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Towards the development of a resource center for individuals with anorexia nervosa and/or bulimia a needs/resource assessment, professional networking, and program planning process

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TOWARDS THE DEVELOPMENT OF A RESOURCE CENTER FOR INDIVIDUALS WITH ANOREXIA NERVOSA AND/OR BULIMIA: A NEEDS/RESOURCE ASSESSMENT, PROFESSIONAL NETWORKING, AND PROGRAM PLANNING PROCESS

by

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

An assessment of service needs and resource availability for clients with the eating disorders anorexia nervosa and bulimia was conducted in the Waterloo region, located in southwestern Ontario, in order to ascertain the number of individuals in the region who currently suffer from the disorders but for various reasons have not sought treatment. In addition, the assessment examined the availability of specialized services for this client population, the sufficiency of extant services in relation to estimated service needs, and the degree of inter-agency networking in treating eating disorders. A variety of needs/resource assessment techniques were utilized including the social indicators approach, key informant interviews, a mail survey of community professionals, and a telephone survey of individuals afflicted with the disorders. In order to facilitate utilization of the results of the assessment a networking/health education conference was arranged at which the preliminary results of the assessment were presented and delegates were invited to become part of a task force which would utilize the results of the assessment to improve services for clients with eating disorders in the region. The results of the needs/resource assessment suggested that there were a large number of individuals in the region who currently suffer from an eating disorder but have not sought treatment. In addition, several specialized services for the treatment of these disorders were found to be absent and the extant services insufficient in

relation to estimated service needs. Finally, the assessment indicated a lack of professional and agency networking in treating these disorders. Apart from facilitating the utilization of the results of the assessment through the development of a task force, the networking/health education conference also facilitated the education of community professionals and encouraged networking of services. Presently the task force consists of twelve committed individuals, including professionals from a wide range of disciplines and two recovered bulimics. The group is currently in the process of applying for funding and seeking sponsorship for an eating disorders resource center in the region which would encourage those afflicted with the disorders to seek treatment, provide referrals to professionals who are capable of treating the disorders, provide self help groups for sufferers, facilitate networking of services and the education of community professionals, and employ preventive/educational interventions in the region.

INTRODUCTION

Towards The Development of a Resource Center for Individuals with Anorexia Nervosa and/or Bulimia: A Needs/Resource Assessment, Professional Networking, and Program Planning Process

Overview of the Project

The present study was conducted in response to a local university health centers' request for assistance in meeting the needs of the increasing number of students who were seeking treatment for anorexia nervosa and/or bulimia. The centers' director felt there was a need for a self help group for these individuals and also expressed a concern that there were many students who were suffering from the disorders but had not sought treatment. While acknowledging the effectiveness of self help groups in treating the disorders, we felt an exclusive focus on treatment would limit the potential effectiveness of the proposed intervention. The role of socio-cultural factors in the etiology of these disorders has been well doccumented (Garner & Garfinkel, 1980; Currie, 1988) and suggests the need for a paradigm shift away from direct treatment towards prevention. As a result, we persuaded the director that an appropriate approach would be to first conduct a region wide needs/resource assessment study which would include an investigation of the need for prevention programming.

The initial stages of the project involved a community wide assessment of service needs and resource availability for individuals with eating disorders. Specifically, four needs assessment techniques were employed. The Social Indicators Approach was used to estimate the number of adolescent and young adult women in the Waterloo region who are afflicted with the disorders. Next, a series of Key Informant Interviews were conducted in order to ascertain the utility of conducting a large scale mail survey of community professionals and to pilot test the questions to be included in this survey. The third strategy, a mail survey of community professionals, was conducted in order to ascertain service accessibility, affordability, acceptability and availability and to provide an estimate of the demand for service, the service needs of this client population as defined by community professionals, and the degree of inter-agency networking. Finally, a telephone survey of individuals afflicted with the disorders was conducted with the purpose of corroborating and/or pointing out discrepancies in the data obtained from the professional mail survey. Together the four assessment strategies provided a clear picture of service needs and resource availability and, more importantly, facilitated the mobilization of community professionals and residents toward improving services for individuals with the disorders.

In order to further facilitate the mobilization of community professionals a networking/health education conference on the topic of eating disorders was arranged at which the results of

the professional mail survey were presented and delegates were invited to join a task force who would utilize the results of the assessment to improve services for this client population. Similarly, feedback to the telephone survey participants included an invitation to become a member of the task force.

To date the task force has met seven times. The current membership includes ten community professionals from a variety of disciplines and two recovered bulimics. We are presently in the process of applying for funding for a community resource center that would include such services as the provision of information and referrals, self help, public education and prevention.

Conceptual Framework

For decades psychologists have focused on the individual in attempting to understand the cause of mental health problems. Individuals who failed to live up to a single standard of competence were labeled deficient and thought to be in need of the help of a professional. As a result of this "person blame" explanation of mental illness the individual became dependent on the professional and unable to recognize his or her own capacity for self healing (Caplan & Nelson, 1973). The resultant disempowered state has been dubbed "iatrogenic illness" in the popular literature (Walsh, in press; Nelson, Potasznik & Bennett, 1983).

In the early 1960's the community mental health movement brought to awareness the need for major changes in our health care system. While funding for mental health programs was becoming increasingly scarce, the demand for these funds was rapidly increasing. Several solutions were suggested including: the coordination of service delivery to avoid duplication; involving the client population in the planning of programs to ensure program relevance; the use of non-professionals for the delivery of services; program accountability and an increased emphasis on prevention (Hodgson, 1984; Perlman & Fisher-Dobbin, 1984). These changes represented a major paradigm shift from the traditional person blame explanation of mental illness to a systems level, competency framework based on client empowerment and respect for human diversity (Fisher, 1982; Rappaport, 1977; Walsh, in press; Watzlawick, Wealland & Fisch, 1979). The present investigation is grounded in this new conceptual framework which is discussed in detail in several excellent texts on community psychology (Rappaport, 1977; Fisher, 1982). A brief review of community psychology concepts which are relevant to this investigation will be presented here.

In recognizing the impact of the socio-economic context it becomes evident that the use of a single standard of competence in defining mental health is inappropriate. With a respect for human diversity and an awareness of cultural relativity the professional begins to see the competencies inherent in all humans. This competency framework is the basis of community

psychology interventions. The client population who were traditionally viewed as passive recipients of mental health care are instead viewed as having the capacity to make a worthwhile contribution in several areas. Involving the client population in program planning activities ensures program relevance and increases their sense of self worth as they become aware of the value of the contributions they are able to make. The latter point refers to the process of client empowerment (Rappaport, 1977) a concept which is central to community psychology philosophy. Similarly, participation in self help activities and the use of non-professionals for the delivery of services serves to empower the individual and results in considerable savings of professional resources.

In addition to contributions in the area of program planning and the provision of services, the client population can also increase the validity and objectivity of evaluative research. As the gulf between the need for mental health services and the availability of funds for such services has widened the evaluation of program effectiveness has become a necessary program activity. While research is never truely value free (Marti-Costa & Serrano-Garcia, 1983) the political nature of accountability research makes it particularly vulnerable to bias. As a result, special attention must be paid to issues of validity and objectivity. In contrast to the traditional scientific paradigm which required rigorous objective detachment, it is now clear that the objectivity and validity of research is increased

through interpersonal exchange between the researcher and data source (Walsh, 1987) and that failing to obtain input from the client population will likely result in a biased evaluation (Seigel, Attkisson & Cohn, 1978).

Apart from recognizing the valuable contributions the client population can make, community psychologists also recognize the importance of considering the socio-economic context in designing mental health interventions. Despite ample evidence to support the utility of systems level interventions, however, funding in the field of mental health continues to be primarily allocated to the direct treatment of individuals. The move away from this emphasis on direct treatment is further hindered by the political reality of the times. Despite a genuine commitment to the betterment of society, health care professionals have a vested interest in maintaining the status quo which provides them with status and power (Reiff, 1974). While there will always be individuals who are in need of direct treatment, it is both expensive and of unproven effectiveness (Nelson et al., 1983). Although the effectiveness of the alternatives suggested by community psychology are also unproven, they do address the question of efficiency by utilizing the resources of the client community, preventing costly service duplication through the coordination of mental health services, and reducing the overall prevalence of mental health problems through preventative interventions.

The concept of prevention subsumes a significant portion of community psychology research and is particularly relevant to the present investigation. Preventive interventions include those that attempt to reduce the incidence of a disorder (primary prevention) and those that are designed to limit the duration and severity of disorder (secondary prevention) (Fisher, 1982), while tertiary prevention is synonymous with direct treatment. Primary prevention activities include those that are aimed at removing the environmental factors that create or maintain illness (proactive) and those that help individuals build resistances to these factors (reactive). While some authors feel the latter is "old wine in new bottles" (Rappaport, 1977) because the focus is still on changing the individual, others note that proactive primary prevention is difficult to implement (Heller, Price, Reinharz, Riger & Wandersman, 1984; Fisher, 1982). Heller et al., (1984) further sub-divide primary prevention interventions into those that are administered to all members of the community (community wide) or all members of the community who are at a specific life stage (milestone) and those that are only administered to individuals who have been identified as "at risk" (high risk). While the community wide and milestone approaches avoid the dangers of overprediction and labeling they are also expensive and generally of most benefit to individuals who are already functioning well. In general these authors report that the most successful primary prevention interventions are those that are designed to ameliorate specific life stressors, improve

psycho-social competence or improve health-related behavior.

A final community psychology concept that is relevant in the present investigation has to do with the collection and analysis of data. Community psychology research is by nature applied research which is grounded in the philosophy of humanism. As such, the methodologies utilized do not mesh well with the traditional experimental methods used in laboratory research. Alternatively, the quasi-experimental method of data collection and analysis, though less rigorous, permits an understanding of real world behavior (Fisher, 1982).

While this discussion of the conceptual framework within which the present study has been conducted is by no means exhaustive, our goal was to provide the reader with a basic understanding of the community psychology concepts which are relevant to this investigation. Throughout this paper the themes discussed in this section will resurface. The importance of each will become clear through their application.

Research Questions

The present study is an investigation of service needs and resource availability for clients with the eating disorders anorexia nervosa and bulimia in the region of Waterloo located in Southwestern Ontario. In keeping with the requirements of a maximally valid and objective investigation potential clients as well as health care professionals from a variety of disciplines

were invited to participate through various assessment techniques. No formal predictions were made since this investigation was a descriptive study and most needs/resource assessment techniques do not produce data that are amenable to inferential statistical analysis. Nonetheless, four formal research questions were postulated in order to guide the study:

1. Approximately how many individuals in the Waterloo region currently suffer from an eating disorder but have not sought treatment? (the service gap).

2. What services, deemed necessary in the treatment of eating disorders, do not exist in the Waterloo region? (missing services).

3. To what extent are available services in the Waterloo region sufficient to meet the service needs of clients with eating disorders? (sufficiency of extant services).

4. To what degree are community professionals aware of specialized services for individuals with eating disorders in the Waterloo region and to what extent do they utilize these services for referral purposes? (networking of services).

While service utilization data are often used as an indicator of service needs, this is not appropriate in the present investigation since, as we hope to demonstrate in answering our first research question, there are many in need who are not utilizers. An estimate of the number of individuals who are afflicted with an eating disorder in the Waterloo region will instead be inferred from the incidence statistics reported in the literature for similar populations. This estimate will then be compared to an estimate of the number of individuals utilizing services for the treatment of an eating disorder based on the number of requests for service from this client population

reported by community professionals. The results of this comparison will provide us with an estimate of the service gap.

Our second research question will involve an assessment of extant services in order to determine the degree to which services are accessible, affordable, acceptable and available with specific reference to clients with anorexia nervosa and/or bulimia (these terms will be operationally defined in a later section). In addition, individuals who are afflicted with the disorders and have utilized services within the community will be surveyed to ascertain the degree to which services are accessible, affordable, acceptable and available from the perspective of the potential client. The results of this part of the assessment will then be compared to an assessment of service needs based on an assessment of the felt needs of the client population coupled with an assessment of the needs attributed to this client population by the professionals who treat them. The results of this comparison should permit the identification of services that are necessary in the treatment of eating disorders but do not exist in the Waterloo region.

Our third research question will be investigated by comparing our data on the availability of accessible, affordable and acceptable services for clients with eating disorders to our estimate of the prevalence of the disorders in the Waterloo region.

Our fourth and final research question will involve directly measuring professional awareness of services and the number of inter-agency referrals.

Literature Review

Eating Disorders Background

Eating disorders primarily affect women (Garner & Davis, 1986) hence the feminine pronoun is used throughout this paper. Over three hundred years ago case histories of individuals exhibiting the symptoms of anorexia nervosa were recorded (Rothman, 1982). Bulimia, a related disorder, dates back to the times of the Roman feasts. While these disorders have historically been extremely rare, there has been a dramatic increase in incidence among adolescent and early adult females over the past two decades (Duddle, 1973; Bruch, 1978; Garner & Garfinkel, 1980; Misik, 1981; Johnson, 1982; Garner, 1984). Anorexia nervosa, characterized by voluntary self starvation coupled with an intense desire to be thin is estimated to affect 1.1 per cent of adolescent and young adult females in the United States (U.S.) (Pope, Hudson, & Yurgelun-Todd, 1984). Bulimia, a binge-purge cycle which occurs in fifty per cent of individuals with anorexia refers to recurrent episodes of binge eating immediately followed by one of several forms of self purgation including self induced vomiting, laxative or diuretic abuse, fasting and/or excessive exercise. Bulimia also occurs in normal and slightly overweight individuals, in which case it is

classified as a separate disorder by the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, 1980). However, some professionals have questioned the validity of this distinction since, as noted above, approximately 50 per cent of anorexics engage in binge eating and purging and longitudial studies have demonstrated that a large number of anorexics eventually become bulimic (Garner, Garfinkel & O'Shaughnessy, 1985; Holmgren, Humble, Norring, Roof, Rosmark & Sohlberg, 1983). Bulimia as a symptom or a syndrome is reported to affect 13.6 per cent of adolescent and young adult females in the U.S. (Pope, Hudson & Yurgelun-Todd, 1984). Several studies on the prevalence and/or incidence of these disorders will be reviewed in detail in the section on epidemiology. When one considers that Frankenburg, Garfinkel and Garner, 1982, report a mortality rate of between 5 and 15 per cent for anorexia nervosa these prevalence figures are frighteningly high. Although mortality rates for bulimia were not reported, Steinhausen and Glanville, 1983, note that the presence of binge eating and vomiting is consistently associated with an unfavorable outcome. The most common cause of death for both disorders is suicide. Heart failure resulting from an electrolite imbalance is also quite common. In addition, anorexics frequently die from starvation itself.

Etiology

Numerous causes have been suggested for both disorders. Bruch (1973) identifies several individual and familial characteristics that might play a role in etiology. Several others have identified these characteristics in patients with anorexia nervosa (Kalliopuska, 1982; Misik, 1981). Familial characteristics are also thought to be linked to the onset of bulimia (Strober et al., 1982; Johnson & Flach, 1984; Garner, Garfinkel & O'Shaughnessy, 1983). Wardel and Beinart (1981) suggest that the onset of the binge-purge syndrome results from the increasing restraint as dieting becomes excessive, which increases the craving for "bad foods" (usually carbohydrates or fats). Faced with the discrepancy between the "ideal" body shape dictated by the culture or social class, women do not question the validity of the standard but instead strive to achieve it through dieting (Love & Johnson, 1985). Garner and Garfinkel (1980) conclude that the disorder is multidetermined emphasizing the role of socio-cultural pressures to be thin. In support of the latter these authors document an apparent increase in the incidence of anorexia that parallels Western cultures preference for increasingly thinner body shapes in women. Furthermore, they note that this has occurred in the context of increasing North American standard weight norms for women. Feminist theorists further support the socio-cultural etiological hypothesis (Currie, 1988).

Biological factors have also been implicated for bulimia. For instance, remission of symptoms in response to antidepressant medication has been reported suggesting the importance of neurochemical factors (Strober, 1981; Strober, Salkin, Burroughs & Marrell, 1982; Pope, Hudson, Jones & Yurgelund, 1983). Another study conducted by Herzog and Ott (1986) for the National Institute of Mental Health in 1982 identified an increase in the activity of endogenous opiods in anorexic patients again suggesting a possible biological cause. Interestingly, Garner, 1988, while supporting the socio-cultural etiological hypothesis, argued that all of the symptoms associated with severe bulimia and anorexia nervosa, including binge eating, food preoccupation, social withdrawl, food fetishes, and depression, are features of the biological effects of starvation.

Treatment

An examination of the literature revealed that a wide range of treatment strategies have proven effective with this client population. However, due to their heterogeneous clinical presentation and etiology there did not appear to emerge a modality of choice for either disorder (Garner & Isaacs, 1986; Garfinkel, Moldofsky & Garner, 1980; Anderson, Hedblom & Hubbard, 1983). Most professionals agree treatment must include a "multidisciplinary team" or "multifaceted" treatment approach (Anderson et al., 1983; Hedblom, Hubbard & Anderson, 1981; Herzog & Ott, 1986; Garfinkel, 1985; Garner & Isaacs, 1986). The

multidisciplinary team should at minimum include a nurse or medical doctor to monitor the health status of the individual and a psychiatrist, psychologist or social worker to deal with the underlying psychological disorder (Kinoy, 1985; Hedblom, et al., 1981; Herzog & Ott, 1986). Ideally a wide range of treatment modalities should be available including hospitalization, post hospital treatment, behaviour modification (in or out of hospital), outpatient therapy (individual, family or group) stress management training and medication for persistent depression, although no single individual would require all of these (Hedblom et al., 1981; Garfinkel, 1985; Garner & Isaacs, 1986; Rosen & Leitenberg, 1982).

Garner and Isaacs, 1986, recommend a two track approach to the treatment of eating disorders including 1. changing the overt behavioral pattern and 2. dealing with the underlying psychological issues. While most patients can be effectively treated on an outpatient basis (Garner & Davis, 1986) hospitalization is recommended for individuals who: are at a dangerously low weight; are suicidal; for whom the binge-purge cycle has become totally out of control; or for whom removal from the home environment is deemed necessary to facilitate recovery (Sanger & Cassino, 1984; Morgan, Purgold & Welbourne, 1983; Lenihan & Sanders, 1984; Garfinkel, 1985). Specialized units in hospital that utilize behavior management techniques are effective at restoring weight in the anorexic, however, Garfinkel, 1985, notes that post hospital treatment is necessary

to maintain weight gain. Nonetheless, weight gain in and of itself is important because it is a prerequisite to psychological gain in the low weight anorexic (Garfinkel, 1985; Anderson et al., 1983) (one effect of starvation is an insufficient supply of protein to the brain which results in an inability to think logically). In hospital treatment of less severe cases may be counterproductive since it may serve as a retreat from real life problems and/or a confirmation of the sick role (Morgan et al., 1983).

Individual psychotherapy, behavior therapy and family therapy have all proven effective in the treatment of eating disorders (Hudson & Pope, 1986; Garfinkel, 1985; Franko, 1987; Hedblom, et al., 1981; Pallazzoli, 1978). While there is little agreement as to the most effective mode of therapy (Steinhausen & Glanville, 1983; Pallazzoli, 1978) it is clear that individual and family characteristics affect the success obtained with each of these modalities. Group therapy is frequently recommended as an important adjunct to individual or family therapy (Garfinkel, 1985; Lieb & Thompson, 1984; Johnson, Connors & Stuckey, 1983; Kinoy, 1985; Franko, 1987; Hedblom et al., 1981; Hudson & Pope, 1986) because it helps reduce the isolation commonly experienced by these individuals. Some authors assert that group therapy is the most effective and efficient approach to the treatment of eating disorders and is superior to individual therapy for some aspects of the recovery process (Inbody & Ellis, 1985; Lenihan & Sanders, 1984) although Kinoy, 1985, cautions that it might teach

members new destructive behaviors or maintain their identification with the illness. Finally, Larocca and Goodner, 1986, note that nutritional counselling is an essential part of any eating disorder treatment program since, although these individuals are highly aware of the calorie content of various foods, they seldom have adequate knowledge of the nutritional requirements of a life sustaining diet.

Prevention

With the rapidly increasing incidence of these disorders the need for preventive interventions is apparent. Primary prevention might include investigating the predispositional risk factors of eating disorders (Chng, 1983) and implementing programs in the schools aimed at changing maladaptive attitudes and behaviors. For example, the pressures placed on young women to maintain sub-normal body weights in our culture have been well documented (Bruch, 1978; Garner, 1980). If eating disorders are at least in part caused by the current dieting epidemic, then their prevalence could be reduced by changing the currently sanctioned "ideal" body shape and size for women. Szmukler (1985) suggests that primary prevention of eating disorders is analogous to the primary prevention of alcoholism. In the latter research has shown a positive correlation between the level of alcohol consumption in a society and the incidence of alcoholism. Similarily, there is an association between the amount of dieting in a society and the incidence of anorexia nervosa and bulimia.

Unfortunately, as in the case of alcohol consumption, it is no easy task to reduce dieting behavior in our society, however, by educating adolescent and early adult females as to the dangers of dieting and the inappropriateness of the currently sanctioned "ideal" body shape for women, we could begin to slow the rapid increase of these disorders. Finally, primary prevention might take the form of legal sanctions against the media for using pre-pubescent females in advertisements for womens' products.

Secondary prevention, though certainly less effective, is somewhat easier to implement (Vandereycken & Meermann, 1984). Early detection and intervention is consistently associated with a good prognosis (Morgan, Purgold & Welbourne, 1983; Szmukler, 1985; Garner, 1982; Garner, 1983; Johnson, 1982; Weed-Mannak, Drop, Smits, Strybosch & Bremer, 1983; Anderson, et al., 1983). Unfortunately, however, few people are aware of the early warning signs of an eating disorder. Secondary prevention of eating disorders thus would require the education of parents, friends, teachers, school nurses, family physicians and other individuals who are likely to see a crisis developing (Chng, 1983). Vandereycken and Meerman (1984) note that early detection of eating disorders is hindered by both "patient delay" and "doctor delay". The anorexic who is proud of her weight loss will judiciously conceal any symptoms that might permit identification while the bulimic often lies about her behavior out of shame or guilt. Family physicians often fail to detect the disorders in their early stages due to the high level of functioning typical

of these patients. Nonetheless, a number of early warning signs have been identified in the literature including weight loss accompanied by increasing social isolation (Bruch, 1976), weight preoccupation, perfectionism, low self esteem, delayed menarche or amenorrhea, and the erosion of tooth enamel (Vandereycken & Meermann, 1984). These authors recommend administering a screening questionnaire such as the Eating Disorders Inventory (Garner, Olmsted & Polivy, 1983) to "at risk" populations. Finally, Sheinin (1983) lists a number of abnormalities in routine laboratory evaluations that signal a possible eating disorder.

Epidemiology

Studies which have examined the occurrence of anorexia nervosa and/or bulimia in North American populations have generally used one of two approaches: a retrospective examination of requests for service (Stangler & Printz, 1980) or sample surveys of "at risk" populations at a given point in time (Maceyko & Nagelberg, 1985; Piccinini & Mitic, 1987; Hart & Ollendick, 1985). This review will concentrate on North American studies that have utilized sample surveys, since the former approach ignores the large number of individuals who suffer from an eating disorder but have not sought treatment (Johnson & Berndt, 1983; Fairburn and Cooper, 1982).

