professionals (Hart et al., 2009) frontline health professionals frequently reflect the dominant ideas of their society.

These types of misconceptions affect the responses and explanations sufferers receive when they present for help from frontline health professionals. This may lead to a failure to diagnose or delays in diagnosis. It may also contribute to feelings of shame and reluctance to seek further help (NEDC, 2010).

Research indicates that there is a generally low level of mental health literacy in the community (Hart et al., 2009) and general beliefs about mental health will inform community responses to eating disorders. Extensive community education would be required to develop an appropriate level of understanding of eating disorders, including identification of symptoms, to support prevention and early help-seeking.

Eating Disorders in a Community Context

A person's body image, self esteem and sense of self-worth are affected by many different aspects of their community environment including school curricula, peer and family relationships (e.g. teasing) (Hart et al., 2009) workplace expectations, sports involvement, and adult attitudes, especially as modelled by family, teachers, sports coaches and youth leaders. It is also affected by wider social factors such as media reporting; entertainment and advertising; and cultural stereotypes and stigma (O'Dea, 2005). To develop new behaviours and attitudes that are sustainable in the environmental context, the environment must change before or at the same time as the individual.

People at risk need support from their community and personal network of friends and family in order to engage with prevention strategies prior to the onset of illness and treatment, and recovery options and support when illness has occurred. The sphere of influence for each person may include relatives, friends and frontline professionals such as teachers, sport and fitness coaches and youth workers. These groups need to understand that eating disorders are serious mental illnesses, they can affect anyone, what the early indicators of risk are, and the actions they can take in response.

Cultural Norms

Western society holds a very thin ideal of beauty for women (Paxton et al., 2002) and a highly muscular ideal for men (Russell-Mayhew, 2007; Weltzin et al., 2005). Choate (2005, cited in Russell-Mayhew, 2007) suggests that "it is a Western cultural pastime to talk about, think about, and obsess about how our bodies look and what we can do to change them". Most people in Western society are exposed to a culture of dieting, poor nutrition and social comparison with body ideals providing an environment conducive to the development of eating disorders, disordered eating and body dissatisfaction, all of which have negative implications for individual health including weight gain (AED, 2011) and depression (Durkin, Paxton, & Wertheim, 2005).

Concern over rising weights has seen the introduction of a range of social marketing and school-based interventions (AED, 2011) as well as generating a level of popular concern expressed as an interest in issues related to diet and dieting.

The safety and efficacy of interventions to prevent or reduce the incidence of obesity has been questioned. There is a "substantial body of evidence from the eating disorder literature" demonstrating a connection between an emphasis on appearance and weight control and the development of eating disordered behaviours (AED, 2011).

In this context, dieting is encouraged and modelled in families, peer groups and the media (Paxton et al., 2002). Attitudes and behaviours which are risk factors for the development of eating disorders are now common in society (Russell-Mayhew, 2007).

Media messages, appearance teasing and appearance conversation ('fat talk') are all variables that contribute to body dissatisfaction (Neumark-Sztainer et al., 2006; Richardson & Paxton, 2010). Comparison with images and standards projected by the media have been found to mediate low self

esteem and body dissatisfaction for females (Van den Berg et al., 2007). Pressures to achieve, or to compare oneself with, unrealistic body ideals have been implicated as one developmental pathway into disordered eating (Becker, 2003).

Heath Promotion

Eating disorders are the result of a complex interplay of biological, psychological, social, and environmental factors at both individual and community levels and prevention approaches must therefore address all modifiable risk factors across this spectrum. This is consistent with the assumptions underpinning a population health promotion approach (Commonwealth Department Health and Aged Care, 2000).

Health promotion combines actions which strengthen individuals and actions which change social environments (Keleher & Armstrong, 2005). Fostering a positive environment is as important to the prevention or amelioration of mental health issues as is strengthening the skills and capabilities of the individual at risk. For eating disorders, positive environments are required to facilitate the implementation and long term effects of more structured evidence-based prevention programs (Becker, 2011).

A positive environment for the prevention and early identification of eating disorders would be one in which the community, at all levels from public policy to organisations, professions and individuals, has an understanding of eating disorders as serious and complex mental illnesses and the capacity to support the social and emotional wellbeing of members, respecting and valuing difference. Engaging the whole community starting from engagement of governments in "multilevel public policy initiatives to prevent eating disorders is the key to prevention on a population scale" (Paxton, in press).