The questions included in surveys designed to detect individuals with eating disorders have varied widely. While the

majority include variously defined diagnostic criteria for the disorders, as specified in the Diagnostic and Statistical Manual for Mental Disorders (DSM-III, 1980) (Maceyko & Nagelburg, 1985; Piccinini & Mitic, 1987; Katzman, et al., 1984; Crowther, et al., 1985) others have utilized questionnaires which assess the presence of characteristics observed in patients with eating disorders (Hart & Ollendick, 1985; VanThorne & Vogel, 1985). The latter are most useful as a pre-screening instrument and should probably be used in conjunction with a diagnostic interview to assess the degree to which the identified individual meets DSM-III criteria for the disorders.

Surveys which incoporate DSM-III criteria have produced widely varying estimates for two main reasons. First, while the majority of survey approaches report prevalence statistics (the number of individuals with the disorders at a given point in time) a few have worded questions in such a way that they are instead obtaining estimates of the incidence of the disorders (the number of individuals who have experienced the disorders at some point in their life). These procedures may produce different estimates although, as noted earlier, the magnitude of the difference is affected by specific characteristics of the disorders being investigated. Anorexia nervosa which is a relatively rare disorder and generally of long duration is likely only minimally affected by differences in these sampling techniques. Secondly, a number of studies have failed to include all of the DSM-III criteria for the disorders and/or have

included additional restrictive criteria in attempting to identify individuals who more closely resemble the patients seen in clinical settings (Pyle, Mitchell, Eckert, Halvorson, Neuman & Goff, 1983; Pyle & Mitchell, 1986). Garner & Davis (1986) have discussed the DSM-III (1980) criteria in detail and offered a number of criticisms. In addition they have recommended a revised set of criteria which now comprise the DSM-III R (1985). In order to facilitate interpretation of epidemiological studies which have utilized variously defined inclusion criteria, the present review will assume that the DSM-III R criteria represent the most accurate inclusion criteria.

Table 1 presents the DSM III, 1980 criteria for anorexia nervosa and bulimia. The revised criteria for the two disorders (DSM III R, 1985) are presented in Table 2. Major changes in the criteria specified for a diagnosis of bulimia include the elimination of criteria D, E and B 1,2,3 and 5 and the specification of a minimum frequency of two eating binges per week for a period of at least three months. Changes in the criteria for anorexia nervosa include the maintenance of a body weight 15 per cent, as opposed to 25 per cent, below expected for age and height and the additional criterion in females of primary or secondary amenorhea.

TABLE 1

DSM-III (1980)

CRITERIA FOR A DIAGNOSIS OF ANOREXIA NERVOSA

A. Intense fear of becoming obese, which does not diminish as weight loss progresses.

B. Disturbance of body image (e.g., claiming to feel fat even when emaciated).

C. Weight loss of at least 25% of original body weight or, if under 18 years of age, weight loss from original body weight plus projected weight gain expected from growth charts may be combined to make the 25%.

D. Refusal to maintain body weight over a minimal normal weight for age and height.

E. No known physical illness that would account for the weight loss.

CRITERIA FOR A DIAGNOSIS OF BULIMIA

A. Recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period of time, usually less than 2 hours).

B. At least three of the following:

1. consumption of high-caloric, easily ingested food during a binge
2. inconspicuous eating during a binge
3. termination of such eating episodes by abdominal pain, sleep, social interruption, or self-induced vomiting
4. repeated attempts to lose weight by severely restrictive diets, self-induced vomiting, or use of cathartics or diuretics
5. frequent weight fluctuations greater than 10 pounds due to alternating binges and fasts

C. Awareness that the eating pattern is abnormal and fear of not being able to stop voluntarily.

D. Depressed mood and self-depreciating thoughts following eating binges.

E. The bulimic episodes are not due to anorexia nervosa or any known physical disorder.

TABLE 2

DSM-III R (1985)

CRITERIA FOR A DIAGNOSIS OF ANOREXIA NERVOSA

A. Intense fear of becoming obese, even when underweight.

B. Disturbance in the way in which one's body weight, size, or shape is experienced, for example, claiming to "feel fat" even when emaciated; belief that one area of the body is "too fat" even when obviously underweight.

C. Refusal to maintain body weight over a minimal normal weight for age and height, for example, weight loss leading to maintenance of body weight 15% below expected; failure to make expected weight gain during period of growth, leading to body weight 15% below expected.

D. In females, absence of at least three consecutive menstrual cycles when otherwise expected to occur (primary or secondary amenorrhea).

CRITERIA FOR A DIAGNOSIS OF BULIMIC DISORDER

A. Recurrent episodes of binge-eating (rapid consumption of a large amount of food in a discrete period of time, usually less than 2 hours).

B. During the eating binges there is a feeling of lack of control over the eating behavior.

C. The individual regularly engages in either self-induced vomiting, use of laxatives, or rigorous dieting or fasting in order to counteract the effects of the binge eating.

D. A minimum average of two binge-eating episodes per week for at least three months.

The literature abounds with studies examining the occurrence of bulimia in North American females, especially highschool and college females. Two studies which examine the incidence of bulimia report statistics for both populations in addition to suburban women shoppers. In the first study Pope, Hudson, Yurgelun-Todd and Hudson, 1984, report an incidence of 12.6 to 18.6 per cent for a sample of 389 college females and 6.5 per cent for a sample of 155 highschool females using DSM-III (1980) criteria. Although they excluded criterion E, this criterion was also excluded in DSM-III R (1985) suggesting that it was found not to be important in diagnosing the disorder. They did not, however, require that binge eating episodes be recurrent as specified in DSM-III R. The second study reported an incidence rate for bulimia of 10.3 per cent in 300 Boston women who were approached while shopping at a suburban shopping mall, again using DSM-III (1980) criteria (Pope, Hudson & Yurgelun-Todd, 1984). In this study the authors reported a separate statistic for bulimia using DSM-III (1980) criteria plus the additional criteria of at least weekly binge eating and reported self induced vomiting or laxative abuse. Unfortunately, this information is not useful because they did not report the per cent of individuals who engaged in weekly binge eating but purged by means of fasting and/or excessive exercise. While the sample included all females judged to be over 12 years of age, they report a significantly higher incidence for women 13 to 20 years of age compared to those 31 years of age and over.

The above studies also examined the incidence of anorexia nervosa. Pope, Hudson, Yurgelun-Todd and Hudson (1984) report an incidence of between 1 and 4.2 per cent for college females and 3.8 per cent for highschool females. Pope, Hudson and Yurgelun-Todd (1984) report a significantly lower rate of .7 per cent in their study of suburban women shoppers. In this case the two respondents who met DSM III criteria for a lifetime diagnosis of anorexia nervosa were both between 13 and 20 years of age. The first study excluded criteria D and E from DSM-III (1980). Criterion E was excluded in DSM-III R (1985) however, criterion D is subsumed under criterion C of the revised criteria. As a result, the criteria utilized in these studies required the loss of the specified percentage of body weight but did not require a refusal to gain weight and the maintenance of this sub-normal weight. On the other hand, the required weight loss specified in the revised criterion is only 15 per cent compared to 25 per cent in the original criterion. Finally, neither study included the additional criterion of primary or secondary amenorrhea as specified in DSM-III R (1985). All of this considerably clouds the interpretation of the specified incidence rates. The stricter criterion of a loss of 25 per cent as opposed to 15 per cent of expected body weight likely resulted in an underestimation of incidence. On the other hand, the failure to require intentional maintenance of a subnormal weight and the presence of primary or secondary amenorrhea may have biased the results in the opposite direction.

The remaining studies to be discussed report prevalence rates. Four studies which examine the prevalence of bulimia in college and university women report rates ranging from 4 to 19 per cent. Zuckerman, Colby, Ware and Lazerson, 1986, reported a prevalence of 4 per cent in 631 New England college freshmen and seniors, using DSM-III (1980) criteria plus an additional criterion of at least weekly binge eating. They also operationally defined a binge to include a minimum of 1000 calories. Although the addition of these criteria probably increases the validity of the obtained prevalence rate, the inclusion of all of the criteria from DSM-III (1980) may have resulted in an underestimation of actual prevalence. A second study which reported a similar prevalence statistic of 4.5 per cent for female freshmen students at a state university in midwestern United States, also used DSM III (1980) criteria plus the additional criterion of at least weekly binge eating (Pyle et al., 1983). In this study criteria C and E were excluded. Unfortunately this makes interpretation of the results difficult since DSM-III R (1985) excludes criterion E but also excludes criteria D and B 1,2,3 and 5 and does not exclude criterion C. The third study examined, a study of 412 female students living in residence at a Canadian university in Halifax Nova Scotia, reported a prevalence rate for bulimia of 7.5 per cent (Piccinini & Mitic, 1987). The criteria used included all of DSM-III (1980) with the additional criterion of at least weekly binging and purging. Since purging was not limited to vomiting or laxative

abuse the obtained statistic is probably quite accurate, although again the inclusion of all of DSM-III (1980) may have resulted in an underestimation of the actual prevalence. The fourth study which examined the prevalence of bulimia in 539 summer session registrants at a suburban liberal arts campus of the State University of New York reported a much higher prevalence for females of 19 per cent (Halmi, Falk & Schwartz, 1981). Although this study is widely cited in the literature, there are two major problems with the methodology which need to be taken into account when considering the accuracy of the reported prevalence rate. To begin with, Katzman et al., 1984, point out that the sample may not have been representative of college females. Secondly, the questionnaire did not include criteria B or C from DSM-III (1980). Both of these criteria are partially included in DSM-III R (1985). Finally, the requirement that binge eating episodes be recurrent was not included. Based on the foregoing discussion it would be safe to conclude that bulimia affects at least 7.5 per cent of Canadian female university students keeping in mind that this is likely an underestimation of the actual prevalence.

A second population that has received considerable attention in epidemiological research on bulimia is highschool females. The four studies to be examined in this review report prevalence rates ranging from 2.4 to 7.1 per cent. Katzman et al., 1984, reported a prevalence of 3.9 per cent for bulimia in 485 female freshmen at Arizona State University in the U.S., using DSM III (1980) criteria plus a minimum requirement of eight binge eating

episodes per month. They also operationally defined a binge episode to include a minimum of 1,200 calories. As noted previously, the inclusion of all the criteria from DSM-III (1980) may have resulted in an underestimation of the actual prevalence. A second study by Crowther et al., 1985, reported a slightly higher prevalence of 5.2 per cent in 363 female highschool students from four highschools located in northeastern Ohio, again using DSM III (1980) criteria plus at least weekly binging. They also operationalized other criteria. Maceyko and Nagelberg, 1985, reported a prevalence of 7.1 per cent in 168 female high school students from two public highschools in southeastern Georgia, using DSM III criteria plus at least weekly binge eating. A recent study conducted in the Waterloo Region, the community under investigation in the present study, examined the prevalence of bulimia in 341 female highschool students (Loomer, 1988). This study utilized the Bulimia Test (BULIT, Smith & Thelen, 1984) a 32 item scale based on DSM III, 1980, criteria which has been shown to be a valid and reliable predictor of bulimia. Although only 2.4 per cent met Smith and Thelen (1984) criteria for a clinical diagnosis of bulimia, endorsement of bulimic behaviors was quite common. For example, 9 per cent admitted to vomiting at least monthly, 36.5 per cent to binge eating at least 2-3 times a month, 22 per cent to being fearful that they would not be able to stop if they started eating and 44.5 per cent to having gone on 2-3 crash diets in the past year. It would thus appear that bulimia affects between 2.4 and 7.1 per

cent of highschool females in North America and possibly more, assuming that the inclusion of all the criteria from DSM-III (1980) resulted in the exclusion of individuals who in fact had the disorders.

Despite an extensive examination of the epidemiological literature we were not able to find a single North American study that examined the prevalence of anorexia nervosa using DSM-III criteria. This is probably a reflection of the fact that anorexia nervosa is a relatively rare disorder and therefore considerably more difficult to detect. Nonetheless, a study by Pope, Hudson, Yurgelun-Todd and Hudson (1984) reported at the beginning of this section did examine the incidence of anorexia nervosa in American college and highschool females. We noted there that the difference between estimates of incidence and prevalence are probably not significant when the disorder under investigation is rare and of long duration, as in the case of anorexia nervosa. Furthermore, the fact that the criterion used required a weight loss of 25 as opposed to 15 per cent of original body weight was probably balanced by the fact that they did not require primary or secondary amenorrhea (since a weight loss of this magnitude is almost always accompanied by amenorrhea). Although, as previously noted, their criteria did not specify "refusal" to gain weight and "maintenance" of the sub-normal weight, individuals who met criteria A, B, and C, which require: an intense fear of becoming obese, feeling fat when emaciated, and a loss of 25 per cent of original body weight

most likely exhibited this behavior. Based on this assumption it is probably safe to conclude that between 1 and 4.2 per cent of college females and 3.8 per cent of highschool females in the U.S. are afflicted with the disorder. Although Canadian statistics are not available for anorexia nervosa, there is no reason to expect that the prevalence of anorexia in Canada would differ from the U.S. statistics.

Program Planning

Posavac and Carey (1985) identify several crucial steps in the planning of mental health programs. To begin with, planners must clearly define the population to be served by the program including the specification of the size, location and distribution of this population (Fisher, 1982). Only after having clearly defined the population to be served is it possible to determine the types of services the program will need to offer based on an assessment of their unique service needs.

Fisher (1982) has called needs assessment a crucial first step in the planning of programs. From another perspective it is vital to obtain an expressed commitment to planning new services and/or restructuring existing services if gaps in services are identified, prior to undertaking an assessment of service needs (Siegel, et al., 1978; Bell, Nguyen, Warheit & Buhl, 1978). Failing to obtain this commitment could result in wasted resources if the findings of the assessment are not utilized and, when potential clients are involved in the assessment, the

heightening of expectations for improvements in service delivery without subsequent changes (Siegel et al., 1978). Once the target population has been identified and a commitment to utilize the results obtained, information on the service needs of specific populations can be obtained from several sources including census data, extant community services who treat similar populations, community members who are familiar with the needs of the population of interest and the client population itself (Posavac & Carey, 1985).

Obtaining information from the client population is especially important since the program will not be utilized if the target population does not feel they have the needs that the program is addressing. Surveys of the client population can also provide useful information on the need for a particular service, the acceptability of that service, and the likelihood that the service will be utilized.

Census data can be used to estimate the prevalence of specific disorders. Posavac and Carey (1985) note that it is important to distinguish between incidence and prevalence since they sometimes produce very different estimates. The common cold, for example, is a widespread but temporary illness, thus a measurement of incidence (the number of times individuals come down with a cold in a given time period) would be much higher than a measurement of prevalence (the number of individuals who have a cold at a given point in time) (Posavac & Carey, 1985).

Anorexia nervosa, on the other hand, is a relatively rare disorder of long duration. We noted in the previous section that in this case the two estimates would likely not differ significantly.

Surveys of extant community services not only prevent the duplication of services but also provide important information on the number of individuals that are currently utilizing the programs, the number of individuals being referred to other agencies and, most importantly, the number of individuals they would have liked to refer but couldn't because the appropriate service did not exist (Posavac & Carey, 1985).

Once the target populations' needs have been documented and described in detail using the most objective needs assessment strategies available the identified needs must be translated into measurable goals and objectives that become the basis of program planning efforts. Finally, decisions as to the number and qualifications of staff and location and type of facility must be made.

Needs/Resource Assessment

Defining "Needs"

Needs assessment has been defined as the "systematic verification of the existence, prevalence, location and importance of a social problem as it is expressed in needs for service" (Rossi, Freeman & Wright, 1979). While this definition

is useful in understanding the parameters of the concept of needs assessment, an operational definition of "need" is imperative if one is to grasp the true complexity of the task of identifying service needs. Bradshaw (1977) identifies four types of social "need" which are of interest to needs assessors:

1. Normative Need - needs as defined by the professional
2. Felt Need - needs as defined by the client population
3. Expressed Need - demand for service
4. Comparative Need - an inferred measure of need which is arrived at by noting characteristics of individuals who seek treatment and determining the number of individuals in the population who are likely to have these characteristics.

Siegel et al., 1978, define "need" as the gap between what is viewed as necessary and what actually exists. This gap can refer to any of the following:

1. an actual absence of the types of services deemed necessary
2. insufficient availability of services in relation to estimated service needs
3. a gap between estimates of service need and service utilization rates

Using Bradshaw's (1977) definitions of social need, an absence of the types of services deemed necessary can be determined by combining normative and felt needs and comparing this to a listing of available services. The availability of services relative to the characteristics and need states of the community can be obtained by comparing the list of available services to the estimated comparative need. Finally, the gap between service

needs and service utilization can be estimated by examining expressed need in relation to comparative need.

Involving Community Residents

The major goal of any needs/resource assessment is to make a reasonable match between needs and services without redundancy. While there is no agreed upon formula for a comprehensive assessment of need, there is a clear consensus in the literature that, in order to obtain a valid picture of need and service availability, it is necessary to use multiple assessment techniques (Stefl, 1984; Fisher, 1982; Milord, 1976; Warheit, Bell & Schwab, 1977; Siegel et al., 1978). Each assessment technique has both unique advantages and inherent weaknesses (Milord, 1976; Siegel et al., 1978; Warheit et al., 1977) and each will produce a different estimate of community need (Warheit et al., 1977). Siegel et al., 1978, have called the use of multiple assessment techniques "convergent analysis" noting that it is equally important that the selected techniques secure data from multiple sources including: community residents, service utilizers and service providers. Numerous authors report a discrepancy between service needs given priority by client populations and the needs attributed to that population by the professionals who provide service to them (Posavac & Carey, 1985; Miller, 1981; Hodgson, 1984; Crocker & George, 1985). This may in part be due to the fact that professionals have their own interests which are not necessarily in agreement with the

interests of their clients (Dubey, 1970; Rappaport, 1977). Alternatively, it may simply reflect the traditional medical model of problem definition and solution in which the professional is expected to possess all the answers and the idea of consulting the client population is never contemplated.

Apart from identifying a unique perspective on service needs, community residents, including individuals who have recovered or are in the process of recovering from the disorders, can also increase the efficiency and effectiveness of programs. Involving these individuals in both the assessment of service needs and the planning of programs will increase their support for program development efforts and, in so doing, increase the likelihood that they will be willing to volunteer their time to undertake the provision of services that would otherwise require the expenditure of professional time and resources (Hodgson, 1984) and the likelihood that the resultant programs or restructuring efforts will be utilized (Rothman, 1978; Crocker & George, 1985).

Despite these obvious advantages, Hodgson (1984) notes that attempts to involve community residents are rare and often unsuccessful. One possible explanation for the lack of success is that non-professionals might lack confidence in their ability to make a worthwhile contribution. This insecurity may in turn be reinforced by the professionals use of jargon that is not understandable to the community resident when collaboration is

attempted (O'Donnel & Chilman, 1969). The professional may also feel intimidated by the fact that he/she is dependent on the input of lay citizens for the effectiveness of his or her service. Thus, in addition to using multiple assessment techniques and gathering data from multiple sources, the specific techniques chosen should be sensitive to this issue and perhaps avoid bringing professionals and community residents together.

Parameters of an Effective Needs/Resource Assessment

Based on the foregoing discussion of the various components of "need" and the importance of obtaining data from multiple sources, the necessity of utilizing multiple assessment techniques should be apparent. The specific techniques chosen will depend on a number of factors including: what data are most relevant, how easily the data can be obtained, and how accurate the obtained data will be (Siegel et al., 1978). Field surveys, for example, are used when the needs assessor wishes to determine the prevalence of a disorder (Siegel et al., 1978) while the incidence of a disorder is more easily estimated by examining service utilization data (Bell et al., 1978). Although prevalence rates are more useful for program planning (Bloom, 1975) incidence rates are more frequently cited because the procedures for obtaining them are simpler and generally accepted as more valid and reliable (cf. Lapouse, 1967). Apart from differences in the type of information provided by the various assessment techniques, Marti-Costa and Serrano-Garcia (1983) note

that the goals of the needs assessment must also be taken into account in selecting specific techniques. For example, techniques that involve community residents and facilitate grouping and mobilization foster social change and respond to the community psychologists commitment to the powerless.

A wide range of needs assessment techniques are available for estimating service needs, each designed to obtain estimates of the different aspects of need. Siegel et al., 1978, identify eight needs assessment techniques:

1. Social and Health Indicators Analysis
2. Analysis of Demand for Service
3. Analysis of Existing Service Resources
4. Citizen Surveys
5. Community Forums
6. Nominal Group Technique
7. Delphi Technique
8. Community Impressions

Each of these techniques serve one or more data gathering functions including: the compilation of data that is already available; development of new information and/or integration of all relevant information. Each of the above techniques will be briefly defined and their advantages and weaknesses outlined.

1. Social and Health Indicators Analysis

Social and health indicators analysis involves making inferences about the needs of a particular community based on descriptive statistics found in public records and/or reports. The literature is reviewed to determine specific characteristics of individuals who seek help for the problem(s) of interest and the descriptive statistics are then used to locate these characteristics in the community. An advantage of this technique is that it is quick and inexpensive because the data is already available. Census data, for example, are reliable, valid, easily available and usually free of charge. The major weakness of this technique is that it is only an indirect measure and is therefore of questionable validity. Royce and Drude (1982) caution that demographic data from one population may not easily generalize to other populations. Siegel et al., 1978, conclude that the social indicators approach to needs assessment is useful as an initial descriptive technique but should be used in combination with other more direct techniques.

2. Analysis of Demand for Service

An analysis of the demand for service again makes use of existing data to estimate the needs of a community. Most agencies have records of service utilization, requests for service, frequency of referrals and average time on waiting lists which can be examined to determine the needs of a particular

community. This information may be obtained through structured interviews, telephone surveys or mailed questionnaires. Advantages of this technique include its low cost and the fact that it often facilitates the integration of services by increasing communication between agencies. The latter is accomplished through feedback procedures that either bring representatives from the various agencies together physically or encourage networking by providing information on the types of services each agency offers. A weakness is that the data may not be comparable across agencies due to different definitions of "caseness" (Bell et al., 1978). For example, clients who utilize a service sporadically may or may not be considered a "new case" each time they re-enter the setting. As well, the labels applied to clients with similar symptomology may differ considerably from setting to setting. Siegel et al., 1978, also point out that one cannot conclude that a particular service is addressing a high priority need because it is well utilized. A number of factors may contribute to a high utilization rate including extensive publicity, low cost, exclusivity of service, limited professional awareness of similar services or professional preferences for particular service modalities. Effective treatment of eating disorders, for example, requires an understanding of the nature of the disorders and knowledge of effective treatment interventions. Thus, once a professional or community agency gains a reputation for treating these disorders it is likely to receive numerous referrals regardless of whether it is in fact

effective at treating individuals with these disorders. Furthermore, high utilization rates might signal the need for prevention programs, although a low utilization rate does not negate the need for preventive programs since there are many in need who do not utilize services (Siegel et al., 1978).

This last point brings us to the major weakness of the service utilization technique. Service needs are almost always underestimated because the transition of needs into demand for service depends on a number of factors including the availability, accessibility, affordability and acceptability of services (Bell et al., 1978; Siegel et al., 1978; Stefl & Prosperi, 1985). Service availability refers to the actual existence of specific services in the community of interest. An assessment of service accessibility requires the examination of a number of potential barriers to service utilization including cultural and linguistic barriers, limited hours of operation, eligibility criteria, ease of getting to the service and awareness of the existence of the service. The latter includes an awareness both on the part of the professional and community agencies as well as community residents and potential utilizers. Service affordability requires an examination of the cost of services for individuals at various income levels. In a recent U.S. study by Stefl and Prosperi (1985) affordability and stigma emerged as the primary barriers to service utilization. Although it could be argued that affordability is not a barrier to utilization of medical services in Canada where these services

are fully subsidized by government funding, stigma probably remains a major barrier to the utilization of specialized mental health services in Canada. In a second U.S. study Mechanic (1980) reports that the family physician is the primary source of mental health care. In light of the fact that payment for both medical and mental health service in the U.S. are the responsibility of the client this lends strong support to the assertion that stigma is a major barrier to the utilization of specialized mental health services.

3. Analysis of Existing Service Resources

An analysis of existing service resources involves the enumeration of extant agencies and individual providers in a community, the services they provide and specific information on the accessibility, affordability and acceptability of these services. Other information of interest includes community/professional awareness of extant services, demand for service, service needs attributed to specific client groups, frequency of referrals from other agencies and ease or difficulty of making referrals to other agencies (Siegel et al., 1978). A thorough analysis should provide a clear picture of the service resources in the community; the degree to which they are accessible, affordable and acceptable; type and frequency of requests for service; pattern and interrelationship among service providers; gaps in service and/or duplication of services. An analysis of existing service resources can involve both the

compilation of existing data from public and agency records and the development of new information through a mailed survey. Although the latter is much more economical in terms of time investment, it has the disadvantage of possible misinterpretation of questions. In addition, mail surveys are commonly associated with a high refusal rate (Bell et al., 1978) although the refusal rate can be reduced considerably with follow-up phone calls or mailouts (Milord, 1976; Siegel et al., 1978). An analysis of existing service resources is an important component of any needs assessment study. As Demone and Harshbarger (1984, p.16) note, a comprehensive and effective network can only emerge from existing organizational relationships.

4. Citizen Surveys

Citizen surveys involve the development of new information through a random sample of community residents. Information provided includes an analysis of the service needs of the community, a measurement of community awareness of extant services, attitudes toward utilization of specific services, type of help received, satisfaction with utilized services and types of services that would most likely be utilized (Siegel et al., 1978). There are three possible techniques: 1. mailed surveys; 2. telephone surveys; and 3. face to face interviews. The mailed survey, which was briefly discussed in the previous paragraph, again has the advantage of being simple and economical but the disadvantage of possible misinterpretation of questions and/or a

low response rate. An advantage of the mail questionnaire which becomes relevant for the citizen survey technique is that it offers the greatest potential for anonymity. Telephone surveys allow a degree of anonymity but require considerably more time, thereby reducing the number of potential contacts. The refusal rate with telephone surveys may be lower because the respondent assumes that it will be brief and feels an element of control knowing that they can hang up at any point (Bell et al., 1978). Face to face interviews are the most productive of the three techniques, however, they do not permit anonymity and sample size is greatly limited due to the time and resources necessary to conduct appropriate interviews. Even if adequate time and resources are available and anonymity is not an issue, the interviews should follow a structured format. This reduces the chance of interviewer contamination, greatly simplifies analysis and permits the inclusion of more questions since structured questions take less time to answer.

Carefully designed and conducted citizen surveys can provide valid and reliable data on the level of psychological, physical and social functioning in a community; attitudes toward utilizing specific services and community awareness of services (Bell et al., 1978; Rossi et al., 1979). In addition, citizen surveys often identify individuals who are in need of services but are not utilizing these services (the service gap) who can then be put in contact with an appropriate service provider. One weakness of the survey technique is that it is difficult to

ascertain the validity and reliability of survey responses, especially when the information sought is of a personal nature (Bell et al., 1978). This is particularly relevant in the present investigation since individuals with eating disorders are usually quite secretive about their behavior. Citizen surveys can also be used to estimate the prevalence of specific disorders, although extremely large samples are necessary to produce valid statistics, especially if the disorders are relatively rare, as in the case of anorexia nervosa. One solution here would be to survey intact groups or known high risk populations (Siegel et al., 1978).

5. Community Forums

The community forum is the first of the four "group" approaches discussed by Siegel et al., 1978. It is an open meeting to which all members of the community are invited and asked to present their views on the service needs of their community. It is quick and, if care is taken to ensure that all present have an opportunity to speak and the meeting has been well publicized, it can provide valuable information on the service needs of diverse elements of the community including those in the service gap (Siegel et al., 1978). Follow-up procedures including feedback to all participants and scheduled meetings for individuals interested in volunteering their time to improve services are also important. Weaknesses of this technique include the difficulty of giving all present the

opportunity to speak, the possibility that important needy groups will not be represented and the possibility that expectations for improvement in services will be raised without subsequent changes (Siegel et al., 1978).

6. Nominal Group Technique

The nominal group technique is a group approach to problem identification and program planning which initially involves a ten to fifteen minute silent period during which group members generate answers to questions posed by the group leader (i.e. what are the service needs of your community?). Next the group leader asks each participant to offer one idea from his or her list in a round robin fashion and records them exactly as stated on a large flip chart in front of the group. A discussion period follows during which ideas are clarified and re-organized. Next, each participant selects the five ideas they feel are most important ranking them one to five. Finally the results are tallied for the group. Advantages of this technique are that it avoids the competition typical of interacting groups, encourages creativity and allows the expression of diverse points of view. Disadvantages include a lack of precision and the fact that certain participants may be uncomfortable with a highly structured technique (Siegel et al., 1978).

7. Delphi Technique

The third group technique, the delphi technique, involves sequential questionnaires which are sent out to participants along with feedback from all participants from the previous questionnaire. This technique has the advantage of affording complete anonymity while decreasing group pressure to conform or domination by more vocal participants. A weakness of this approach is the usual loss of divergent and creative ideas in attempting to obtain agreement.

8. Community Impressions

The final assessment technique discussed by Siegel et al., 1978, is the community impressions approach. This approach combines existing data about human service needs with community impressions of those needs. It involves three major stages. The first stage involves a series of key informant interviews. A key informant is an individual who has lived or worked in the community for several years and has knowledge of the service needs of that community. Ten to fifteen key informants are selected and taken through a structured interview. If the needs assessor is not familiar with the community the names of appropriate key informants can be obtained by using a technique known as "snowballing" (Fisher, 1982, p.102) in which five to six key informants are identified and interviewed and then asked to identify other potential key informants in the community. Once

ten to fifteen informants have been interviewed their answers are summarized to produce an overall picture of the community. Siegel et al., 1978, recommend that discrepancies in the obtained data be resolved by erring in favor of identifying groups as having unmet needs since this can be verified at a later time by asking the identified groups about their service needs. Advantages of this technique include the fact that it is inexpensive, simple to implement, promotes professional networking and develops the support of community influentials for future program development (Fisher,.1982; Rossi et al., 1979; Crocker & George, 1985). A major weakness of the key informant approach is the possibility that selected individuals will not be representative of the community or familiar with its unique service needs outside of their own clientele (Royce & Drude, 1982). Rossi et al., (1979) suggest two techniques for reducing this bias: 1. the selection of questions that are specific and concrete and 2. the selection of key informants who are maximally familiar with the topic area.

The second component of the community impressions approach involves the integration of information from a wide range of needs assessment methods (social indicators, survey and/or group data) with the impressionistic data obtained from key informants. Finally, a community forum is held and groups identified as having unmet needs are allowed to validate or invalidate the data and/or assist in prioritizing identified needs. The community impressions approach is an economical and comprehensive approach

which facilitates professional networking, however, as with most needs assessment techniques, the results are of questionable reliability and validity (Siegel et al., 1978).

It should be apparent from the foregoing discussion that the findings of any needs assessment study must be considered tentative although the validity of the obtained data is increased when multiple assessment techniques are employed. It is important that a wide range of audiences will easily understand the results of the survey thus simple statistical procedures and clear charts and figures should be used in presenting the data (Bell et al., 1978). Needs assessment studies can serve many functions. They can identify current and/or potential resources that can be reallocated to meet identified needs, suggest new interventions or advocate for underserviced groups (Siegel et al., 1978). Unfortunately, even the most carefully planned and executed study might not produce the necessary improvements in services if capable staff and adequate funding is not available underscoring the importance of securing a commitment to program planning or the restructuring of services prior to undertaking a needs assessment study.

Selection of Client Appropriate Assessment Strategies

In selecting the specific needs assessment techniques to be utilized characteristics of the client population of interest must be taken into account. Individuals with anorexia nervosa and bulimia are very secretive about their behavior, which makes

obtaining accurate statistics on the incidence or prevalence of these disorders particularly difficult. The social indicators approach is useful in providing an initial estimate, since prevalence statistics for college, university and highschool females are widely cited in the literature and the number of females enrolled in these various institutions in the Waterloo region is also readily available information.

An analysis of the demand for service from this client population is somewhat more problematic. To begin with, individuals with these disorders frequently do not seek treatment until the disorder has become severe, either because they do not define themselves as sick, are embarrassed about their behavior or are unaware of available treatment. Even those individuals who seek treatment often do not initially identify themselves as having an eating disorder, something that may not come out until much later in therapy. Thus, information on the demand for service is of questionable use in estimating the incidence or prevalence of these disorders. Group approaches like the Community Forum or Nominal Group technique are also inappropriate with this population since few eating disordered individuals would be willing to "go public" and, as noted above, techniques that do not require direct contact between professionals and community residents are preferable. The Delphi technique, while affording the necessary element of anonymity, assumes relevant participants have already been identified. The citizen survey is therefore the only needs assessment technique available for

obtaining an accurate estimate of prevalence and securing input from potential clients. However, given that these disorders are relatively rare, a survey of sufficient magnitude would require considerable expenditure of resources. Earlier we suggested that this limitation could be overcome by surveying "high risk" populations.

METHOD

Procedure

Four need/resource assessment strategies will be employed in the present investigation including: the social indicators approach; key informant interviews; a mail survey of community professionals; and a telephone survey of individuals in the community who are afflicted with the disorders. Each of these procedures will be described in detail here.

Social Indicators Approach

The first phase of the project involved the use of the social indicators approach to estimate the prevalence of the eating disorders anorexia nervosa and bulimia in the Waterloo region. The literature on eating disorders was reviewed to obtain epidemiological statistics for both disorders in populations that were maximally comparable to the population under study in the present investigation. Next, the Public and Separate School Boards were contacted to obtain information on the number of female highschool students currently enrolled in the Waterloo region and the local college and two local universities were contacted to obtain information on the number of female students enrolled in the current academic year. Thirdly, 1986 Census data was examined to obtain an estimate of the number of females in the Waterloo region as well as the number of females between 12 and 30 years of age in the region.

Finally, this information was combined to obtain an estimate of the prevalence of anorexia nervosa and bulimia in highschool females, college and university women, adolescent and young adult females and females of all ages in the Waterloo region.

Key Informant Interviews

The second phase of the project involved thirteen, forty five minute recorded interviews with eighteen professionals from the Waterloo region who were identified with the assistance of the director and several staff members at the university health center. Key informants were selected on the basis of having lived and worked in the community for a number of years and/or having experience in treating eating disorders. Interviewees included one public health nurse, one public health nutritionist, four social workers, two psychologists, two medical doctors, one guidance consultant four highschool guidance counsellors, two university counsellors and one registered nurse. All were provided a typed copy of the questions by mail prior to conducting the interview (see Appendix A). The purpose of conducting key informant interviews was threefold: first, to ascertain the utility of conducting a full scale needs assessment; second to pilot test the questions to be included in the professional mail survey; and third to provide data to supplement the data obtained from the professional mail survey. All key informants were asked if they would be willing to also complete the mail questionnaire once the final draft was prepared

to simplify the data analysis. Thus, specific conclusions regarding service availability, accessibility, affordability and acceptability; the service needs of clients with eating disorders; the demand for service from this client population and the degree to which community services network in treating these disorders were not drawn based on this data. Instead, the data obtained from these interviews provided possible explanations and clarifications to assist in the interpretation of the data obtained in the professional mail survey and client telephone survey. Specifically, the following questions were asked to obtain rich data on these themes:

Service Availability

Question #3: What, if any, treatment or service do you offer clients with eating disorders?

Service Accessibility

Question #2: Do you accept referrals for clients with eating disorders?

Question #11: Are there eligibility criteria for your service?

Service Affordability

Question #10: Is there a fee for your service?

Service Acceptability

Question #4: Do you feel this treatment or service is effective?

Question #13: How frequently do you read about eating disorders or attend conferences or seminars on eating disorders?

Service Needs

Question #5: In your opinion, what other forms of treatment or service are important for clients with eating disorders?

Question #7: Are these services adequate to meet the demand for service from this client population?

Service Utilization

Question #8: Approximately how frequently do you receive requests for service from clients with eating disorders?

Networking of Services

Question #6: To your knowledge are these adjunct treatments or services available in the Waterloo region?

Question #9: If you are unable to meet a clients treatment needs directly do you feel you have adequate resources to refer the client?

Professional Mail Survey

The third phase, a mailed survey to professionals in the Waterloo region including: Medical Doctors, Psychiatrists, Psychologists, Counsellors, Social Workers, Public Health Nurses, Guidance Counsellors and Mental Health Agencies was employed to assess the availability of accessible, affordable and acceptable services for clients with eating disorders; the degree of networking among professionals who treat these disorders; the experienced demand for service from this client population and the service needs of clients with eating disorders as defined by community professionals. Three hundred and sixty one health care professionals were identified through the key informant interview process and/or an examination of the local telephone directory

and were mailed a four page questionnaire (see Appendix B). To increase the response rate a follow-up telephone call to non-respondents approximately two weeks after the initial mail-out was used. In addition, in exchange for participation potential participants were offered a list of resources available in the Waterloo region for the treatment of eating disorders, which was developed from the survey itself. The criteria utilized in assessing the themes identified above and the corresponding survey questions were as follows:

Service Availability

Criteria: the service exists in the community and is accessible, affordable and acceptable.

#1: Type of treatment or service you or your agency provides clients with anorexia nervosa or bulimia (check any that apply):

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self help)
__ family therapy
__ family support group
__ educational/preventive
__ other_____

Note: This question was included to assess the extent to which various services exist in the Waterloo region, however, as specified in the above criteria, this information was combined with information regarding the accessibility, affordability and acceptability of these services in order to estimate "actual" availability. The criteria utilized to assess service accessibility, affordability and acceptability are outlined below.

Service Accessibility

Criteria: service is located on a major bus route and clients with eating disorders readily meet the eligibility criteria for service and clients with eating disorders would not be placed on a waiting list for a period longer than one month.

#2: Is your service located on a major bus route? __ Yes
__ No

#3: Are their eligibility criteria for your service? __ Yes
__ No

If yes, please specify_____

_____

#4: Do you have a waiting list? __ Yes
__ No

If yes, approximately how long?_____

Service Affordability

Criteria: service is covered by O.H.I.P. (Ontario Health Insurance Plan) or service is free of charge and if a client was unable to pay he/she would not be denied service.

#6: Fee Category:
__ geared to income
__ subsidized by extended health care insurance
__ O.H.I.P.
__ other_____

#7: Please indicate on the scale the usual fee per one hour session:

+---+---+---+---+---+---+---+---+---+---+
$0 10 20 30 40 50 60 70 80 90 100

#8: If a client is unable to pay would they be denied service?
__ Yes
__ No

Service Acceptability

Criteria: service provider reads materials on eating disorders at least monthly and service provider attends conferences or seminars on eating disorders at least yearly and service provider feels he/she has the training and background necessary to provide services to clients with eating disorders and service provider recognizes the need for a multifaceted approach to the treatment of eating disorders (including: 1. medical monitoring or hospitalization; 2. personal counselling or family therapy or facilitative (self help); 3. nutritional counselling; 4. family support groups and 5. educational/preventive).

#9: I read materials on the symptomology and treatment of eating disorders:

__ weekly
__ monthly
__ yearly
__ seldom
__ never

#10: I attend conferences, symposiums, seminars or courses on eating disorders:

__ weekly
__ monthly
__ yearly
__ seldom
__ never

#11: I have the training and background necessary to provide services to clients with eating disorders:

__ strongly agree
__ agree
__ neither agree or disagree
__ disagree
__ strongly disagree

#12: In my opinion the following treatments or services are essential to adequately meet the needs of clients with eating disorders:

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self help)
__ family therapy
__ family support groups
__ educational/preventive
__ other_____

Note: The last of the four criterion specified above was based on

the assumption that, in order to be effective at treating individuals with eating disorders a service provider would need to be familiar with the literature on treatment. As noted above in the section on treatment, there is a clear consensus in the literature that effective treatment requires a multidisciplinary team approach including, at minimum, medical monitoring, psychological counselling, and nutritional counselling. In addition, family support is necessary due to the extreme emotional trauma the family experiences as a result of living with an eating disordered sibling or daughter. Finally, educational/preventive interventions are necessary to slow the rapidly increasing prevalence of the disorders.

Service Needs

Criteria: direct measure of the number of times each service category is endorsed and a listing of any services mentioned under "other".

#12: In my opinion the following treatments or services are essential to adequately meet the needs of clients with eating disorders:

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ faciltative (self help)
__ family therapy
__ family support groups
__ educational/preventive
__ other_____

Service Utilization

Criterion: direct measure of the number of requests for service from clients with eating disorders, including all referrals, in a one year period.

#14: In my practice I receive approximately __ requests for service from new clients with eating disorders (including all referrals) per year.

Note: The total number of requests for service from clients with eating disorders in the Waterloo region was estimated by adding the reported requests for service. When a range was provided (i.e. one to five requests per year) the highest number reported was used since, as noted earlier in this paper, many individuals do not reveal the fact that they have an eating disorder when they first enter therapy. Derived in this way, the estimate is

probably quite accurate in light of the fact that all community professionals were mailed the survey and presumably any professional who had come across an eating disordered client in his or her practice would have enough interest in the topic to complete the survey in exchange for the resource list. Furthermore, conceivably an eating disordered client may have been counted more than once if she was simultaneously seeing a medical doctor, counsellor and nutritionist or if she had changed care givers within the one year period.

Networking of Services

Criteria: direct measure of the number of referrals for clients with eating disorders received from other community agencies or professionals in a one year period and service provider feels there are accessible, affordable and acceptable resources for the treatment of eating disorders in the Waterloo region which he/she could utilize for referral purposes.

#5: In a one year period, approximately how frequently would you receive a referral for a client with an eating disorder from another professional?

___ times per year

#13: Of the services you checked in question 12 above, check any that: 1. you are not able to provide directly through your service and 2. you do not feel you have accessible, affordable and acceptable resources to refer clients in the Waterloo region:

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self help)
__ family therapy
__ family support groups
__ educational/preventive
__ other_____

Potential Client Telephone Survey

The fourth phase of the project involved a telephone survey of potential clients in the Waterloo region with the purpose of corroborating and/or pointing out discrepancies in the data obtained from the professional mail survey. Participants were

obtained by posting flyers (see Appendix C) in various locations around the community including the local college and university campuses, eight highschools, three major shopping centers, nine fitness clubs and a few local pharmacies and convenience stores. Where possible the posters were displayed on the inner side of public washroom stalls to provide maximum privacy. While this procedure did not permit an estimate of the prevalence of the disorders in the region, it did allow input from the client population. Furthermore, the obtained data is probably more valid compared to the data that would have been obtained through a randomized sample procedure since the participants were given time to contemplate participation and the freedom to call at a time when they were assured privacy. A disadvantage of this method is the possibility of bias due to self selection. Respondents may have differed from non-respondents in some significant way.

The survey was first pilot tested with a fellow graduate student familiar with the literature on eating disorders. Callers were asked a prepared set of questions (see Appendix D). The first half of the survey permitted classification of the respondents as anorexic, bulimic or otherwise according to DSM III R (1985) criteria for the disorders. These criteria are presented in Table 2 on page 30. The weight criteria used in classifying respondents as anorexic or bulimic is presented in Appendix E. The second half of the survey was designed to ascertain service accessibility, affordability, and acceptability

and the service needs of individuals with eating disorders from the perspective of the potential client. In exchange for their participation callers were mailed a copy of the resource list and a summary of the results of the survey in a plain brown envelope.

Services Utilized

To begin with survey participants were asked whether they had sought medical, psychological or nutritional help for their eating problem. If they answered yes, they were asked a number of questions to assess the accessibility, affordability and acceptability of each service they had utilized (as outlined below). If they said no they were asked why they had not sought this type of treatment.

Reported Availability

In order to assess the degree to which specific services that the client population felt would be useful in helping them overcome their eating disorder, were available in the Waterloo region, they were asked the following question:

Is there any type of help for your eating problem that you have found particularly difficult to find in the Waterloo region?

Service Accessibility

The accessibility of services from the clients perspective was assessed by asking the following questions:

1. Were you put on a waiting list? If yes, for how long?

2. Was the service easy to get to (i.e. located on a major bus route)?

Service Affordability

Service affordability from the clients perspective was assessed by directly asking the respondent whether the service was affordable.

Service Acceptability

The acceptability of services from the perspective of the client population was assessed by asking the following questions:

1. Was the service provider knowledgeable about eating disorders?

2. Did he or she recommend that you seek psychological counselling, nutritional counselling, medical assessment?

3. Was the treatment helpful?

4. Are you still going? If no, why did you stop?

Service Needs

Service needs from the perspective of the client population were assessed by asking respondents the following questions:

1. Which type of psychological counselling would you find most helpful/would you be most comfortable using:

a) individual therapy
b) family therapy
c) group therapy (run by a professional)
d) self help group (run by a recovered anorexic or bulimic)
e) telephone help line

2. Is there any other service that I have not mentioned which you feel would be helpful?

Networking/Health Education Conference

In order to facilitate professional networking a conference was held at one of the local universities at which the results of the professional mail survey were presented. The conference was extensively advertised throughout the Waterloo region and the fee charged was considerably less than the standard conference fee in order to attract a maximum number of delegates. In addition, permission for study credits was obtained from the College of Family Physicians of Canada and Dr. David Garner, a renowned expert in the area of eating disorders was invited to give the keynote address on prevention and early intervention. Following Dr. Garner's presentation participants were provided with a buffet style lunch in a large comfortably furnished lounge. This style of lunch was chosen with the goal of facilitating interaction and promoting professional networking as delegates from a variety of disciplines actively discussed their professional interests, skills and limitations in relation to eating disorders. Following lunch the data from the professional mail survey were presented.

Apart from providing feedback from the professional mail survey and providing an opportunity for professional networking, two additional goals of the conference were to educate community professionals on prevention and early detection of eating disorders and solicit members for a task force of individuals interested in utilizing the results of the needs assessment to

improve services for clients with eating disorders in the Waterloo region.

A questionnaire asking delegates to evaluate several aspects of the conference was included in the conference package (see Appendix F). The questionnaire was designed to assess the degree to which the four goals stated above had been achieved. Specifically, delegates were asked whether they felt they had increased their knowledge in the areas of prevention, early identification and Waterloo region needs and resources. In addition, they were asked whether they had had an opportunity to network with other community professionals and were invited to participate on a task force who would work toward the improvement of services for clients with eating disorders.

Task Force Development

The final phase of this project involved inviting respondents to both the professional mail survey and client telephone survey to join a task force who would utilize the results of the needs assessment to improve services for clients with eating disorders in the Waterloo region. Initial meetings involved reviewing the results of the needs/resource assessment to determine whether there was a need for restructuring of services and/or the development of new services. Subsequently the group attempted to implement the changes suggested by the needs/resource assessment.

RESULTS

Estimating Prevalence in the Waterloo Region

The Social Indicators Approach was used to estimate the prevalence of anorexia nervosa and bulimia in the Waterloo region. Ideally estimates based on a sample of the population under investigation should be used (Royce & Drude, 1982). Earlier in this paper we reviewed several studies on the epidemiology of eating disorders including a study which measured the prevalence of bulimia in highschool females in the Waterloo region and reported a rate of 2.4 per cent (Loomer, 1988). Although this was the only epidemiological study conducted in the Waterloo region, several studies have examined similar populations and reported prevalence rates for bulimia in college and university women and for anorexia nervosa in highschool females and college and university women. One study that looked at the prevalence of bulimia in a sample of Canadian university women reported a prevalence of 7.5 per cent (Piccinini and Mitic, 1987). In a second study anorexia nervosa was estimated to affect 3.8 per cent of highschool females and between 1 and 4.2 per cent of college and university women in the U.S. (Pope, Hudson, Yurgelun-Todd & Hudson, 1984).