A healthy, diverse and inclusive society acts to prevent eating disorders in the next generation of young Australians and the sustained recovery of those affected

Treatment research, epidemiological research, personal recovery stories, and clinician's experiences provide strong evidence that full recovery from eating disorders is possible, and that the best outcomes are achieved by those who receive individually tailored treatment early in illness and early in episode (NICE, Clinical Guidelines 9, 2004). As such, recovery should always be the goal of treatment, defined in ways that are meaningful to both the person and their treatment team.

A recovery oriented approach for eating disorders is one which is a sustained, long term approach that attends to all of the dimensions of the illness: physical, psychological, behavioural, social and practical. This approach must be maintained both during treatment and in the recovery process.

In the context of eating disorders, recovery is understood as both clinical and personal:

• Clinical recovery comprises restoration of physical, behavioural and psychological health

 Personal recovery encompasses a range of factors that influence quality of life, including internal personal conditions and external conditions that facilitate recovery (Jacobson & Greenley, 2001)

Person-centred and recovery-oriented approaches are promoted and incorporated in policy as the best practice standard for all mental health services.

Person-Centred and Recovery-Oriented Approaches

'Person-centred treatment' puts the needs of the patient at the core of all decision making about treatment and support. The care plan of the patient must be individualised and appropriate to the age, needs and family circumstances of the patient. The role of the patient's support structure (usually the family) must be incorporated into treatment and, in turn, the needs of the family and carers, including information, education and support, must also be addressed.

Available evidence indicates that effective person-centred treatment approaches for young people under 18 years of age recognise the importance of the role of the family. These approaches are family based, ensuring the young person and their family are not only considered in treatment, but there is an appropriate partnership between the parents and health services providers to support the young person towards recovery. In addition, there is a recognised family based therapy (FBT) treatment option in which the family has a specified role in the treatment process.

Person-centred approaches for adults over 18 years of age can include appropriate family based therapy treatment options if that is in the best interests of the patient, and health service providers work collaboratively with the patient, their family and other health professionals (Lutz & Bowers, 2000). Community based support is an equally important component of the continuum of care, providing access to information, education, professional and peer support, and health and well being promotion.

An Integrated System

Eating disorders present challenges to the traditional organisation of health care but these are challenges that can be addressed.

Firstly, to achieve a collaborative multi-disciplinary team approach will require the implementation of mechanisms to support professional networking across traditional treatment boundaries. The multi-disciplinary team must work across both physical and mental health; between public and private health services; across specialist disciplines and between health and social services.

Secondly, a consistent and coordinated approach is required to ensure timely, flexible and equitable access to services with particular emphasis on smooth transitions between child, adolescent and adult services and between levels of care. For most children and many adults, the supportive environment is created by family, defined in the inclusive sense of people in relationships such as parents, siblings, partners, carers, extended family and close friends. For people who do not have access to this strong network of social support, consideration must be given to providing treatment within a more formally constructed social environment such as residential care.

Thirdly, in addition to consistency, there must also be flexibility to accommodate the individuality of each eating disorder experience. A person's progression through an eating disorder is not linear. There is no single consistent pathway that may be used to determine the level of intensity of treatment and support that all patients will require. Individual assessment of several dimensions of need is required to determine the level of intensity of treatment.

The risks associated with an approach to the prevention and treatment of eating disorders that do not address these challenges include:

- Failure to develop protective factors through primary prevention approaches
- Failure to identify warning signs and symptoms early in the progression of the illness with consequences for the severity and duration of the illness
- Lack of access to evidence-based information and clinical treatment early in the course of the illness
- Inconsistencies in treatment across disciplines and service providers, with implications for the effectiveness of treatment and continued engagement with treatment
- Treatment of comorbid conditions without specific treatment for the eating disorder, contributing to severity and chronicity of the eating disorder
- Absence of essential treatment at critical points in the development of illness, particularly where physical and mental aspects of illness are treated separately
- Individuals 'falling through the cracks' between services, particularly during transitions between services with implications for the continuity and effectiveness of care
- Difficulties in transitioning from child and adolescent care involving families to adult care which may or may not continue to involve families in treatment options
- Inadequate duration or level of treatment and support resulting in failure of recovery or recurrence of the illness