There are two universities and one college in the Waterloo region with a combined total of 14,413 females currently registered (Wilfrid Laurier University: 3,701; University of Waterloo: 9,362; Conestoga College: 1,350). In addition, there

are presently 11,688 highschool females registered in the Waterloo region (Public School Board: 9,390; Separate School Board: 2,298). Using the most conservative of the incidence and/or prevalence statistics presented above and a 95 per cent confidence interval we can extrapolate the following estimates for the Waterloo region: anorexia nervosa affects between 101 and 788 highschool females and between 3 and 285 college and university women. Similarly, we can estimate that bulimia affects between 97 and 464 highschool females and between 713 and 1,449 college and university women. Combining these estimates we can estimate that there are between 932 and 2,986 highschool, college, and university women currently suffering from an eating disorder in the Waterloo region.

While the majority of epidemiological studies have been conducted in highschools or on college and university campuses, one study which examined the incidence of anorexia nervosa and bulimia in 300 female shoppers in a suburban Boston shopping mall reported an incidence of .7 and 10.3 per cent respectively (Pope, Hudson & Yurgelun-Todd, 1984). Although the survey participants included all females judged to be over 12 years of age, the authors note that there were more eating disordered individuals in the 13 to 30 years age group compared to those 31 and over and that this difference was significant for the 13 to 20 years age group. These findings support the assertion that eating disorders primarily affect adolescent and young adult females. Specifically, they reported an incidence of 1.1 per cent for

anorexia and 13.6 per cent for bulimia in females 12 to 30 years of age. According to the 1986 census there are 167,360 females in the Waterloo region, 53,775 of whom are between 12 and 30 years of age. These figures may be conservative however, since the census was conducted in June when many of the university students would have gone home for the summer. Nonetheless, using these conservative estimates and again a confidence interval of 95 per cent, we can extrapolate the following estimates for the prevalence of eating disorders in all females in the Waterloo region: anorexia nervosa: between 469 and 2,812; bulimia: between 11,498 and 22,979. Similarly, we can extrapolate the following estimates for the prevalence of eating disorders in all women in the region who are between 12 and 30 years of age: anorexia nervosa: between 231 and 1,414; bulimia: between 4,592 and 10,034. Again by combining these figures we can estimate that there are between 11,967 and 25,791 women of all ages and between 4,823 and 11,448 adolescent and young adult females in the Waterloo region who currently suffer from an eating disorder.

Apart from using the most conservative estimates in these calculations, these figures are very likely an underestimation of actual prevalence since we have not included a figure to represent individuals who suffer from the disorders but are male.

Key Informant Interviews

Eighteen professionals who were selected on the basis of having lived and worked in the community for a number of years

and/or having experience in treating eating disorders served as key informants. The purpose of the interviews was to ascertain the utility of conducting a full scale needs assessment, to pilot test the questions to be included in the professional mail survey and to provide data to assist in the interpretation of the data obtained in the professional mail survey. Since the questions used were open ended in format the taped interviews were analysed using content analysis. Although this section is lengthy, several attempts at summarizing resulted in considerable loss of the richness of the data thus, we decided to present it in its entirety.

Description of the Respondents

Question #1: What is your occupational title?

Respondents included four guidance counsellors, four counsellors, two counselling psychologists, two medical doctors, two social workers, one registered nurse, one guidance consultant, one public health nutritionist and one public health nurse.

Service Availability

Question #3: What, if any, treatment or service do you offer clients with eating disorders?

Two respondents stated that treatment would vary from client to client but often included developing general coping skills and or direct behavioral interventions. Five provided individual

counselling which variously included the provision of information, relaxation training, ego supportive therapy and/or cognitive-behavioral strategies. Two respondents provided medical monitoring including instruction in physiology. Other services provided included nutritional counselling, hospitalization, family therapy and a psychiatric day center program in the hospital. While three respondents mentioned group therapy, further questioning revealed that none of the groups were specifically geared to clients with anorexia nervosa and/or bulimia. The highschool guidance counsellors also mentioned providing referrals to other community professionals and/or agencies and providing teachers with information to be included in the school curriculum. Again, further questioning revealed that they often experienced considerable difficulty making appropriate referrals and that information provided to teachers was on a request basis but was not a mandatory part of the curriculum.

Service Accessibility

Question #2: Do you accept referrals for clients with eating disorders?

All 18 key informants stated that they did accept referrals for clients with eating disorders with the exception of the public health nurse and public health nutritionist. The public health nurse stated that she would, on occasion, encounter individuals with anorexia nervosa and/or bulimia through home visits, in which case she would do some preliminary and brief

nutritional counselling and refer the individual to a community agency for full assessment and treatment. The public health nutritionist stated that her role was consultant to other health care professionals and thus she was not involved in direct treatment of the disorders. The fact that these two respondents were not involved in direct treatment of the disorders influenced their ability to answer other questions, thus, their data were eliminated from the analysis leaving a sample of 16 key informants. The guidance person had just taken her position as central office consultant but had previously been involved in direct counselling for several years and thus was able to answer the survey questions retrospectively.

Three respondents from the local hospital (a counselling psychologist, a social worker and a registered nurse) stated that, although they accepted referrals for clients with eating disorders, all potential clients went through a prescreening process and generally only the most severe cases were accepted. Ten of the key informants worked in an educational setting. Six were employed at one of the local universities including two medical doctors and four counsellors while four were guidance counsellors at a local highschool. In all cases student referrals were accepted. While the two medical doctors stated that they had to limit referrals to students and would refer faculty and staff elsewhere due to their heavy caseloads, three of the four university counsellors stated that they accepted referrals from faculty and staff but would only see alumni for

short term counselling. Finally, the four highschool guidance counsellors and the remaining university counsellor stated that they accepted referrals from students, faculty, staff and alumni.

Question #11: Are there eligibility criteria for your service?

As noted above, the ten education based practitioners stated that services were limited to students, faculty and staff and in some cases alumni. The key informants who were employed at the local hospital reported that the outpatient psychiatry department required a clearly defined psychiatric disorder (i.e. clinically depressed, a serious emotional state and/or meeting a DSM III criteria for a disorder) in addition to an ability to use verbal outpatient therapy and no major current substance abuse for at least six months. Two key informants stated that they had no eligibility criteria and a third that the only criteria was that they could not be in therapy elsewhere to avoid doubling up of services.

Question #12: Do you have a waiting list?

Two key informants stated that they did not have a waiting list. The remaining fourteen reported waiting lists ranging from one week to six months, although most stated that a serious eating disorder would be prioritized and that the length of the wait varied throughout the year.

Service Affordability

Question #10: Is there a fee for your service?

Three of the sixteen key informants reported that their service was free of charge and four others stated that they were subsidized by government funding sources. The nine remaining key informants reported using a sliding scale for those who could pay but added that they would not turn anyone away. In addition, several key informants noted that Regional Social Services paid for individuals who were on social assistance.

Service Acceptability

Question #4: Do you feel this treatment or service is effective?

Three key informants felt the treatment they offered was effective with clients with eating disorders. Most felt it was effective with some clients noting that it depended on a number of factors including "the motivation level of the client", "whether or not they stick with it", "the severity of the disorder", and "in some cases the severity of the underlying personality disorder". One key informant noted that, although it was not curative, it was effective to the extent that it provided monitoring, support and provision of information (in light of the fact that these are life threatening disorders this may be considered an effective intervention). The three key informants from the local hospital stated that their inpatient program was

not as effective as they would like it to be and that, due to the fact that they only accept the most severe cases for outpatient treatment, "it might take two to three years to see even minor improvements". Another respondent noted that although their supportive counselling was effective it was not meant to be the only treatment for these clients and they often experienced difficulty obtaining appropriate referrals. Finally, one key informant noted that a lot of individuals with eating disorders don't seek treatment in the first place.

Question #13: How frequently do you read about eating disorders or attend conferences or seminars on eating disorders?

Most of the key informants stated that they read about eating disorders quite frequently from weekly to monthly depending on what came out in the literature. Three of the highschool guidance counsellors stated that they rarely read about the disorders because they saw students for such a wide variety of problems. The fourth guidance person had a special interest in eating disorders and read about them on a regular basis. One key informant stated that she averaged two conferences on eating disorders per year. Four attended about one per year and four had not attended a conference or seminar on the topic of eating disorders in the last year. One well read key informant stated that she attended any seminar that she felt might offer her something beyond where she was at. Two others had recently given a talk on eating disorders.

Service Needs

Question #5: In your opinion, what other forms of treatment or service are important for clients with eating disorders?

In response to this question most of the respondents mentioned group therapy, noting that it should be free of charge. Three individuals felt there was a need for nutritional counselling, family physicians who were knowledgeable about the disorders and preventative informational programs (both in the schools and in the larger community). Several of the key informants mentioned the need for an effective inpatient program in the hospital. While one key informant felt an eating disorders clinic located in the hospital would be useful a second felt a live-in, non-medical model eating disorders centre located outside of the hospital would be more effective. Two individuals felt there was a need for a network of recovered and recovering anorexics and bulimics who could contact one another for support, if in need, between weekly counselling sessions. Two key informants felt there was a need for individual therapy (including behavior modification and long-term psychotherapy) that would be covered by the Ontario Health Insurance Plan (O.H.I.P.). There was also an expressed need for easier access to referral, especially referrals to the hospital.

Question #7: Are these services adequate to meet the demand for service from this client population?

Five of the sixteen key informants stated that services in the Waterloo region were not adequate to meet the demand for

service from this client population. Three others felt that adequate services were available to meet the present demand but not the potential demand since a lot of individuals do not seek treatment for several years. Several key informants stated that there were presently no self help groups for individuals with eating disorders. Two others claimed there was a lack of coordination of services and that it was difficult to match the right approach with the individual. In summary, services were perceived to be inadequate, in some way, by all sixteen key informants.

Service Utilization

Question #8: Approximately how frequently do you receive requests for service from clients with eating disorders?

Responses ranged from "not often" to "30 per year". Two key informants noted that this was difficult to estimate because, although they saw many women who were preoccupied with food and weight, engaged in binge eating and/or suffered from low self esteem, these clients did not state that they had an eating disorder upon admission. Another echoed the earlier observation that many do not seek treatment so these numbers do not reflect the seriousness of the disorder. One respondent who reported treating a relatively low number of these clients noted that, although they had considerably more requests for service, due to their three month waiting list many of them went elsewhere.

Networking of Services

Question #6: To your knowledge are these adjunct treatments or services available in the Waterloo region?

Two of the sixteen key informants felt the necessary services were available with the exception of support groups. One noted that, while psychological counselling was available, the waiting lists were generally quite long and most were not covered by O.H.I.P., and thus not affordable. Two key informants felt medical services were more accessible than psychological services but a third felt that few family doctors were interested in and capable of treating the disorders. Two key informants felt there was a need for a specialized inpatient program. One felt there was a need for a visible eating disorders center in the community which would provide accessible information thereby promoting acceptance of the behavior and encouraging individuals with the disorders to seek help.

Question #9: If you are unable to meet a clients treatment needs directly do you feel you have adequate resources to refer the client?

One key informants felt she had adequate resources. Two others also felt the resources were adequate for the present demand for service but noted that there were many individuals "hiding in the closet" who were not getting needed treatment. Two key informants felt waiting lists for mental health services were too long. Two others felt it was difficult to find someone who was experienced in treating the disorders in the Waterloo region and mentioned that, as a result, they frequently referred

clients to services in Toronto. Another key informant felt that no service was adequately available while a second felt medical and nutritional services were adequate but there was a need for group support. One key informant stated that medical services were more accessible than mental health services. In contrast, two others reported difficulty getting medical referrals, especially for anorexics who were at a dangerously low weight. In addition, referrals to the hospital often required lengthy waiting periods except in the most severe cases. Finally, one key informant felt medical services were available but questioned whether the treatment provided was appropriate.

Closing Comments

Question #14: Do you have any other thoughts or ideas regarding service needs or the availability of services for this client population that I have neglected to mention?

Several of the key informants brought up the issue of early identification and prevention in answering this question. Some suggested that preventive interventions could be implemented in the school system through providing students starting in grade seven with information on the detrimental effects of dieting and the importance of proper nutrition and informing them about the types of treatment that are available in the Waterloo region. Although some of this is already incorporated into health classes, one key informant noted that it varied from school to school and that Health Education was not a mandatory part of the curriculum. Others suggested that there was a need to educate

teachers as to early warning signs and appropriate referral resources. Suggestions for prevention at the community level included making changes in the media and the general emphasis on body shape and size for women, and educating "at risk" groups. One key informant mentioned that she had just received a journal from Jake Epp (the Minister of Health at the Federal level) entitled "Achieving Health for All: A Framework for Health Promotion". While she was pleased to see health moving in this direction, she questioned whether things were really any different noting that presently there is no area in which health promotion is funded. She went on to explain: "it is funded on an ad hoc yearly grant basis which limits its potential for success since health promotion has to be long term to be effective." She felt the present system of funding health promotion frustrating and depressing.

A second topic discussed by several of the key informants was the need for coordination of nutritional, medical and qualified therapy skills for information sharing and consultation. One respondent stated that she knew the team approach was best but that "this wasn't facilitated by the way health care is funded" (i.e. medical is covered by government funding but not nutritional or psychological counselling). The community nutritionist stated that she "did not feel capable of treating an eating disorder on her own" and, although she received a lot of calls from these individuals requesting referrals, she was "unsure where to send them".

Two key informants talked about the need for an eating disorders clinic which would provide education on nutrition, homework with monitoring, psychological counselling and group experience. One suggested that the center would need to be visible in order to bring people out of the closet but that the ideal setting was probably a residence out in the country. Specific suggestions for appropriate treatment included treating individuals on an outpatient basis except for extreme cases and utilizing non-professionals as peer supports to reduce the amount of professional time necessary to treat these disorders. In addition, recognizing that eating disorders vary greatly in their severity and in the structure of the person with the eating disorder was thought to be important in planning services for this client population. One key informant cautioned against the use of scare tactics but a second stated that it was important to emphasize the fact that some behaviors can cause permanent physical damage. One key informant noted that the destruction to families was untold and that, although F.R.E.E.D. (Friends and Relatives of Individuals with Eating Disorders, the local family support group) was helping in this area, there was a need for a more active program. Finally, one key informant felt it would be interesting to compare women who leave highschool to enter the work force and those who continue as academics.

Summary

At the beginning of this section we noted that the purpose of the key informant interviews was threefold: first, to ascertain the utility of conducting a full scale needs assessment study; second to pilot test the questions to be included in the professional mail survey; and third to provide rich data to assist in the interpretation of the data obtained in the professional mail survey. The data obtained from the key informant interviews clearly supported the utility of a full scale needs assessment. To begin with, a comparison of the needs attributed to this client population by the key informants and the perceived availability of services for clients with eating disorders in the Waterloo region points to both an inadequacy of extant services and an absence of specialized services. In addition, most of the key informants felt that there were many individuals who were in need of treatment but were not receiving it (the service gap).

All of the key informant interview questions were retained for use in the professional mail survey, although the format used was forced choice as opposed to open ended in order to facilitate analysis of the data. Furthermore, the data obtained in the interviews provided valuable insights into the true status of service needs and resource availability, which will be used extensively in interpreting the professional mail survey data. Finally, and most importantly, several of the key informants

indicated an interest in the results of the survey. The three key informants who were employed at the local hospital indicated that they were in the process of reviewing the services they offered clients with eating disorders and thought that the results of the assessment would be helpful to them in planning hospital services. In addition, one key informant indicated that she would be interested in becoming involved in any program planning activities that evolved out of the assessment.

Professional Mail Survey Results

Based on the findings of the key informant interviews we decided to conduct a full scale needs assessment study including a mailed survey of all health care professionals in the Waterloo region. Of the 361 surveys that were mailed out 82 were returned. Twenty two additional surveys were received after follow-up phone calls were conducted for a total sample of 104. In addition to increasing the response rate, the follow-up phone call procedure also helped to identify a large portion of the original sample who were inappropriate to the study. Of the 257 non-respondents we were able to re-contact 253. Of these, 134 (53%) indicated that they were either a specialist (i.e. dermatologist or surgeon) and therefore would never see an eating disordered client in their practice or that they did not provide a treatment service. The remaining 119 (46%) non-respondents either stated that they were too busy, that they did not receive the survey or that they never received requests for service from

clients with eating disorders. Those in the latter two categories were asked if they would consider completing the survey if we mailed them a second copy since information on underutilized services was of equal importance. Theoretically one would expect that the 119 non-respondents who did not state that the survey was inappropriate for them probably do not see a large number of individuals with these disorders, however, we cannot make such an assumption without data to support it. Thus, based on the foregoing discussion we can estimate that there are approximately 227 (361 surveyed minus 134 found to be inappropriate) service providers in the Waterloo region who offer treatment for clients with eating disorders. In this light our sample of 104 (46%) can be considered a representative sample. The results of the survey are included in Appendix G.

Reported Availability of Services

The first question asked respondents to indicate the types of treatment or service they offer clients with eating disorders. Eight types of treatment were listed along with an "other" option and respondents were asked to check "all that applied" to them. The eight provided service categories were derived from a review of the literature on treatment and an examination of the services the key informants stated were necessary in treating the disorders. All 104 respondents completed this question and a frequency distribution indicated that the following services were being offered in the Waterloo region:

Medical Monitoring	= 51 (15%)
Hospitalizaton	= 39 (12%)
Personal Counselling	= 78 (23%)
Nutritional Counselling	= 49 (15%)
Self Help	= 20 (6%)
Family Therapy	= 43 (13%)
Family Support	= 11 (3%)
Educational/Preventive	= 35 (10%)
Other	= 9 (3%)

Note: Since respondents were asked to check "all that applied" these numbers and percentages represent services checked rather than individual respondents.

Of the nine who responded to the "other" option six indicated referral to other professionals. The three remaining services mentioned were case finding, peer support and nurse visitation. An examination of the above data suggests that all eight of the provided service categories are available in the Waterloo region. As noted above in the procedure section, these data were combined with information on service accessibility, affordability, and acceptability to provide an estimate of "actual" availability.

Service Accessibility

Next an "accessibility" score was obtained for each respondent by summing the responses to questions 2, 3 and 4 (see Appendix B) which asked for information on service location, eligibility criteria and waiting lists respectively. Again all 104 respondents completed these questions. Ninety-eight of the one hundred and four respondents indicated that their service was located on a major bus route (receiving a score of 2). Sixty-two stated that there were no eligibility criteria for their service. The remaining forty-two respondents who indicated that there were

eligibility criteria for their service mentioned eight different criterion, seven of which were determined to potentially exclude clients with eating disorders (see Appendix H). As a result, sixty-three respondents either did not have eligibility criteria or had a criterion that would not eliminate clients with anorexia nervosa and/or bulimia (receiving a score of 2). Thirdly, seventy-four of the one hundred and four respondents reported that they did not have a waiting list or that their waiting list was less than one month (receiving a score of 2). All others were assigned a score of 1 on the respective variables. The three scores were then summed to obtain an "accessibility" score for each respondent. The three groups that emerged were designated low, medium and high accessibility. The total for each group was as follows:

Low Accessibility	= 10 (10.4%)
Medium Accessibility	= 57 (59.28%)
High Accessibility	= 37 (38.48%)

These data suggests that the services offered by the 104 mail survey respondents who completed this question are, for the most part, accessible with 59.28 per cent rated "medium" on service accessibility and only 10.4 per cent rated "low" on this variable.

Service Affordability

Next an "affordability" score was calculated for each respondent by summing the responses to questions 6, 7 and 8 (see Appendix B) which asked about the method of payment, fee per one

hour session and whether clients who were unable to pay would be denied service. The data from one respondent were excluded in calculating this variable since they did not indicate their fee per one hour session resulting in a sample of 103. Eighty-four of the one hundred and three respondents indicated that their service was covered by O.H.I.P. or was gratis (receiving a score of 2). Of the nineteen respondents who indicated that there was a fee for their service, fifteen indicated that a client who was unable to pay would not be denied service (receiving a score of 2). All others were assigned a score of 1 on these variables. Next, these scores were summed to obtain an "affordability" score for each respondent. The three groups that emerged were designated low, medium and high affordability. The total for each group was as follows:

Low Affordability = 5 (5.15%)
Medium Affordability = 14 (14.42%)
High Affordability = 84 (86.52%)

According to these data affordability is not a major barrier to service utilization since 86.52 per cent of the respondents were assessed to offer a service that is "highly" affordable and only 5.15 per cent were rated "low" on affordability.

Service Acceptability

Next a score for service "acceptability" was calculated based on responses to questions 9, 10, 11 and 12 (see Appendix B) which asked for information on the frequency with which respondents read about eating disorders; attended conferences,

seminars or courses on eatihg disorders; whether or not they felt they had the training and background necessary to treat clients with eating disorders and whether or not they recognized the need for a multidisciplinary team approach to the treatment of eating disorders, respectively. Fifty-six of the one hundred and two respondents who completed the question indicated that they read about eating disorders at least "monthly" (receiving a score of 3); twenty-five indicated "yearly" (receiving a score of 2); and twenty-one indicated "seldom" or "never" (receiving a score of 1). Forty-one of the one hundred and two respondents who completed the question indicated that they attended conferences or seminars on eating disorders at least "yearly" (receiving a score of 2) and sixty-one indicated "seldom" or "never" (receiving a score of 1). Fifty-eight of the one hundred and one respondents who completed the question selected "strongly agree" or "agree" in response to the statement "I have the training and background necessary to treat clients with eating disorders" (receiving a score of 3); eighteen selected "neither agree or disagree" (receiving a score of 2); and twenty five selected "disagree" or "strongly disagree" (receiving a score of 1).

The final criterion utilized to assess service acceptability was that the service provider recognized the need for a multidisciplinary team treatment approach. As noted above in the procedure section, the literature indicates that appropriate treatment of these disorders must include: medical monitoring, psychological counselling, nutritional counselling, family

support and educational/preventive interventions. Since medical monitoring might occur either on an outpatient basis or in hospital and psychological counselling might take any one of a number of forms, respondents were only required to check at least one of "medical monitoring" or "hospitalization" and at least one of "personal counselling", "facilitative (self help)", or "family therapy". In addition, they had to have checked all three of "nutritional counselling", "family support", and "educational/preventive". Sixty-eight of the one hundred and four respondents who completed the question met the above criteria (receiving a score of 2) and thirty-six failed to meet the criteria (receiving a score of 1).

The scores obtained for the four criteria outlined above were then summed to obtain an "acceptability" score for each respondent. The data for four of the respondents were eliminated in calculating service acceptability since they had neglected to answer one or more of the questions which comprised this variable resulting in a sample of 100. The resultant frequency distribution divided respondents into seven groups. To facilitate consistency these groups were arbitrarily combined to produce three groups which were designated low, medium and high acceptability. Although we attempted to divide the groups into three equal groups each consisting of 33.3 per cent of the total, due to the large number of individuals scoring high on this variable, the resultant distribution was skewed toward the high group (see Appendix I). Twenty six individuals were placed in

the low acceptability group with scores ranging from 4 to 6. Thirty individuals were placed in the medium acceptability group. In this group, half received a score of 7 and half a score of 8. Finally, forty four individuals were placed in the high acceptability group. Twenty five received a score of 9 and 19 a score of 10. The following distribution emerged:

Low Acceptability	= 26 (26%)
Medium Acceptability	= 30 (30%)
High Acceptability	= 44 (44%)

Again, the majority of services were rated "high" on acceptability, however, 26 per cent of the services were rated "low" on this variable, suggesting that this is a greater barrier to utilization than either accessibility or affordability.

Actual Availability

To obtain an estimate of "actual" availability (defined in this paper to be the extent to which a service is: "accessible", "affordable" and "acceptable") the obtained "accessibility", "affordability" and "acceptability" scores were converted to 1, 2 or 3 with 1 representing the low groups and 3 representing the high groups. The three scores were then summed to obtain an "actual" availability score. Once again, it was necessary to exclude the data from the four respondents who neglected to answer all of the questions used to calculate an acceptability score and the one respondent who did not provide information on the fee per one hour session. Thus, the resultant distribution was based on a sample of 99. As in the case of "acceptability",

the five groups that emerged were divided into three groups each representing approximately 33.3 per cent. Twenty three individuals were placed in the low availability group. Five received a score of 5 and 18 a score of 6. Forty individuals were placed in the medium availability group, all receiving a score of 7. Finally, thirty six individuals were placed in the high group. Twenty eight received a score of 8 and 8 a score of 9. The fact that 40 individuals received the middle score of seven resulted in a skew toward the medium availability group (see Appendix J). The following distribution emerged:

Low Availability	= 23 (23.2%)
Medium Availability	= 40 (40.4%)
High Availability	= 36 (36.4%)

These data suggests that taken together accessibility, affordability and acceptability are not major barriers to service utilization. The majority of services were rated, "medium" (40.4%) or "high" (36.4%) on "actual" availability, however, 23.2 per cent did score "low" on this variable suggesting that one or more of these barriers prevent utilization for almost one fourth of our sample of services.

Service Availability by Type

In order to determine whether service availability differed for the eight provided service categories and four services mentioned in response to the "other" option a cross-tabulation between service type and "actual" availability was performed. The data from the five respondents who had not completed all of

the questions included in calculating "actual" availability were eliminated resulting in a sample of 99 and the following distribution:

TABLE 3

"Actual" Availability by Service Type (survey respondents/all services)

Service Type	Actual Availability Low	Med.	High	Total
1. medical monitoring	9	16	23	48
2. hospitalization	7	11	19	37
3. personal counselling	18	27	30	75
4. nutritional counselling	8	15	24	47
5. self help	3	6	10	19
6. family therapy	8	16	16	40
7. family support	0	2	9	11
8. educational preventive	6	8	20	34
9. referral	0	1	5	6
10. case finding	0	0	1	1
11. peer support	0	0	1	1
12. nurse visitation	0	0	1	1
Total	59	102	159	

Note: since most respondents indicated that they provided more than one type of service, the numbers in this table are based on services provided rather than individual survey respondents, and therefore total more than 99.

Since our sample of 104 represents 46 per cent of the services in the Waterloo region which were considered appropriate for the survey, on the assumption that our sample is representative, we can estimate that the "actual" availability of all appropriate services is as follows:

TABLE 4

"Actual" Availability by Service Type (region wide/all services)

Service Type	Actual Availability Low	Med.	High	Total
1. medical monitoring	20	35	50	104
2. hospitalization	15	24	41	80
3. personal counselling	39	59	65	163
4. nutritional counselling	17	33	52	102
5. self help	7	13	22	41
6. family therapy	17	35	35	87
7. family support	0	4	20	24
8. educational preventive	13	17	43	74
9. referral	0	2	11	13
10. case finding	0	0	2	2
11. peer support	0	0	2	2
12. nurse visitation	0	0	2	2
Total	128	222	345	

Service Needs Identified by Community Professionals

The data from question 12: "in my opinion the following treatments or services are essential to adequately meet the needs of clients with eating disorders" were used to determine service needs of this client population from the perspective of the community professional. Three respondents did not complete this question resulting in a sample of 101 and the following frequency distribution regarding service needs:

Medical Monitoring = 94 (14%)
Hospitalization = 76 (11%)
Personal Counselling = 98 (14%)
Nutritional Counselling = 93 (13%)
Self Help = 81 (12%)
Family Therapy = 89 (13%)
Family Support = 77 (11%)
Educational/Preventive = 87 (13%)

Note: Since most respondents checked more than one service these numbers and percentages represent services checked rather than

individual respondents.

This distribution suggests that all eight provided service categories were thought to be necessary in the treatment of these disorders. Responses to the "other" option included: peer supports, residential treatment center, self hypnosis training, and eating disorders clinic.

Service Utilization

Question 14 asked respondents to report the number of requests for service from new clients with eating disorders per year from all sources, including referrals. Five respondents did not complete this question resulting in a sample of 99. Responses to this question ranged from zero to 90. The raw data for this question are included in Appendix K, however, to simplify the interpretation of these data responses were divided into seven categories resulting in the following distribution:

Zero	= 9 (9%)
1 to 5	= 62 (63%)
6 to 10	= 10 (10%)
11 to 20	= 14 (14%)
21 to 30	= 2 (2%)
40	= 1 (1%)
90	= 1 (1%)

This distribution suggests that the majority (72%) of service providers see between zero and five eating disordered clients per year and approximately one fourth see between six and twenty per year. The two respondents who reported seeing 40 and 90 eating disordered clients per year were both dieticians. The total number of requests for service from clients with eating

disorders in the Waterloo region was estimated by adding the maximum requests for service reported by the 99 respondents who completed this question. The resultant estimate was: 606 requests per year. Again, since this estimate represents 46 per cent of the services in the Waterloo region which were considered appropriate for the survey, on the assumption that our sample is representative, we can estimate that service providers in the region receive approximately 1,317 requests for service per year.

Finally, although F.R.E.E.D. (Friends and Relatives of Individuals with Eating Disorders, the local family support group) was not involved in direct treatment of the disorders, they were contacted and asked to provide information on the number of telephone calls they received in a one year period from individuals with anorexia or bulimia and/or their friends and relatives. These data were obtained in order to further clarify the magnitude of the need for services for this client population in the Waterloo region. Despite the fact that F.R.E.E.D. was without publicity from July 1986 to mid November 1986, between June 1986 and June 1987 they received 57 requests for help or information from sufferers, their friends or relatives or community professionals (see Appendix L).

Professional and Agency Networking

Question 13: "of the services you checked in question 12 above, check any that: 1. you are not able to provide directly through your service and 2. you do not feel you have accessible,

affordable and acceptable resources to refer clients in the Waterloo region" was designed to provide a measure of professional networking around the problem of eating disorders. To begin with, in question 12 respondents were provided with the list of eight service types plus an "other" option and asked to check all services that they felt were important for the treatment of eating disorders. Next, they were asked to re-examine the list of services they checked in question 12 to determine whether there were any that were "not available" in the Waterloo region. They were asked to rate a service as "not available" if: 1. it was a service that they could not provide themselves and 2. they were not aware of anyone in the region who provided that service (and was accessible, affordable, and acceptable).

Responses to the "other" option included: peer supports, residential treatment center, self hypnosis training, and eating disorders clinic, however, none of these services were mentioned in response to question 13. Although in the case of peer supports and self hypnosis training an examination of the services these two respondents provided revealed that they themselves provided these services, the ommission of residential treatment center and eating disorders clinic in question 13 suggests that this question may have been misinterpreted, since these services clearly do not exist in the region.

Frequencies for each of the eight service types were obtained representing services thought to be "not available". Two individuals did not complete this question resulting in a sample of 102 and the following distribution:

Medical Monitoring	= 33 (12%)
Hospitalization	= 34 (12%)
Personal Counselling	= 21 (7%)
Nutritional Counselling	= 30 (11%)
Self Help	= 38 (13%)
Family Therapy	= 30 (11%)
Family Support	= 36 (13%)
Educational/Preventive	= 30 (11%)
All Services Available	= 30 (11%)

Note: Since most respondents checked more than one these numbers and percentages represent services checked rather than individual survey respondents.

This distribution suggests that all eight provided service categories were thought to be "not available" by between 7 and 13 per cent of the 102 survey respondents who completed this question and that only 11 per cent felt all services were available. When this data is compared to the data on "actual" availability reported above there appears to be a lack of awareness of services rather than a lack of availability. No services were mentioned in response to the "other" option.

A second question designed to obtain an estimate of the degree of professional networking around the problem of eating disorders was question 5: "in a one year period, approximately how frequently would you receive a referral for a client with an eating disorder from another professional?". Four respondents did not complete this question resulting in a sample of 100.

Responses to this question ranged from zero to 90. The raw data for this question are presented in Appendix M. Again to simplify interpretation of the data the responses were divided into six categories and the following distribution emerged:

Zero	= 32 (32%)
1 to 5	= 53 (53%)
6 to 10	= 5 (5%)
11 to 15	= 6 (6%)
16 to 20	= 3 (3%)
80	= 1 (1%)

This distribution suggests that approximately one third of the respondents never receive referrals for clients with eating disorders and that the majority (53%) receive between one and five referrals per year. Only 15 per cent reported receiving six or more referrals per year. The one respondent who indicated that she received 80 referrals for these clients in a one year period was a dietician. The total number of inter-agency referrals was estimated by adding the maximum number of referrals received for clients with eating disorders as reported by the 100 respondents who completed this question. The resultant estimate was 391 referrals per year. Again, since this estimate is based on a sample of 46 per cent, assuming our sample is representative, we can estimate that there are approximately 850 inter-agency referrals for clients with eating disorders per year in the Waterloo region.

Development of the Resource List

At the end of the questionnaire respondents were asked to indicate whether they wished to have their names included on a resource list of professionals interested in and capable of treating clients with anorexia nervosa and/or bulimia. Forty-seven respondents indicated that they wished to be included in this list: 34 providing psychological services; 3 providing medical services; 3 providing both psychological and medical services; 5 providing nutritional services; 1 providing a self help group for overeaters and 1 providing a family support group for the parents and friends of individuals with these disorders (see Appendix N).

Client Telephone Survey

Survey Participants

Nineteen individuals agreed to participate in the survey. To begin with survey respondents were asked to indicate where they had seen the poster advertisement. Three respondents stated that they saw it at their highschool, five on one of the local university campuses, three at one of the local shopping centers and one at a local health club. The seven remaining respondents were informed of the study through their counsellor, a local professional who agreed to ask her eating disordered clients to participate. Answers to the first half of the survey (questions 1 to 11, see Appendix D) were compared to the diagnostic criteria

for anorexia nervosa and bulimia as set out in the American Psychological Associations Diagnostic and Statistical Manual for Mental Disorders (DSM III R, 1985, see Table 2). Seven respondents met DSM III R criteria for "Bulimic Disorder", four met DSM III R criteria for "Bulimic Disorder" plus a history of "Anorexia Nervosa", one met both the criteria for "Bulimic Disorder" and the criteria for "Anorexia Nervosa" and three met DSM III R criteria for a history of "Anorexia Nervosa". The four remaining participants did not meet the complete criteria for either disorder. Two of these individuals met all of the criteria for "Bulimic Disorder" with the exception of criterion "D" which specifies a minimum of 2 binge eating episodes per week for at least 3 months. While both had been binge eating for over four years, they reported a frequency of 2 to 3 times per month. The remaining two both reported regular vomiting for the purpose of controlling weight. The first reported daily vomiting and responded "horrible" to the question "how would you feel if you were to gain 10 lbs.?". The second reported vomiting twice a week, dieting "all the time" and excessive exercising. Despite the fact that these four respondents did not meet DSM III R criteria for the disorders, all respondents were included in the analysis since all demonstrated clearly disturbed eating patterns and exhibited most of the behaviors typical of patients with anorexia nervosa and/or bulimia.

Services Utilized

Of the nineteen telephone survey respondents six reported that they had never sought professional help for their problem. All others reported that they had at least consulted their family physician. The six respondents who had not sought medical treatment for their eating problem reported the following reasons: "didn't consider it an illness", "not ready yet", "don't trust them to tell you the truth", "my father would kill me" and "afraid my parents will find out". Nine participants had sought medical treatment from a family physician, three had seen a family physician and had also been hospitalized for the disorder and one had seen two different family physicians and had also been hospitalized.

Of the 19 respondents seven reported that they had never sought psychological treatment for their disorder. The reasons given were identical to those given above for medical treatment with the seventh respondent stating that her negative experience with a medical doctor "turned her off" the idea of seeking help. Respondents who indicated that they had sought psychological treatment were asked to specify the service provider's title, however, most were unable to answer this question so it was eliminated from the analysis. Respondents reported having seen from one to three professionals for psychological counselling for a total of twenty client-counsellor contacts. The data for one respondent was eliminated for this question because she stated

that she was "tricked" into going by her friends, only went for one visit and "didn't give the therapist a chance".

Ten of the nineteen respondents reported that they had not sought nutritional counselling for their eating problem. Reasons given included: "didn't consider it an illness", "I am well informed in the area of nutrition", "my counsellor is well informed in the area of nutrition", "my father would kill me", "I'm afraid my parents will find out", "my negative experience with a medical doctor turned me off seeking any kind of treatment", "I am a nursing student" and "I didn't think of it". Six respondents had seen a nutritionist, two had been to Weight Watchers, one to Overeaters Anonymous and one to the Weight Loss Clinic. The respondent who reported going to the Weight Loss Clinic admitted that she had withheld information that would allow them to identify her as bulimic, thus her data on this question were eliminated.

Reported Availability

Next respondents were asked the following question in order to assess the degree to which specific services which they felt would be useful in helping them overcome their eating disorder were available in the Waterloo region:

1. Is there any type of help for your eating problem that you have found particularly difficult to find in the Waterloo region?

Six respondents reported that they had not tried to find help and four could not think of anything. Two respondents said

that they hadn't come across anything specifically geared to the treatment of eating disorders such as an eating disorders clinic. One respondent mentioned group therapy and two others felt there was a need for a referral service or resource list of professionals who were knowledgeable about the disorders. Three respondents felt there was a lack of professionals who were knowledgeable about the disorders and don't have long waiting lists. Another respondent felt the waiting list for the hospital was much too long. Finally, one respondent wanted to find someone who could "stop her totally" having battled the disorder with only partial success for several years.

Service Accessibility

The following questions were designed to assess service accessibility:

1. Were you put on a waiting list? If yes, for how long?

2. Was the service easy to get to (i.e. located on a major bus route)?

All 13 respondents who had sought treatment from a family physician reported that the service was easy to get to (i.e. located on a major bus route or respondent had access to a car) and all but one stated that they were not placed on a waiting list. The latter had seen two family physicians and had been placed on a waiting list in both cases (the first for 2 months and the second for 1 month). All four respondents who had been hospitalized for the disorders reported that the service was easy

to get to and two stated that they were not placed on a waiting list. The remaining two stated that they were placed on a two week waiting list for the hospital program.

For thirteen of the client-counsellor contacts there was no waiting period, two had a waiting period of 1 month, one a waiting period of 2 months, one a waiting period of 3 months. One respondent stated that she "never did get to see someone on a regular basis". Another respondent stated that the local hospital services were not adequate and that she was on a waiting list for Toronto General Hospital. All nineteen services were described as easy to get to.

All six respondents who reported seeing a nutritionist felt the service was easy to get to. One of the six reported being placed on a waiting list for one month while the others reported that there was no waiting period. The three respondents who had attended Weight Watchers or Overeaters Anonymous all reported that these services were easy to get to and neither service had a waiting list.

Service Affordability

It was not necessary to assess the affordability of medical services since all medical services are covered by O.H.I.P. and are therefore free of charge. Respondents were asked the following question in order to assess the affordability of psychological and nutritional services:

1. Was the service affordable?

Of the nineteen client-counsellor contacts only one was reported to be not affordable. In this case the respondent had stopped going to a local psychologist because she could not afford his fee of $75./hr. She stated that this was especially annoying because, of the three therapists she had been to he was the most helpful.

The six respondents who reported seeing a nutritionist all stated that the service was affordable. One of the two respondents who had attended Weight Watchers felt that the service was too expensive. The respondent who had attended Overeaters Anonymous felt that this service was affordable.

Service Acceptability

The following questions were designed to assess service acceptability:

1. Was the service provider knowledgeable about eating disorders?

2. Did he or she recommend that you seek psychological counselling, nutritional counselling, medical assessment?

3. Was the treatment helpful?

4. Are you still going? If no, why did you stop?

When the fourteen respondents who reported seeing a family physician were asked whether he/she was knowledgeable about eating disorders, nine said "no", one said "somewhat" and four said "yes". When asked whether the family physician recommended that they go for psychological and nutritional counselling eight

respondents said "yes", five said "no" and one stated that she was already in both psychological and nutritional treatment. When respondents were asked whether the sessions with the family physician were helpful five said "yes" and nine said "no". When asked whether they were still going to their family physician four respondents said "yes" and seven said "no". Those who were no longer going were asked why they had stopped. Nine respondents reported that they had gone for one visit only, seven did not return because the service provider was not knowledgeable about eating disorders and/or they did not find the treatment helpful. One respondent reported that she had gone with the sole purpose of obtaining a referral for psychological counselling. Another had seen a medical doctor for over 2 1/2 years on campus but was no longer going because she had graduated. Of the four respondents who had been hospitalized for the disorder one felt the hospital staff was knowledgeable about eating disorders, two stated that they were not knowledgeable, and the fourth felt they were somewhat knowledgeable about the disorders. All four respondents indicated that the hospital staff recommended and/or provided both psychological and nutritional counselling. One felt the treatment was helpful but the three others stated that it was not helpful. All four reported that they had been released from the hospital program.

For fourteen of the nineteen client-counsellor contacts the service provider was thought to be knowledgeable about eating disorders. Of the remaining five, one was thought to be

"somewhat" knowledgeable and four "not knowledgeable". For eleven of the nineteen client-counsellor contacts the respondent reported that the counsellor had recommended that they seek medical and nutritional counselling. Ten of the counsellors were considered helpful and nine were considered not helpful. Six respondents reported that they were still going to a counsellor, six reported stopping because the treatment was not helpful, two had stopped going because they had moved, one because the counsellor had moved and three because they felt they had progressed to the point where they felt able to "do it on their own". One respondent who had been in an inpatient program reported stopping as a result of family responsibilities.

Of the six respondents who had been to a nutritionist five felt the service provider was knowledgeable about eating disorders but the sixth stated that he/she was not knowledgeable about the disorders. Five reported that the service provider recommended that they seek medical and psychological treatment but again one did not. Four of the six felt the counselling was helpful while two stated that it was not helpful. Three respondents reported that they were still going and one went for one visit only because it was not helpful. One respondent, who was seeing a nutritionist in hospital, was no longer going because she had been released and felt she knew everything about nutrition anyway. The sixth respondent had stopped going because all her questions had been answered. The two participants who had attended Weight Watchers both felt their staff were not

knowledgeable about eating disorders and noted that they did not recommend seeking medical or psychological treatment. One felt the treatment was not helpful but the second said it was helpful to the extent that she learned about the four food groups and was given support by the group members. Both respondents had stopped going, one because it was not helpful and the second because she was under the weight criteria. The respondent who reported going to Overeaters Anonymous felt that they were not knowledgeable about eating disorders and stated that they did not recommend she seek medical or psychological treatment. Despite the fact that she found the group support helpful, she was no longer going.

Service Needs

Finally, service needs from the clients perspective were assessed by asking the following questions:

1. Which type of psychological counselling would you find most helpful/would you be most comfortable using?

a) individual therapy
b) family therapy
c) group therapy (run by a professional)
d) self help group (run by a recovered anorexic or bulimic)
e) telephone help line

2. Is there any other service that I have not mentioned which you feel would be helpful?

Thirteen of the nineteen respondents felt individual therapy would be helpful, four said maybe, one said no and one said it would be helpful if the service provider was knowledgeable about eating disorders. When asked whether they would be comfortable

in individual therapy two respondents said yes, eight said they would be comfortable "after a while", two said it would depend on the counsellor (i.e. one said she would be comfortable if the counsellor was female) and two said they would not be comfortable. Five respondents felt that family therapy would be helpful but thirteen said it would not be helpful and one said maybe. Three said they would be comfortable utilizing family therapy, one felt she would be comfortable after having first been in individual therapy, one felt she would be comfortable after a few sessions, one said she might be comfortable and two stated that they would not. Eleven respondents thought group therapy would be helpful, four said maybe and four said no. Five said they would be comfortable using group therapy, six said they would be comfortable "after a while", two thought they might be comfortable and six said they would not be comfortable. Sixteen respondents felt a self help group would be helpful, one said it might be and two said it would not be. Ten respondents thought they would be comfortable in a self help group situation, four said they would be comfortable "after a while", one said she might be comfortable and four said they would not be. Eight respondents felt a telephone help line would be helpful, one felt it would be helpful on a short term basis and ten felt it would not be helpful. Eleven said they would be comfortable utilizing such a service (as long as it was confidential) two said they might be comfortable using it and six said they would not be.

When the respondents were asked whether there were any other services that had not been mentioned which they felt would be helpful fourteen said "no", one adding that it was "self attitude". Five respondents provided suggestions including: "I would like someone to talk to between counselling sessions. Close friends are helpful but it's easy to lie to them", "maybe something spiritual or church related", "we need a better hospital program or clinic. I shouldn't have to go to London or Toronto for help", "We need to educate kids in highschool" and "education for the family and public awareness".

Networking/Health Education Conference

In order to assess whether the networking/health education conference was effective at promoting networking of professionals from a variety of disciplines and at increasing professional knowledge about prevention and early identification of eating disorders and the availability of services for clients with eating disorders in the Waterloo region, an evaluation questionnaire was included in the conference package. A summary of the results of the evaluation is included in Appendix O. Eighty-seven evaluation questionnaires were completed. Although 37 respondents failed to identify their professional title, there appeared to be representation from a wide variety of disciplines including: psychometrists, psychologists, psychiatrists, counsellors, social workers, family therapists, consultants, medical doctors, nurses, school counsellors, teachers, students,

dieticians, recovered sufferers, parents and other non-professionals. Sixty eight per cent of the respondents indicated that they were "able to meet and dialogue with other professionals". Ninety five per cent said that they "enjoyed the conference in general" and eighty five per cent felt that they "learned something that would be useful in their work". When asked whether they felt they had increased their knowledge in specific areas sixty three per cent indicated yes to "diagnosis and early identification", seventy nine per cent to "prevention", eighty seven per cent to "education", seventy nine per cent to "treatment", and fifty three per cent to "Waterloo region needs and resources". The latter assessed information which was presented at the end of the day by which time many delegates had already left, thus twenty nine per cent of the delegates left this question blank compared to two per cent which was the next highest per cent of non-responses to a single question. Finally, respondents were provided space for further comments. Most made use of this option and some very useful information resulted. A summary of these comments is contained in Appendix P. In general most respondents indicated that David Garners presentation (the keynote address) was excellent. Many indicated that they would have preferred a longer question and answer period and/or more information on early warning signs and treatment. Also, constructive criticisms were offered as to how the conference could have been made more effective.

Task Force Program Planning Process

Perhaps the most constructive outcome of the networking/health education conference was the fact that it facilitated the formation of a group of community professionals who were interested in utilizing the results of the needs/resource assessment to improve services for clients with eating disorders in the Waterloo region. There are presently twelve task force members including: two recovered bulimics, two psychologists, two nurses, a social worker, psychometrist, medical doctor, nutritionist, college guidance counsellor and a mental health coordinator. Thus far the group has met seven times. The initial meeting included member introductions and the presentation of the findings of the needs/resource assessment study. Based on the findings of the needs/resource assessment the group identified five themes to be discussed at the next meeting. These themes included: 1. how can we encourage those who are afflicted with the disorders to seek help; 2. how can we ensure that individuals who are afflicted with eating disorders get in contact with professionals who are capable of treating the disorders and facilitate networking of community professionals 3. how can we best facilitate the development of self help groups for these individuals; 4. how can we increase awareness of the local family support group; and 5. how can we prevent these disorders.

After much discussion the group arrived at the consensus that these services could best be provided by opening an eating disorders resource center in the region. Having identified our purpose we then attempted to list the goals and objectives of the proposed center. Consistent with the five themes identified above, the group came to the consensus that the objectives of the proposed center were to: 1. increase public awareness and acceptance of the disorders and educate at risk groups as to the dangers associated with eating disorders and the importance of early intervention in order to encourage sufferers to seek help; 2. provide referrals to community professionals who are capable of treating the disorders; 3. provide self help groups for individuals who currently suffer from the disorders; 4. provide referrals to the local family support group; and 5. employ preventive interventions aimed at reducing the prevalence of these disorders. Further discussion resulted in the identification of two additional objectives. First, the suggestion was made that we also facilitate the education of community professionals regarding effective treatment strategies for clients with eating disorders since, although 47 of the professional mail survey respondents felt they were able to treat these disorders, we had no way of knowing whether or not they were in fact effective. Secondly, fund raising would have to be included in our list of program activities to ensure that the center would continue to exist in the event that we were not able to secure a grant. At this point the group was asked whether

there were any additional objectives that had been missed or whether they felt any of the seven identified objectives were inappropriate. All of the task force members indicated agreement with the proposed objectives.

Subsequent meetings consisted of brainstorming sessions around various possible sources of funding. One member suggested that, since our mandate was primarily prevention and health promotion we might be eligible for one of the grants currently being made available by the Ministry of Health for this purpose. A second suggestion was that we ask the Canadian Mental Health Association (C.M.H.A.) who currently sponsored the local family support group (F.R.E.E.D.) to fund an embellishment of F.R.E.E.D. Thirdly, it was suggested that we might ask to be part of the new womens center that was currently opening in the region. We decided against the latter suggestion since this would make our service inaccessible to males who do suffer from the disorders, albeit to a much lesser extent. In light of this it was decided that it would be appropriate for a few task force members to approach C.M.H.A. to find out how they would feel about funding an embellishment of F.R.E.E.D. and report the outcome to the rest of the group. Unfortunately, the outcome was not positive. Basically C.M.H.A. said they would not be in a position to take on any new programs or expand any of their existing programs for at least two years since they were already understaffed and had recently turned down other excellent proposals. As a result, we decided to pursue a grant from the Ministry of Health. One

member, who is also a member of the District Health Council, suggested that he could bring a grant proposal to the next meeting and go through the steps involved in applying for a grant.

The next task force meeting was spent going through the grant application attempting to assess the degree to which the mandate of our proposed center fit with the Ministries' mandate. The group agreed that we appeared to fit quite well and each group member agreed to take home a page of the proposal to work on. Subsequent meetings were spent going through the grant proposal page by page and discussing individual group members' suggestions for various sections of the proposal and arriving at group consensus around the contents of the proposal. By the end of the seventh meeting a reasonably accurate and complete application emerged. This exercise also helped us to clarify our objectives by forcing us to define the program activities in concrete terms as follows:

Education/Prevention

1. Information library
2. Speakers bureau
3. News letter

Support

4. Self help groups
5. One to one support
6. Family support
7. Telephone help line

Outreach

8. Referral service
9. Professional networking/education

Other

10. Fundraising
11. Training volunteers

Having developed a satisfactory grant application we decided to set the issue of funding aside temporarily and move to a discussion of suitable sponsoring agencies. There was a clear consensus in the group that, although it would be desirable to be sponsored by a credible organization in the community, the center should be physically separate from other mental health services to avoid problems of stigma. One task force member, who is employed at the Waterloo Regional Health Unit, indicated that she had mentioned the activities of the task force to the senior administrators and they had indicated an interest in the proposed center. All group members agreed that this would be an appropriate sponsoring agency and that we should arrange to make a formal presentation to the administration.

DISCUSSION

Needs/Resource Assessment

At the beginning of this paper we stated four research questions to be investigated in this study: 1. approximately how many individuals in the Waterloo region currently suffer from an eating disorder but have not sought treatment? (the service gap); 2. what services, deemed necessary in the treatment of eating disorders, do not exist in the Waterloo region? (missing services); 3. to what extent are available services in the Waterloo region sufficient to meet the service needs of clients with eating disorders? (sufficiency of extant services); and 4. to what degree are community professionals aware of specialized services for individuals with eating disorders in the Waterloo region and to what extent do they utilize these services for referral purposes? (networking of services).

Earlier in this paper in discussing the definition of "needs" assessment we talked about four types of social need as defined by Bradshaw (1977). These included: 1. normative need - needs as defined by community professionals; 2. felt need - needs as defined by the client population; 3. expressed need - demand for service; and 4. comparative need - an inferred measure of need which is arrived at by noting characteristics of individuals who seek treatment and determining the number of individuals in the population who have these characteristics. In addition, we also listed three measures of need as defined by Seigel et al.,

1978, which are consistent with our first three research questions. We also demonstrated how Seigel et al.'s three measures of need could be obtained by combining and comparing various measures of need based on Bradshaw's (1977) definitions. Specifically, a measure of the extent of the service gap is obtained by estimating the comparative need and contrasting this with an estimate of expressed need. Secondly, the identification of missing services is accomplished by combining normative and felt needs and comparing this to a list of available services. Finally, an assessment of the sufficiency of extant services in relation to estimated service needs is obtained by comparing the availability of services in quantitative terms to an estimate of comparative need. Our fourth research question - a measure of the degree of inter-agency networking - can be obtained through an assessment of professional awareness of services combined with an estimate of the frequency of interagency referrals. The former is obtained by comparing a list of available services to a listing of services thought to be "not available" by community professionals and the latter by directly measuring the number of interagency referrals. Having defined the techniques used in assessing these research questions we will now briefly discuss the obtained results.

Key Informant Interviews Essential Findings

To begin with, there was a clear consensus among the key informants that there were many individuals in the Waterloo

region who were currently suffering from an eating disorder but for various reasons had not sought treatment. In addition, as a group they indicated that there was an absence of specialized services for individuals with eating disorders in the region and that the extant services were inadequate. Specifically, the specialized services mentioned included: group therapy (free of charge); inpatient hospital program; eating disorders clinic; peer supports; and preventive informational programs. In addition they felt there was a need for the coordination of services and easier access to referrals to medical, psychological and hospital services. Although, in general, they reported that accessible, affordable and acceptable medical and psychological services were available in the region, some felt family physicians in the community were not knowledgeable about the disorders and others felt psychological services were not affordable or accessible since they were not covered by government insurance and often had long waiting lists. Finally, one key informant felt there was a need for a more active family support group in the region.

- Professional Mail Survey Essential Findings

The data from the professional mail survey indicate that there are approximately 1,317 individuals in the region who have sought treatment for an eating disorder. The majority of services were rated "high" or "medium" on measures of accessibility and affordability. Although most services were

also rated "high" or "medium" on measures of acceptability, approximately one fourth of the services were rated "low" on this variable, suggesting that it is a greater barrier to service utilization compared to accessibility and affordability. When the "actual" availability of services was calculated (by summing individual scores on accessibility, affordability and acceptability) 23.2 per cent were rated "low" on this variable. Although this represents a minority, it again suggests that nearly one fourth of all services are not available to this client population. When a cross-tabulation was performed to determine whether individual service types differed in "actual" availability, again the majority of services were rated "high" or "medium" on "actual" availability, regardless of service type.

Service needs identified in the professional mail survey included the eight provided service categories in addition to peer supports; residential treatment center; self hypnosis training; and eating disorders clinic. Based on the survey results we estimated that service providers in the Waterloo region receive approximately 850 referrals for clients with eating disorders per year.

Client Telephone Survey Essential Findings

Of the 19 client telephone survey respondents 6 indicated that they had never sought treatment for their eating problem. Their reasons for not seeking treatment suggest that they were unaware of the dangers associated with eating disorders, were

embarrassed about their behavior or did not feel prepared to enter treatment (possibly because they were resistant to the idea of gaining weight). As a group the client telephone survey participants indicated that services in the region were affordable. While the majority felt Waterloo regional services were accessible, a few reported being placed on lengthy waiting lists for psychological services. Service acceptability again emerged as the major barrier to service utilization. The majority of respondents reported that the family physicians they had been to were not knowledgeable about eating disorders and were not helpful. Similarly, the majority of those who had been hospitalized for the disorders felt that the treatment was not helpful and only half of the client-counsellor contacts were thought to be helpful. The three respondents who had attended Weight Watchers or Overeaters Anonymous all stated that the group leaders were not knowledgeable about eating disorders and neither organization had recommended that the client seek medical or psychological help. Although the question of ethics is beyond the scope of this paper, one cannot help but question the ethical acceptability of organizations such as these knowingly treating individuals with serious psychological disorders such as anorexia nervosa and/or bulimia without referring them for professional treatment.

In addition to identifying problems with the accessibility and acceptability of extant services, telephone survey respondents also indicated that there was an absence of

specialized service for the treatment of eating disorders. Specifically they indicated a need for: an eating disorders clinic; group therapy; a referral service; peer supports; spiritual support; preventative interventions; information for family members; and increased public awareness.

The Service Gap

Question: Approximately how many individuals in the Waterloo region currently suffer from an eating disorder but have not sought treatment?

Using the social indicators approach we estimated that there are between 932 and 2,986 highschool, college and university women; or between 4,823 and 11,448 adolescent and young adult females; or between 11,967 and 25,791 females of all ages currently suffering from an eating disorder in the Waterloo region, using a 95 per cent confidence interval. It is important to note here that the statistics used in calculating these estimates are from similar populations, however, apart from the one study that was conducted in the Waterloo region and reported an estimate of the prevalence of bulimia in highschool females, these estimates are not based on a sample of our population. Furthermore, as indicated in the literature review, the Social Indicators Approach should, where possible, be used in conjunction with other assessment techniques. Unfortunately, due to time and funding constraints, it was not possible to conduct a sample survey of the Waterloo region. In the present investigation the estimate for adolescent and young adult females

(women between 12 and 30 years of age) will be used in all subsequent calculations since the reported statistics are comparable to the prevalence rates reported in several epidemiological studies (as reviewed at the beginning of this paper) and the fact that eating disorders primarily affect adolescent and young adult females has been well documented (Garner & Garfinkel, 1980; Muuss, 1985). The total number of requests for service from clients with eating disorders in the Waterloo region was estimated to be 1,317 per year. It should be kept in mind, however, that this is probably an overestimation since non-respondents may have not completed the survey because they rarely treated clients with eating disorders (we noted earlier that this was, in fact, one of the reasons provided for not completing the survey in the follow-up phone call procedure). In addition, since eating disorders are best treated using a multidisciplinary approach, individuals who are simultaneously seeing a medical doctor, psychologist and nutritionist would have been counted three times. Similarly, clients who switched counsellors or doctors within the year would have been counted twice. Thus, using our prevalence estimate of between 4,823 and 11,448 of adolescent and young adult females, we can estimate that there are between 3,506 and 10,131 individuals in the service gap (4,823 - 1,317 and 11,448 - 1,317 respectively). Although it is possible that these individuals do not want treatment, a more likely explanation is that they are hesitant to seek treatment because they are embarrassed about their behavior

(in the case of the bulimic) or are resistant to gaining weight (in the case of the anorexic) (Vandereycken & Meerman, 1984). For instance, when the six client telephone survey respondents who had not sought treatment for their eating problem were asked why those classified as bulimic made statements like: "afraid my parents will find out" and "my father would kill me" while those classified as anorexic made statements like: "not ready yet" and "don't trust them to tell you the truth". Alternatively, it might reflect the fact that the client population is unaware of the availability of services for the treatment of eating disorders in the Waterloo region. The degree to which client telephone survey participants were aware of the availability of services was indirectly measured by asking them: "is there any type of help for your eating problem that you have found particularly difficult to find in the Waterloo region?". Their responses indicated that they were aware of available services since the services they mentioned were services that do not exist in the region.

The Identification of Missing Services

Question: What services, deemed necessary in the treatment of eating disorders, do not exist in the Waterloo region?

As noted above the identification of missing services is accomplished by combining normative needs (needs as defined by the professional) and felt needs (needs as defined by the client population) and comparing this to a list of available services.

In the present investigation two methodologies were employed in order to assess normative needs. To begin with, key informants were asked to report the types of treatment or service they felt were important for clients with eating disorders. Secondly, respondents to the professional mail survey were provided with a list of eight types of service that are important in the treatment of eating disorders (we noted earlier that this list was derived from a review of the literature on the treatment of eating disorders and an examination of treatment needs as defined by the key informants) along with an "other" option and asked to check those that they felt were important.

An assessment of the felt needs of the client population was conducted based on the data obtained from four questions included in the client telephone survey. First, respondents were asked whether they had utilized medical, psychological and nutritional services and whether or not they found these services helpful. Secondly, they were asked whether there was any type of help that they had found particularly difficult to find in the Waterloo region. Third, they were provided with a list of five different types of supportive counselling and asked whether they thought they would be helpful. Finally, respondents were asked if there was any other service that had not been mentioned which they felt would be helpful.

When responses to the two questions measuring normative needs and four questions measuring felt needs were combined the

following list of service needs emerged: 1. medical monitoring by professionals who are knowledgeable about the disorders; 2. a better hospital program and easier access to the hospital; 3. psychological counselling that is affordable by professionals who are knowledgeable about the disorders and do not have long waiting lists; 4. family therapy; 5. group therapy; 6. nutritional counselling; 7. family support/education; 8. eating disorders clinic; 9. telephone help line; 9. easier access to referrals; 10. peer support; 11. one to one support; 12. educational/preventive interventions; 13. case finding; 14. spiritual support; 15. nurse visitation; and 16. increased public awareness. Having identified the services necessary in treating eating disorders we can now identify missing services by comparing this list to a list of available services.

In order to obtain information on the availability of services respondents to the professional mail survey were again provided with a list of the eight service types along with an "other" option and asked to check the services they offered. In addition, a series of questions were included to assess the degree to which these services were accessible, affordable, and acceptable, since a service that is not at least moderately accessible, affordable and acceptable will not be utilized and thus should not be included in a list of available services. Despite the fact that the criteria employed in measuring accessibility, affordability and acceptability were quite strict, no service was eliminated from the list of available services as

a result of this additional criterion. Thus, the following list of available services emerged: 1. medical monitoring; 2. hospitalization; 3. personal counselling; 4. nutritional counselling; 5. self help; 6. family therapy; 7. family support; 8. educational/preventive; 9. referral; 10. case finding; 11. peer support; and 12. nurse visitation. Finally, by comparing this list to our list of service needs we can identify the following missing services: 1. eating disorders clinic; 2. telephone help line; 3. one to one support; 4. spiritual support; and 5. increased public awareness.

An inspection of the data obtained from the key informant interviews and client telephone survey revealed several contradictions in the data. To begin with, although the professional mail survey data indicated that medical monitoring, hospitalization and personal counselling were accessible, affordable and acceptable, both key informants and client telephone survey respondents made statements to the contrary. There was concern expressed over the lack of medical doctors who were knowledgeable about the disorders (acceptability); the long waiting lists (accessibility) and high fees (affordability) for psychological counselling by professionals who were knowledgeable about the disorders (acceptability); and the ineffectiveness (acceptability) and difficulty getting access to (accessibility) the local hospital. Secondly, although several professional mail survey respondents indicated that they offered group therapy and family support, several key informants had noted that there were

currently no groups specifically for clients with anorexia nervosa and/or bulimia in the community and that there was only one family support group of which many people were not aware. Thirdly, a theme that continuously emerged in the key informant interviews was the difficulty making appropriate referrals yet 6 of the 104 mail survey respondents indicated that this was a service they provided. Similarly, 35 of the 104 mail survey respondents indicated that a service they provided was education/prevention. In contrast key informants reported that there was a clear need for educational/preventive interventions in the community.

The discrepancy between the availability of accessible, affordable and acceptable medical, psychological and hospital services as measured by the professional mail survey and the perceived availability of these services as measured by the key informant interviews and client telephone survey may simply reflect the fact that there is a lack of awareness of the availability of services both on the part of the community professional and potential clients, suggesting the need for a visible referral service. Respondents who reported offering a self help group were most likely referring to a weight control group or a group for women with a wide range of emotional and/or psychiatric problems. Those who indicated that they offered family support were likely referring to family support on a case by case basis as opposed to a family support group. These conclusions seem warranted in light of the fact that the key

informants, who were selected on the basis of having special knowledge of the community and/or the treatment of eating disorders explicitly stated that there were currently no self help groups and only one family support group in the community. Furthermore, the local family support group was unaware of any self help groups in the community.

The six survey respondents who included referral in the list of services they provided did not indicate whether or not they experienced difficulty making these referrals or whether or not they felt confident that the referrals they made were appropriate (since the questionnaire did not ask for this information) however, an examination of the key informant interview data reveals that the highschool guidance counsellors, who had indicated that one of the services they offered was referral to community professionals, reported experiencing difficulty making referrals and were unsure of the appropriateness of the referrals they were able to make. Furthermore, direct measures of the extent of inter-agency networking also indicate a lack of awareness of specialized services for these clients. This question will be explored in more detail in the section on inter-agency networking. Finally, as in the case of family support, the large number of respondents who reported that one of the services they offered was educational/preventive interventions may simply reflect the fact that they interpreted this to mean on a case by case basis. While this is a useful and important service, it cannot replace the more efficient method of

primary prevention at the community level.

Provided these assumptions are correct, we are left with the following list of missing services based on our list of services identified as essential in the treatment of eating disorders: 1. eating disorders clinic; 2. telephone help line; 3. one to one support; 4. spiritual counselling; 5. increased public awareness; 6. self help; 7. educational/preventive interventions; and 8. appropriate referrals.

Sufficiency of Extant Services

Question: To what extent are available services in the Waterloo region sufficient to meet the service needs of clients with eating disorders?

Apart from identifying missing services it is equally important to assess whether the services that do exist are sufficient to meet the service needs of the client population of interest in quantitative terms. In discussing the service gap we noted that there are between 4,823 and 11,448 adolescent and young adult females currently suffering from an eating disorder in the Waterloo region. As noted in the previous section, the following services appear to be available in the Waterloo region: 1. medical monitoring; 2. hospitalization; 3. personal counselling; 4. nutritional counselling; 5. family therapy; 6. family support; 7. case finding; 8. peer support; and 9. nurse visitation. . In the results section we estimated the "actual" availability of all services reported by survey respondents that

might be utilized by clients with eating disorders by combining reported availability scores with data on the accessibility, affordability, and acceptability of services. Next, in order to assess the "actual" availability of individual service types a cross-tabulation was performed between "actual" availability and service type. Finally, the obtained data, which represented 46 per cent of services in the Waterloo region thought to be appropriate for the survey, was used to estimate the "actual" availability of all services in the region. The distribution that emerged for the nine services listed above is presented in Table 5.

TABLE 5

"Actual" Availability by Service Type (region wide/selected services)

Service Type	Actual Availability Low	Med.	High	Total
1. medical monitoring	20	35	50	104
2. hospitalization	15	24	41	80
3. personal counselling	39	59	65	163
4. nutritional counselling	17	33	52	102
5. family therapy	17	35	35	87
6. family support	0	0	2	2
7. case finding	0	0	2	2
8. peer support	0	0	2	2
9. nurse visitation	0	0	2	2
Total	108	186	251	

Note: since most respondents indicated that they provided more than one type of service, the numbers in this table are based on services provided rather than individual survey respondents.

An examination of these data reveals that, although the individual service types vary widely in the number of respondents

who provide them, most services scored high on "actual" availability and there is a consistent decrease in the number of services rated medium and low on "actual" availability as one moves from high to low "actual" availability regardless, of service type. We arbitrarily decided that any service that scored medium or high on "actual" availability would be considered "available". Using this criterion we obtained the following estimates of service availability:

medical monitoring	85
hospitalization	65
personal counselling	124
nutritional counselling	85
family therapy	70
family support	2
case finding	2
peer support	2
nurse visitation	2

An assessment of the sufficiency of available services in relation to service needs must take into account the fact that, while some services are essential, others may or may not be needed depending on the individual client. Medical monitoring, personal counselling and nutritional counselling, for example, are essential services in the treatment of eating disorders. Hospitalization is necessary in some cases, however, outpatient treatment is often sufficient and in some cases more effective (Garner & Davis, 1986). Similarly, depending on the age of the client and the family situation, family therapy can be either very useful or totally inappropriate (Pallazzoli, 1978). Family support is probably always important although again, the living arrangements of the individual client will determine whether the

person in need of support is a parent, sibling, spouse or close friend. Case finding is of vital importance in treating eating disorders since a good prognosis has been shown to be associated with early detection and intervention and individuals with eating disorders frequently put off seeking treatment until the disorder has become quite severe. Peer support and nurse visitation are useful services which are probably quite effective with certain clients, however, they could not be considered essential services in every case. Having prioritized the various service types we are now ready to examine the sufficiency of services.

By dividing our estimated prevalence of between 4,823 and 11,448 adolescent and young adult females by the data on service availability listed above we can estimate that, of all service providers in the Waterloo region who potentially offer services to clients with eating disorders, each medical doctor will receive between 57 and 135 requests for service from clients with eating disorders, each counsellor between 39 and 92 requests, and each nutritionist between 57 and 135 requests in a one year period. Furthermore, the one family support group could theoretically receive requests for service from the family and friends of between 4,823 and 11,448 sufferers. Unfortunately, it is not possible to estimate the sufficiency of hospital, family therapy, case finding, peer support and nurse visitation services in this way since we have no way of knowing the number of individuals who would be in need of these services. It is possible, however, to check the accuracy of the above conclusions

by again referring to our key informant interview data.

When the key informants were asked whether they felt extant services were sufficient to meet the demand for service from clients with eating disorders most felt they were not. One of the key informants felt they were sufficient to meet the present demand but not the potential demand since individuals with these disorders often do not seek treatment. This statement in fact provides a fairly accurate summary of the data. The needs of the estimated 1,317 individuals who are currently utilizing services in the region for treatment of an eating disorder could quite easily be met by 85 medical doctors (an average of 15 eating disordered clients each in a one year period), 124 counsellors (an average of 11 eating disordered clients each in a one year period), and 85 nutritionists (an average of 15 eating disordered clients each in a one year period). On the other hand, it is unlikely that one family support group is able to adequately meet the needs of the family and friends of this many clients. With the implementation of community wide educational/preventive interventions the number of individuals "coming out of the closet" could potentially increase threefold. In light of this there is presently no service that could be considered sufficient to meet the estimated service needs of clients with eating disorders.

Networking of Extant Services

Question: To what degree are community professionals aware of specialized services for individuals with eating disorders in the

Waterloo region and to what extent do they utilize these services for referral purposes?

Networking of services was assessed by asking professional mail survey respondents about their awareness of services for individuals with eating disorders in the region and secondly by asking them to report how frequently they received referrals for these clients. Professional mail survey respondents were first provided with the list of eight service types, including the "other" option, and asked what types of treatment or service they felt were important in treating the disorders. Based on this list they were asked to check those services that they were unable to provide themselves and did not feel they had accessible, affordable, and acceptable resources to refer the client in the Waterloo region. Although peer supports, residential treatment facility, eating disorders clinic and hypnosis were mentioned in response to the "other" option, these services were not mentioned in the list of "not available" services suggesting that the respondent either provided the service his or herself, was aware of an accessible, affordable, and acceptable resource for referral, or misinterpreted the question. The eight provided service categories were thought to be "not available" by between 21 and 38 of the 102 respondents who completed this question. Personal counselling with a score of 21 was thought to be the most available, and self help with a score of 38 the least available. The fact that between 21 and 39 per cent of the respondents were unaware of the existence of

services for individuals with these disorders suggests a lack of inter-agency networking in treating eating disorders. This conclusion is further supported by the data on the frequency with which respondents received referrals for these clients. While all survey respondents indicated that they provided services for clients with eating disorders, 32 per cent stated that in a one year period they did not receive a single referral for an eating disordered client and 53 per cent reported receiving between one and five referrals for clients with these disorders per year. Only 15 per cent reported receiving six or more referrals per year, the majority of whom were nutritionists.

In the results section we estimated that there are approximately 850 inter-agency referrals for these clients in the Waterloo region. When this estimate is compared to our estimated 1,317 individuals who are utilizing services for the treatment of an eating disorder, an estimated 467 clients are not being referred. In light of the fact that adequate treatment of these disorders requires a multidisciplinary team approach this finding is particularly worrisome.

Since key informants were selected on the basis of having special knowledge of the community and/or the treatment of eating disorders, we expected that they would demonstrate a good awareness of service availability. Their responses to two questions assessing the degree to which they were aware of services for clients with eating disorders and whether they felt

they had adequate resources to refer these clients in the Waterloo region were compared to the professional mail survey data on these variables to assess its validity. One key informant felt services were adequate to meet the present demand but not the potential demand due to the large number of individuals in the service gap. Many felt there was a lack of professionals who were knowledgeable about the disorders, were affordable and did not have long waiting lists. While a few key informants reported that medical services were adequate but psychological services were not, an equal number reported the exact opposite observation. Specific services thought to be "not available" by key informants included an eating disorders clinic, a specialized hospital program that was accessible, and support groups for the sufferers. While these data suggest a greater awareness of service availability compared to professional mail survey respondents, even the key informants demonstrate a lack of awareness of services for this client population suggesting the need for networking of services in the region.

Other Findings

Apart from the findings related to the research questions stated at the beginning of this paper, there were a number of other findings that were of interest. To begin with, the key informant interview process and client telephone survey data proved to be invaluable in interpreting the professional mail survey data. There were a number of problems with these data,

most of which could have been overcome by having worded the survey questions differently. For example, the eight service categories should have been defined to avoid misinterpretation and the question asking respondents to identify missing services should have been worded more clearly. This problem is not uncommon with mail survey techniques as noted in the literature review. Although, as previously noted, we were unable to conduct a sample survey of Waterloo region residents to obtain an accurate estimate of the prevalence of these disorders, in light of the secretive nature of these problems, the technique used did allow us to make contact with a reasonable number of individuals in the community who are afflicted with the disorders. We intentionally asked telephone survey respondents where they had seen the poster advertisement in order to assess the appropriateness of the various locations. Apart from the respondents who were referred by their counsellor all respondents indicated that they came across the poster either at school or in the washroom at one of the local shopping malls. In addition, several respondents added that they thought the idea of displaying the posters on the inner side of washroom stalls was appropriate. Perhaps the most important piece of information that came out of the client telephone survey data was the importance of making sure individuals who are afflicted with these disorders have access to appropriate treatment. One survey respondent indicated that she had sought treatment from a medical doctor but that this experience had "turned her off" the idea of

seeking further treatment because the doctor was not knowledgeable about the disorders. This emphasizes the importance of ensuring individuals with these disorders have easy access to appropriate treatment.

Networking/Health Education Conference

The decision to use this methodology for providing feedback to professional mail survey respondents proved to be quite fruitful. To begin with, there was representation from a wide variety of disciplines and 68 per cent of the delegates reported that they were able to meet and dialogue with other community professionals. In addition, most delegates reported having increased their knowledge in the areas of diagnosis and early identification; prevention; education; treatment; and Waterloo region needs and resources. In our literature review we noted that early identification and treatment were associated with a good prognosis and that educational/preventive interventions were essential to slow the rapidly increasing prevalence of these disorders. The results of the needs assessment clearly indicated a need for networking of community services. Furthermore, a quick examination of the information provided in response to the invitation for further comments (see Appendix P) suggests that community professionals would welcome the opportunity to further develop their knowledge in all of these areas.

Task Force Evolution

Apart from providing an opportunity for professional networking and educating community professionals on various topics related to eating disorders, the Networking/Health Education conference facilitated the development of a task force of community professionals. As in the case of the networking conference there is representation from a wide range of disciplines on the task force. In addition to demonstrating an unrelenting commitment to the task force, members have provided valuable insights based on the unique perspective of their various distiplines, which have helped to define the types of services that would most likely be utilized by clients with these disorders. Perhaps the most exciting part of this project is the notion that the findings of the needs assessment will actually be utilized to improve services for individuals with eating disorders, provided we are able to secure funding.

In the procedure section we noted that we are presently in the process of applying for funding for an eating disorders resource center in the Waterloo region that would: 1. encourage those afflicted with the disorders to seek help; 2. put these individuals and other community professionals in contact with professionals who are knowledgeable about the disorders; 3. provide self help groups for sufferers; 4. increase awareness of the local family support group; 5. facilitate educational/preventive interventions in the community; 6. educate

community professionals on effective treatment strategies; and 7. engage in fund raising activities to ensure continuation of the center.

We are now in the process of identifying an appropriate sponsoring agency. Although, as noted above, the group felt the resource center should be physically separate from existing mental health services, it was also thought important that we be associated with a reputable community agency in order to establish credibility. Presently we are investigating the possibility of being sponsored by the Waterloo Regional Health Unit which has expressed an interest in our project.

Conclusions

Methodologically the decision to use multiple assessment techniques proved quite fruitful. In combining data from various sources, including data obtained from the client population itself, we obtained a clear and comprehensive picture of service needs and resource availability in the region. One notable limitation was the use of the social indicators approach as the sole measure of the prevalence of eating disorders in the Waterloo region. As previously noted, this technique should normally be used in combination with other more direct techniques. Due to the secretive nature of the disorders no technique can provide a truely accurate estimate of incidence, however, had the time and resources been available it would have been preferable to directly survey at risk groups within the

region.

The results of this study taken as a whole represent an effective model for the development of a community resource. In particular, the fact that the research was undertaken in fulfillment of the thesis requirement of a Masters program in Community Psychology is particularly appropriate since, in addition to providing the community with valuable information, as a student I was provided with an invaluable learning experience. The key informant interview process, Networking/Health Education conference and Task Force involvement provided me with practical experience in relating to professionals from a wide range of disciplines. In addition, the Networking/Health Education conference proved to be an effective tool for coordinating community professionals and forming a committed multidisciplinary group interested in utilizing the results of the survey to improve services for this client population through program development efforts.

At the beginning of this paper we noted that this study was conducted in response to a university health centers request for assistance in meeting the needs of the increasing number of students requesting help for eating disorders. We also noted that the proposed needs/resource assessment study required a paradigm shift from the traditional individualsitic treatment paradigm from which the centers director viewed the problem toward a community level competency framwork. While the utility

of utilizing this non-traditional paradigm is apparent from the scope and richness of the obtained data, it can be argued that the very act of studying the availability of individualistic treatment services perpetuates the person blame ideology. Feminist theorist Dawn Currie (1988), for example, states that the physiological symptoms of eating disorders are secondary to the social and that health care professionals currently treat the symptoms rather than the cause of the disorders. Feminist theory is based on the assumption that the devalued position of women in our society is a causal factor in the development of eating disorders and thus assert that treatment must involve consciousness raising as opposed to changing the individual. While recognizing the validity of this argument, we felt it was important to investigate the availability of treatment services given the large number of individuals currently suffering from these potentially fatal disorders.

REFERENCES

Anderson, A.E., Hedblom, J.E., & Hubbard, F.A. (1983). A multidisciplinary team treatment for patients with anorexia nervosa and their families. International Journal of Eating Disorders, 2, 181-192.

Bell, R.A., Nguyen, T.D., Warheit, G.J., & Buhl, J.M. (1978). Service utilization, social indicator, and citizen survey approaches to human service needs assessment. In C.C. Attkisson, W.A. Hargreaves, M.J. Horowitz, & J.E. Sorensen (Eds.) Evaluation of human service programs, (pp. 253-300). New York: Academic Press.

Bloom, B.L. (1975). Changing patterns of psychiatric care, New York: Human Sciences Press.

Bradshaw, J. (1977). The concept of social need. In N. Gilbert and H. Specht (Eds.), Planning for social welfare: Issues, models, and tasks. Englewood Cliffs, New Jersey: Prentice Hall.

Bruch, H. (1973). Eating disorders, New York: Basic Books.

Bruch, H. (1976). The treatment of eating disorders. Mayo Clinic Proceedings, 51, 266-272.

Bruch, H. (1978). The golden cage: The enigma of anorexia nervosa. Cambridge: Harvard University Press.

Caplan, N., & Nelson, S.D. (1973). On being useful: The nature and consequences of psychological research on social problems. American Psychologist, 28, 199-211.

Chng, C.L. (1983). Anorexia nervosa: Why do some people starve themselves? The Journal of School Health, Jan., 22-26.

Crisp, A.H., Palmer, R.L., & Kalucy, R.S. (1976). How common is anorexia nervosa? A prevalence study. British Journal of Psychiatry, 128, 549-554.

Crocker, P.J., & George, M.S. (1985). Participation and utilization: Assessing the skills training needs of the chronically mentally ill. Canadian Journal of Community Health, 4, 73-82.

Crowther, J.H., Post, G., & Zaynor, L. (1985). The prevalence of bulimia and binge eating in adolescent girls. International Journal of Eating Disorders, 4, 29-42.

Currie, D. (1988). Starvation amidst abundance: female adolescents and anorexia. In: B.S. Bolaria and H.D. Dickinson eds. Sociology of Health Care in Canada, Angler Press Ltd.: Toronto, pp. 198-215.

Demone, H.W., & Harshbarger, D. (Eds.) (1974). A handbook of human service organizations. New York: Behavioral Publications.

Dubey, S.N. (1970). Community action programs and citizen participation: Issues and confusions. Social Work, 15, 76-84.

Duddle, M., (1973). An increase of anorexia nervosa in a university population. British Journal of Psychiatry, 123, 711-712.

Fairburn, C.G., & Cooper, P.J. (1982). Self-induced vomiting and bulimia nervosa: An undetected problem. British Medical Journal 284, 1153-1155.

Fisher, R.J. (1982). Social psychology: An applied approach. (pp. 86-113). New York: St. Martin's Press.

Frankenburg, F., Garfinkel, P., & Garner, D. (1982). Anorexia nervosa: Issues in prevention. Journal of Preventive Psychiatry, 4, 469-483.

Franko, D.L. (1987). Anorexia nervosa and bulimia: A self-help group. Small Group Behavior, 18, 398-407.

Garfinkel, P.E. (1985). The treatment of anorexia nervosa in Toronto. Journal of Psychiatric Research, 19, 405-411.

Garfinkel, P.E., Moldofsky, H., & Garner, D.M. (1980). The heterogeneity of anorexia nervosa: Bulimia as a distinct subgroup. Archives of General Psychiatry, 37, 1036-1040.

Garner, D. (1982). Anorexia nervosa: the relentless pursuit of thinness. Health News Digest, 1(3).

Garner, D. (1983). Understanding anorexia nervosa. Health News Digest, 2(2).

Garner, D., (1984). Anorexia nervosa. Paper presented at the Bulimia Anorexia Nervosa Association Recovery Seminar, University of Windsor, Windsor, Ontario.

Garner, D.M. (1988). Early identification, prevention and treatment of eating disorders: A one day conference, Keynote address. University of Waterloo, Waterloo, Ontario.

Garner, D.M., & Davis, R. (1986). The clinical assessment of anorexia nervosa and bulimia nervosa. Innovations in Clinical Practice: A Source Book, 5, 5-28.

Garner, D.M., & Garfinkel, P.E. (1980). Sociocultural factors in the development of anorexia nervosa. Psychological Medicine 10, 647-656.

Garner, D.M., Garfinkel, P.E., & O'Shaughnessy, M. (1983). Clincald and psychometric comparison between bulimia in anorexia and bulimia in normal weight women. Report of the Fourth Ross Conference on Medical Research, 6-11.

Garner, D.M., Garfinkel, P.E., & O'Shaughnessy, M. (1985). The validity of the distinction between bulimia with and without anorexia nervosa. American Journal of Psychiatry, 142, 581-587.

Garner, D.M., Garfinkel, P.E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women, Psychological Reports, 47, 483-491.

Garner, D.M., & Isaacs, P. (1986). The fundamentals of psychotherapy for anorexia nervosa and bulimia nervosa. Innovations in Clinical Practice: A Source Book, 5, 29-44.

Garner, D., Olmsted, M., & Polivy, J. (1983). Development and validation of a multidimensional eating disorders inventory for anorexia nervosa and bulimia. International Journal of Eating Disorders, 2, 15-34.

Hart, K.J., & Ollendick, T.H. (1985). Prevalence of bulimia in working and university women. American Journal of Psychiatry, 142, 851-854.

Halmi, K.A., Falk, J.R., & Schwartz, E. (1981). Binge eating and vomiting: A survey of a college population. Psychological Medicine, 2, 697-706..

Hedblom, J.E., Hubbard, F.A., & Anderson, A.E. (1981). Anorexia nervosa: A multidisciplinary treatment program for patient and family. Social Work in Health Care, 7, 67-83.

Heller, K., Price, R.H., Reinharz, S., Riger, S., & Wandersman, A. (1984). Psychology and community change: Challenges of the future (2nd ed), (pp. 172-226). Homewood, Il: The Dorsey Press.

Herzog, D.B., & Ott, I.L. (1986). Dangerous eating habits. Science Year Worldbook, 59-69.

Hodgson, S., (1984). Efficient and effective human services: Some assumptions about why and how to involve community residents, Canadian Journal of Community Mental Health, 1, 27-38.

Holmgren, S., Humble, K., Norring, C., Roof, B., Rosmark, B. and Sohlberg, S. (1983). The anorectic bulimic conflict, International Journal of Eating Disorders, 2(2), 3-14.

Hudson, J.I., & Pope, H.G. (1986). Treatment of bulimia: A review of current studies. New Directions in Mental Health Services, 31, 71-85.

Inbody, D.R., & Ellis, J.J. (1985). Group therapy with anorexic and bulimic patients: Implications for therapeutic intervention. American Journal of Psychotherapy, 39, 411-420.

Johnson, M., (1982). Anorexia nervosa: Framework for early identification and intervention. Issues in Mental Health Nursing, 4, 87-99.

Johnson, C., & Berndt, D.J. (1983). Preliminary investigation of bulimia and life adjustment. American Journal of Psychology, 140, 774-777.

Johnson, C., Connors, M., & Stuckey, M. (1983). Short-term group treatment of bulimia: A preliminary report. International Journal of Eating Disorders, 2, 199-208.

Johnson, C., & Flach, A. (1985). Family characteristics of 105 patients with bulimia. American Journal of Psychiatry, 142, 1321-1324.

Kalliopuska, M. (1982). Body image disturbances in patients with anorexia nervosa. Psychological Reports, 51, 715-722.

Katzman, M.A., Wolchik, S.A., & Braver, S.L. (1984). The prevalence of frequent binge eating and bulimia in a non-clinical sample. International Journal of Eating Disorders, 3, 53-62.

Kinoy, B.P. (1985). Self-help groups in the management of anorexia nervosa and bulimia: A theoretical base. Transactional Analysis Journal, 15, 73-78.

Lapouse, R. (1967). Problems in studying the prevalence of psychiatric disorder. American Journal of Public Health, 57, 947-954.

Larocca, F.E.F., & Goodner, S.A. (1986). Tube feeding: Is it ever necessary? New Directions for Mental Health Services, 31, 87-98.

Lenihan, G.O., & Sanders, C.D. (1984). Guidelines for group therapy with eating disorder victims. Journal of Counselling and Development, 63, 252-254.

Lieb, R.C., & Thompson, T.L. (1984). Group psychotherapy of four anorexia nervosa inpatients. International Journal of Group Psychotherapy, 34, 639-642.

Loomer, M.L., & Woody, E.Z. (1988). The relation of parent and peer variables to eating disordered tendencies in female adolescents. Unpublished Doctoral Dissertation, University of Waterloo, Waterloo, Ontario.

Love, S., & Johnson, C.L. (1985). Etiological factors in the development of bulimia. Head Line News, 48(2).

Maceyko, S., & Nagelburg, D.B. (1985). The assessment of bulimia in highschool students. Journal of School Health, 55, 135-137.

Marti-Costa, S., & Serrano-Garcia, I. (1983). Needs assessment and community development: An ideological perspective. Strategies for needs assessment in prevention, (pp. 75-88). Press.

Mechanic, D. (1980). Mental health and social policy (2nd ed.). Englewood Cliffs, N.J.: Prentice Hall.

Miller, F.T., (1981). Mental health center versus community perceptions of mental health services. Journal of Community Psychology, 9, 204-209.

Milord, J.T., (1976). Human service needs assessment: Three non-epidemiological approaches. Canadian Psychologist, 17, 260-269.

Misik, I.M., (1981). When the anorectic patient challenges. Nursing, Dec., 46-49.

Morgan, H.G., Purgold, J., & Welbourne, J. (1983). Management and outcome in anorexia nervosa: A standardized prognostic study. British Journal of Psychiatry, 143, 282-287.

Nelson, G., Potasznik, H., & Bennett, E. (1983). Primary Prevention: Another perspective. Canadian Journal of Community Mental Health, 2, 3-12.

O'Donnel, E., & Chilman, C. (1969). Participation of the poor as advisors and policy makers in public welfare, Welfare in Review, 5, 1-10.

Pallazzoli, M.S. (1978). Self-starvation: From individual to family therapy in the treatment of anorexia nervosa. New York: Aroson.

Perlman, B., & Fisher Dobbin, D.D. (1984). System service provision and client service utilization in public sector, human service organizations. Journal of Community Psychology, 12, 21-30.

Piccinini, H., & Mitic, W. (1987). Self-esteem levels of female university students who exhibit bulimic behavior. Canada's Mental Health, June, 15-19.

Pope, H.G., Jr., Hudson, J.I., & Yurgelun-Todd, D. (1984). Anorexia nervosa and bulimia among 300 suburban women shoppers. American Journal of Psychiatry, 141, 292-294.

Pope, H.G., Hudson, J.I., Yurgelun-Todd, D., & Hudson, M.S. (1984). Prevalence of anorexia nervosa and bulimia in three student populations. International Journal of Eating Disorders, 3(3), 45-51.

Posavac, E.J., & Carey, R.G. (1985). Program evaluation: Methods and case studies, (2nd Edition). New Jersey: Prentice-Hall.

Pyle R.L., & Mitchell, J.E. (1986). The prevalence of bulimia in selected samples. _____ (pp. 241-252). The University of Chicago Press.

Pyle, R.L., Mitchell, J.E., Eckert, E.D., Halvorson, P.A., Neuman, P.A., & Goff, G.M. (1983). The incidence of bulimia in freshman college students. International Journal of Eating Disorders, 2(3), 75-85.

Rappaport, J. (1977). Community psychology values, research and action. New York: Holt, Rinehart and Winston.

Reiff, R. (1974). The control of knowledge: The power of the helping professions. Journal of Applied Behavioral Science, 10, 451-461.

Rosen, J.C., & Leitenberg, H. (1982). Bulimia nervosa: Treatment with exposure and response prevention. Behavior Therapy, 13, 117-124.

Rossi, P.H., Freeman, H.E., & Wright, S.R. (1979). Evaluation a systematic approach. Beverly Hills, CA: Sage.

Rothman, J., (1978). Conversion and design in the research utilization process. Journal of Social Service Research, 2, 117-131.

Rothman, L., (1982). Anorexia nervosa: Health topics quiz. Bestways, Aug., 88.

Royce, D., & Drude, K. (1982). Mental health needs assessment: Beware of false promises. Community Mental Health Journal, 18, 97-105.

Sanger, E., & Cassino, T. (1984). Eating disorders: Avoiding the power struggle. American Journal of Nursing, Jan., 31-33.

Sheinin, J.C. (1983). Medical evaluation and management of patients with anorexia nervosa and related eating disorders. Unpublished manuscript. Division of Endocrinology and Metabolism, Department of Medicine, Michael Reese Hospital and Medical Center, University of Chicago, Pritzker School of Medicine.

Siegel, L.M., Attkisson, C.C., & Carson, L.G. (1978). Need identification and program planning in the community context. In C.C. Attkisson, W.A. Hargreaves, M.J. Horowitz & J.E. Sorensen (Eds.) Evaluation of human service programs, (pp. 215-251) New York: Academic Press.

Smith, M.C. & Thelen, M.H. (1984). Development and validation of a test for bulimia. Journal of Consulting and Clinical, 52, 863-872.

Stangler, R.S., & Printz, A.M. (1980) DSM-III: Psychiatric diagnosis in a university population. American Journal of Psychiatry, 137, 937-940.

Stefl, M.E., & Prosperi, D.C. (1985). Barriers to mental health service utilization. Community Mental Health Journal, 21, 167-178.

Steinhausen, H.C., & Glanville, K. (1983). Retrospective and prospective follow-up studies in anorexia nervosa. International Journal of Eating Disorders, 2(4), 221-236.

Strober, M. (1981). The significance of bulimia in juvenile anorexia nervosa: An explanation of possible etiological factors. International Journal of Eating Disorders, 1(1), 28-43.

Strober, M., Salkin, B., Burroughs, J., & Marrell, W. (1982). Validity of the bulimia restricter distinction in anorexia nervosa: Parental personality characteristics and family psychiatric morbidity. Journal of Nervous and Mental Disease, 170, 345-351.

Szmukler, G.I. (1985) The epidemiology of anorexia nervosa and bulimia. Journal of Psychiatric Research, 19, 143-153.

Vandereycken, W., & Meermann, R. (1984). Anorexia nervosa: Is prevention possible? International Journal of Psychiatry in Medicine, 14, 191-205.

VanThorne, M.D., & Vogel, F.X. (1985). The presence of bulimia in highschool females. Adolescence, 20(77), 45-51.

Walsh, R.T. (1987). The evolution of the research relationship in community psychology. American Journal of Community Psychology, 15, 773-778.

Walsh, R.T. (in press). The dark side of our moon: Iatrogenic aspects of professional psychology. Journal of Community Psychology.

Wardel, J., & Beinart, H. (1981). Dieting and binge eating: behavioral analyses and modification. British Journal of Clinical Psychology, 20, 97-109. .

Warheit, G.J., Bell, R.A., & Schwab, J.J. (1977). Needs assessment approaches: Concepts and methods. Washington D.C.: U.S. Government Printing Office.

Watzlawick, P., Wealland, J., & Fisch, R. (1979). Change: Principles of problem formation and problem resolution, (pp. 92-109). New York: W.W. Norton & Co.

Weeda-Mannak, W.L., Drop, M.J., Smits, F., Strybosch, L.W., & Bremer, J.J. (1983). Toward an early recognition of anorexia nervosa. International Journal of Eating Disorders, 2(4), 27-37.

Zuckerman, D.M., Colby A., Ware, N.C., & Lazerson, J.S. (1986). The prevalence of bulimia among college students. American Journal of Public Health, 76, 1135-1137.

APPENDIX A

KEY INFORMANT INTERVIEW QUESTIONS

Name_____

Facility Address_____

1. What is your occupational title?

2. Do you accept referrals for clients with eating disorders?

3. What, if any, treatment or service do you offer clients with eating disorders?

4. Do you feel this treatment or service is effective?

5. In your opinion, what other forms of treatment or service are important for clients with eating disorders?

6. To your knowledge, are these adjunct treatments or services available in the Waterloo region?

7. Are they adequate to meet the demand for service from this population?

8. Approximately how frequently do you receive requests for service from clients with eating disorders?

9. If you are unable to meet a clients treatment needs directly do you feel you have adequate resources to refer the client?

10. Is there a fee for your service?

11. Are there certain eligibility criteria for your service?

12. Do you have a waiting list?

13. How frequently do you read about eating disorders or attend seminars or conferences on eating disorders?

14. Do you have any other thoughts or ideas regarding service needs or the availability of services for this client population, that I have neglected to mention?

APPENDIX B

PROFESSIONAL MAIL SURVEY QUESTIONNAIRE

Dear Professional:

I am a masters degree student at Wilfrid Laurier University in the Social Community Psychology program. I am presently working with my thesis and practicum advisor, Dr. Steve Chris, on a study that may be of some interest to you. I am conducting this research as part of my Masters degree thesis requirement and also in conjunction with my practicum placement at Health and Safety Services, University of Waterloo.

The study involves a needs assessment/networking project related to services available for individuals with the eating disorders anorexia nervosa and bulimia in the University communities and the Waterloo region. The first segment of the project is a mail survey of service providers in the Waterloo region (please see attached). I am aware that most professionals carry extremely heavy caseloads, thus I have attempted to keep the attached questionnaire as brief as possible. I would be very grateful if you would take approximately fifteen minutes to complete this questionnaire and return it to me in the enclosed postage paid, self-addressed envelope by September 1, 1987.

In the first section I have asked for some general information for identification purposes. Once the data from the remaining sections has been inputted in the computer this information will be destroyed in order to ensure absolute confidentiality. If, for any reason, you do not wish to answer a question simply leave it blank. In exchange for your participation I will be sending you a list of resources available to clients with eating disorders in the Waterloo region which will be derived from the survey itself.

The preliminary results of the survey will be presented at an upcoming conference at the University of Waterloo. The conference will feature an internationally known expert in the area of eating disorders, Dr. David Garner. For further details please see the attached flyer and registration form. If you have any questions please do not hesitate to contact me. I can be reached at Health and Safety Services Mondays: 885-1211 ext. 6277 or at home anytime: 747-0218. Thank you for your assistance!

Sincerely,

Tammy Lee Morrell

Steve Chris, Ph.D.
Thesis Advisor

APPENDIX B (CONT.)

I.D. Number_____

Name_____

Business Address_____

_____

Business Telephone_____

1. Type of treatment or service you or your agency provides clients with anorexia nervosa or bulimia (check any that apply):

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self-help)
__ family therapy
__ family support group
__ educational/preventive
__ other_____

2. Is your service located on a major bus route? __ Yes
__ No

3. Are there eligibility criteria for your service? __ Yes
__ No

If yes, please specify_____

_____

4. Do you have a waiting list? __ Yes
__ No

If yes, approximately how long?_____

5. In a one year period, approximately how frequently would you receive a referral for a client with an eating disorder from another professional?

__ times per year

6. Fee Category:

__ Geared to income
__ Subsidized by extended health care insurance
__ O.H.I.P.
__ Other_____

APPENDIX B (CONT.)

*The following information is necessary in order to assess the availability of affordable services for young women with limited incomes. If you feel information regarding fees is confidential please omit this question.

7. Please indicate on the scale the usual fee per one hour session:

$0 10 20 30 40 50 60 70 80 90 100

8. If a client is unable to pay would they be denied service?

__ Yes
__ No

9. I read materials on the symptomology and treatment of eating disorders:

__ Weekly
__ Monthly
__ Yearly
__ Seldom
__ Never

10. I attend conferences, symposiums, seminars or courses on eating disorders:

__ Weekly
__ Monthly
__ Yearly
__ Seldom
__ Never

11. I have the training and background necessary to provide services to clients with eating disorders:

__ strongly agree
__ agree
__ neither agree or disagree
__ disagree
__ strongly disagree

12. In my opinion the following treatments or services are essential to adequately meet the needs of clients with eating disorders:

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self-help)
__ family therapy
__ family support groups
__ educational/preventive
__ other_____

APPENDIX B (CONT.)

13. Of the services you checked in question 12 above, check any that: 1. you are not able to provide directly through your service and 2. you do not feel you have accessible, affordable and accessible resources to refer clients in the Waterloo region:

__ medical monitoring
__ hospitalization
__ personal counselling
__ nutritional counselling
__ facilitative (self-help)
__ family therapy
__ family support groups
__ educational/preventive
__ other_____

14. In my practice I receive approximately __ requests for service from new clients with eating disorders (including all referrals) per year.

Thank you once again for taking the time to complete this questionnaire. As noted earlier, I will be presenting the preliminary results of this study in an upcoming conference, the details of which are included in this package. If you are unable to attend the conference but are interested in the results of the study please indicate so below and I will forward a copy to you as soon as they are available. In addition, I will be mailing out a list of resources available to clients with eating disorders in the Waterloo region. If you would like to have your name included on this list please indicate so below. Finally, if you have any additional comments please feel free to use the back of this page.

I will not be attending the conference but would like a copy of the results of the study:

___ Yes
___ No

I would like to be included in the resource list:

___ Yes
___ No

APPENDIX C

FLYER USED TO OBTAIN CLIENT SURVEY PARTICIPANT

Do you avoid eating when you are hungry?
Are you constantly preoccupied with food and weight gain?
Do you go on eating binges where you feel unable to stop?
Do you vomit after eating to prevent weight gain?
Do people tell you that you are too thin?
Do you avoid fattening foods and eat diet foods?

If you answered yes to several of the questions above you may be suffering from anorexia nervosa or bulimia. I am doing research on the availability of services for individuals with eating disorders in the Waterloo region. If you have been diagnosed as anorexic or bulimic or feel you may have an eating disorder I would appreciate your participation in my research.

In exchange for your participation in my brief telephone survey I will send you a brochure listing the resources available to clients with eating disorders in the Waterloo region. The interview is completely confidential and I will send the resource list in a plain brown envelope.

Please call Tammy at: 884-1970 ext. 2929 or 747-0218
If you are unable to reach me at either of these numbers please leave your first name and telephone number and the best time to reach you at this number. I will return your call as soon as possible. If you are not in when I call I will either leave my first name and telephone number without indicating the purpose of the call or will call you again. Thank you!

APPENDIX D

CLIENT TELEPHONE SURVEY QUESTIONNAIRE

Name_____Contact_____
Poster Location_____

First I would like to ask you some questions directly related to your eating behavior. I realize that these are very personal questions so if you feel uncomfortable answering any of them just ask me to go to the next question.

1. Do you ever go on eating binges where you feel unable to stop?
   If yes: How frequently does this occur?
   How long has this been going on?
   What would you eat in a typical binge?
   How long would a typical binge last?

2. Do you do anything to: counteract the effects of a binge?
   OR control your weight?
   Such as: Vomit after eating?
   Use laxatives or diuretics?
   Fast or go on an extremely stringent diet?
   Exercise excessively?

3. How tall are you?

4. How old are you?

5. What is your current weight?

6. Do you feel comfortable at this weight or would you like to gain or loose weight?

7. Approximately what is the most youv'e ever weighed at your current height?

8. Approximately what is the least youv'e ever weighed at your current height?

9. What is your most stable weight (the weight you remember having stayed at for the longest period of time at your current height)?

10. How would you feel if you were to gain ten pounds?

11. Do you menstruate every month? If no, when was your last period?

Thank you. That is the end of the personal questions. I would now like to ask you a few questions about the types of treatment youv'e had for your eating problem.

APPENDIX D (CONT.)

12. Have you sought medical help for this problem?
If no: Why not?
If yes: Where did you go (family doctor, hospital ...)?
Was the service provider knowledgeable about eating disorders?
Did he/she recommend that you go for psychological counselling and/or nutritional counselling?
Was the treatment helpful?
Were you put on a waiting list? If yes, for how long?
Was the service easy to get to (on a major bus route)?
Are you still going? If no, why did you stop?

13. Have you sought psychological help for this problem?
If no: Why not?
If yes: Where did you go (M.D., M.S.W., Psychologist ...)?
Was the service provider knowledgeable about eating disorders?
Did he/she recommend that you go for nutritional counselling and/or medical testing?
Was the treatment helpful?
Were you put on a waiting list? If yes, for how long?
Was the service easy to get to (on a major bus route)?
Was the service affordable?
Are you still going? If no, why did you stop?

14. Have you sought nutritional counselling for this problem?
If no: Why not?
Was the service provider knowledgeable about eating disorders?
Did he/she recommend that you go for psychological counselling and/or medical testing?
Was the treatment helpful?
Were you put on a waiting list? If yes, for how long?
Was the service easy to get to (on a major bus route)?
Was the service affordable?
Are you still going? If no, why did you stop?

15. Is there any type of help for your eating problem that you have found particularly difficult to find in the Waterloo region?

16. Which type of psychological counselling would you find most helpful?/would you be most comfortable using?
a) individual therapy
b) family therapy
c) group therapy (run by a professional)
d) self help group (run by a recovered anorexic/bulimic)
e) telephone help line

APPENDIX D (CONT.)

19. Is there any other service that I have not mentioned which you feel would be helpful?

Thank you for calling (agreeing to participate in the survey). If you would like a copy of the resource list and/or the results of the survey you can either give me your address or, if you prefer, the name and address of your (counsellor, doctor, friend), and I will forward this to you in a plain brown envelope no later than February 15, 1988. Once this package has been mailed I will destroy your name, telephone number and address to ensure complete confidentiality.

APPENDIX E

HEIGHT/WEIGHT CHART (Sheinin, 1983)

HEIGHT	WEIGHT	-15%
4'11"	95 lbs.	80.75 lbs.
5'	100 lbs.	85.00 lbs.
5' 1"	105 lbs.	89.25 lbs.
5' 2"	110 lbs.	93.50 lbs.
5' 3"	115 lbs.	97.75 lbs.
5' 4"	120 lbs.	102.00 lbs.
5' 5"	125 lbs.	106.25 lbs.
5' 6"	130 lbs.	110.50 lbs.
5' 7"	135 lbs.	114.75 lbs.
5' 8"	140 lbs.	119.00 lbs.
5' 9"	145 lbs.	123.25 lbs.
5'10"	150 lbs.	127.50 lbs.

APPENDIX F

CONFERENCE EVALUATION QUESTIONNAIRE

1. In general I found this conference a rewarding experience:

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

2. The information I obtained at this conference will be useful in my present work:

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

3. I was able to meet and dialogue with other community professionals who are concerned about persons with eating disorders:

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

4. I feel I increased my knowledge with respect to eating disorders in the following areas:

a) Diagnosis/Identification

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

b) Prevention

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

APPENDIX F (CONT.).

c) Education

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

d) Treatment

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

e) Waterloo Region Needs and Resources

___ strongly agree
___ agree
___ neither agree or disagree
___ disagree
___ strongly disagree

5. Further comments?

APPENDIX G

PROFESSIONAL MAIL SURVEY RESULTS

Services Provided by Respondents

*104 Respondents

Medical Monitoring	= 51
Hospitalization	= 39
Personal Counselling	= 78
Nutritional Counselling	= 49
Self Help	= 20
Family Therapy	= 43
Family Support	= 11
Educational/Preventive	= 35

*does not total 104 because respondents were asked to check all that apply

Service Accessibility

1. Located on a major bus route:

Yes = 98
No = 6

2. Individuals with eating disorders meet eligibility criteria:

Yes = 63
No = 41

3. Individuals with eating disorders would not be placed on a waiting list longer than two weeks:

Yes = 74
No = 30

Low Accessibility	= 10
Medium Accessibility	= 57
High Accessibility	= 37

Service Affordability

1. Service is free of charge or covered by O.H.I.P.

Yes = 84
No = 19

APPENDIX G (CONT.)

2. If a client was unable to pay they would not be denied service.

Yes = 14
No = 5
N/A = 84

Low Affordability = 5
Medium Affordability = 14
High Affordability = 84

Service Acceptability

1. How frequently read about eating disorders:

Weekly or Monthly = 56
Yearly = 25
Seldom or Never = 21

2. How frequently attend conferences or seminars on eating disorders:

Yearly = 41
Seldom or Never = 61

3. Feel has the necessary training and background to treat eating disorders:

Agree = 58
Neutral = 18
Disagree = 25

4. Recognize the need for a multidisciplinary approach to the treatment of eating disorders (i.e. Medical Monitoring OR Hospitalization AND Personal Counselling OR Self Help OR Family Therapy AND Family Support AND Nutritional Counselling AND Educational/Preventive).

Yes = 68
No = 36

Low Acceptability = 26
Medium Acceptability = 30
High Acceptability = 44

APPENDIX G (CONT.)

"Actual" Availability

The sum of: Accessibility + Affordability + Acceptability

Low Availability = 23
Medium Availability = 40
High Availability = 36

"Actual" Availability by Service Type

Service Type	Actual Availability Low	Med.	High	Total
1. medical monitoring	9	16	23	48
2. hospitalization	7	11	19	37
3. personal counselling	18	27	30	75
4. nutritional counselling	8	15	24	47
5. self help	3	6	10	19
6. family therapy	8	16	16	40
7. family support	0	2	9	11
8. educational preventive	6	8	20	34
9. referral	0	1	5	6
10. case finding	0	0	1	1
11. peer support	0	0	1	1
12. nurse visitation	0	0	1	1
Total	59	102	159	

Note: since most respondents indicated that they provided more than one type of service, the numbers in this table are based on services provided rather than individual survey respondents, and therefore total more than 99.

Experienced/Perceived Availability

Medical Monitoring not available = 33
Hospitalization not available = 34
Personal Counselling not available = 21
Nutritional Counselling not available = 30
Self Help not available = 38
Family Therapy not available = 30
Family Support not available = 36
Educational/Preventive not available = 30
All Services available = 30

APPENDIX G (CONT.)

Service Needs

Medical Monitoring	= 94
Hospitalization	= 76
Personal Counselling	= 98
Nutritional Counselling	= 93
Self Help	= 81
Family Therapy	= 89
Family Support	= 77
Educational/Preventive	= 87

Other Services Suggested by Survey Respondents

1. Peer supports
2. Hypnosis
3. Social Network
4. Residential Facility outside of the Hospital
5. Eating Disorders Clinic in the Hospital
6. Referral Service

Demand for Service

Number of requests for service from clients with eating disorders per year from all sources. Used the highest number indicated when a range was provided:

Zero	= 9
1 to 5	= 62
6 to 10	= 10
11 to 20	= 14
21 to 30	= 2
40	= 1
90	= 1

Total from all respondents = 606/yr.

Number of Referrals from Other Professionals

Zero	= 32
1 to 5	= 53
6 to 10	= 5
11 to 15	= 6
16 to 20	= 3
80	= 1

APPENDIX H

PROFESSIONAL MAIL SURVEY - ELIGIBILITY CRITERIA CLASSIFICATION

Criteria That Potentially Exclude Clients with Eating Disorders

1. Ability to pay or have extended health care
2. Under 18 yrs. or 16 to 21 yrs. or 12 to 15 yrs. of age
3. Must be a patient in my practice
4. Must be referred by another professional
5. Faculty, staff, students or alumni
6. Based on personal history
7. Willing to adhere to program

Criteria That Would Not Exclude Clients with Eating Disorders

1. A clear cut psychiatric disorder (i.e. meet DSM III criteria or have been in London Psychiatric Hospital)

APPENDIX I

PROFESSIONAL MAIL SURVEY - CATEGORIZATION OF "ACCEPTABLE"

	VALUE	FREQUENCY	PERCENT
LOW	4	5	5
	5	12	12
	6	9	9
MEDIUM	7	15	15
	8	15	15
HIGH	9	25	25
	10	19	19

APPENDIX J

PROFESSIONAL MAIL SURVEY - CATEGORIZATION OF "AVAILABILITY"

	VALUE	FREQUENCY	PERCENT
LOW	5	5	5.1
	6	18	18.2
MEDIUM	7	40	40.4
HIGH	8	28	28.3
	9	8	8.1

APPENDIX K

RAW DATA - NUMBER OF REQUESTS FOR SERVICE PER YEAR

Value	Frequency	Percent
0	9	9.1
1	15	15.2
2	21	21.2
3	12	12.1
4	2	2.0
5	12	12.1
6	5	5.1
7	1	1.0
8	1	1.0
10	3	3.0
12	2	2.0
13	1	1.0
15	6	6.1
17	2	2.0
18	2	2.0
20	1	1.0
24	1	1.0
30	1	1.0
40	1	1.0
90	1	1.0

5 Missing Cases

APPENDIX L

TELEPHONE CALLS RECEIVED BY F.R.E.E.D.

	REGARDING FRIEND/ FAMILY MEMBER		REGARDING SELF		REQUESTING	
	ANOREXIC	BULIMIC	ANOREXIC	BULIMIC	INFO.	HELP
DATE						
28/06		X			X	X
15/07		X			X	X
17/07				X		X
26/08		X			X	
28/08		X			X	
12/09		X				X
17/09				X	X	
17/10		X			X	X
31/10	X				X	X
09/11	X				X	
10/11		X			X	X
11/11				X	X	X
19/11		X			X	X
25/11				X	X	X
25/11				X	X	X
25/11				X	X	
25/11				X		X
26/11			X		X	
27/11	X				X	
06/01		X			X	X
13/01	X				X	X
20/01	X				X	X
22/01		X			X	
03/02	X					X
09/02	X				X	X
10/02	X	X			X	X
11/02			X			X
17/02	X				X	
19/02				X		X
25/02		X			X	X
25/02		X			X	X
25/02	X				X	X
26/02				X	X	
03/03				X		X
03/03		X (professional)			X	X
10/03		X			X	
11/03			X		X	X
16/03		X (professional)			X	X
18/03		X			X	
19/03		X			X	
24/03	X				X	
24/03				X	X	X
29/03		X			X	X
06/04	X				X	X
07/04			X		X	
08/04			X			X

APPENDIX L (CONT.)

DATE	REGARDING FRIEND/ ANOREXIC	REGARDING FRIEND/ BULIMIC	REGARDING SELF ANOREXIC	REGARDING SELF BULIMIC	REQUESTING INFO.	REQUESTING HELP
21/04		X			X	X
11/05				X	X	X
12/05				X	X	
12/05	X				X	
22/05		X			X	X
28/05		X			X	
28/05				X		X
02/06		X			X	X
03/06		X				X
08/06				X		X
09/06	X	X				X

APPENDIX M

RAW DATA - NUMBER OF INTER-AGENCY REFERRALS PER YEAR

Value	Frequency	Percent
0	32	32
1	15	15
2	12	12
3	13	13
4	7	7
5	6	6
6	1	1
9	1	1
10	3	3
12	5	5
14	1	1
18	2	2
20	1	1
80	1	1

4 Missing Cases

APPENDIX N

RESOURCE LIST DERIVED FROM PROFESSIONAL MAIL SURVEY

The following is a list of health care professionals in the Waterloo Region who have indicated an interest in treating the eating disorders anorexia nervosa and bulimia. An asterisk (*) indicates that there are certain criteria that must be met in order to be eligible for treatment. A double asterisk (**) indicates that the professional is not involved in direct treatment.

PSYCHOLOGICAL SERVICES

1. Ken R. Bender, M.S.W., C.S.W.
   33 Jackson Avenue, Kitchener
   744-1351

2. Paula King, M.S.W.
   K-W Counselling Service, 235 King Street East, Kitchener
   743-6391

3. JoAnn Collins, M.S.W.
   K-W Counselling Service, 235 King Street East, Kitchener
   743-6391

4. Rosaline Adelberg, M.S.W.
   K-W Counselling Service, 235 King Street East, Kitchener
   743-6391

5. Shalom Counselling Services
   131 Erb Street East, Waterloo
   886-9690

6. Catholic Family Counselling Centre, Region of Waterloo
   74 Weber Street West, Kitchener
   743-6333

7. Dr. Charles H. Pierce, Dr. Pierce and Associates
   7 Union Street East, Waterloo
   742-3101

8. Allan Goebel, Ph.D., C.Psych.
   7 Union Street East, Waterloo
   742-3101

9. Dr. Robert McKie, Psychologist
   824 King Street West #204, Kitchener
   579-5473

10. Melba Tanner, Counsellor
    15 Yarmouth Street, Guelph
    1-836-8171

APPENDIX N (CONT.)

11. Dr. A. Waters, M.A., M.Div., D.D.
Interfaith Pastoral Counselling Centre, 127 Frederick Street
Kitchener, 743-6781

12. Barbara Lawson, M.S.W.
Interfaith Pastoral Counselling Centre, 127 Frederick Street
Kitchener, 743-6781

13. Elizabeth Huss, M.S.W.
Interfaith Pastoral Counselling Centre, 127 Frederick Street
Kitchener, 743-6781

14. Catherine E. Martin, Outpatient Psychiatry
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext. 2374
**intake person for all psychological services at the hospital

15. Pamela Handford, M.S.W., Adolescent and Young Adult Team
Outpatient Psychiatry, Kitchener-Waterloo Hospital
835 King Street West, Kitchener
742-3611 ext.2397

16. Hilary Bowers, R.N., Adult Team
Outpatient Psychiatry, Kitchener-Waterloo Hospital
835 King Street West, Kitchener
742-3611 ext. 2365

17. Mary Lennon, M.S.W.
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext. 2360

18. Dr. Linda Butler, Psychologist, Adult Team
Outpatient Psychiatry, Kitchener-Waterloo Hospital
835 King Street West, Kitchener
742-3611 ext.2367

19. Cheryl Gillin, Ph.D., C.Psych.
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext. 2706

20. George VanderSchaaf, M.S.W.
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext.2363

21. Central Counselling Service
55 Queen Street South, Kitchener
743-6526

22. Denise J. Dolff, M.A.
67 Owen Avenue, Kitchener
742-4841

APPENDIX N (CONT.)

23. Mary R. Adams, Head of Guidance
Eastwood Collegiate Institute, 760 Weber Street East, Kitchener
743-8265
*must be a registered student at E.C.I.

24. Gail Freiburger, Counsellor, Student Services
St. Marys Highschool, 35 Weber Street West, Kitchener
745-6891
*must be a registered student at St. Marys Highschool

25. Carol Gregory, Counsellor, Student Services
Conestoga College, Doon Campus, 299 Doon Valley Drive, Kitchener
653-2511 ext. 222
*must be a registered student at the college

26. Mr. Gord Lovsinger, Counsellor
Waterloo-Oxford District Secondary School, R.R. #2 Baden
634-5441
*must be a registered student at Waterloo-Oxford D.S.S.

27. Linda Holden, R.N. Nurse Therapist
Young Adult Program, 75 Allen Street East, Waterloo
745-8340
*limited to individuals between 16 and 21 years of age

28. Sunny Sundberg, R.N., M.A.
12 Margaret Avenue East, Waterloo
746-1525 (T., Th. & F.: 885-1211 ext.2655)

29. Anna Ledbetter, M.S.W., C.S.W.
Health and Safety Services, University of Waterloo
885-1211 ext. 3541
*must be a registered student at the university

30. Stephen Chris, Ph.D., C.Psych
Health and Safety Services, University of Waterloo
885-1211 ext. 3541
*must be a registered student at the university

31. Debby Zweig, Ph.D., C.Psych.
University of Waterloo Psychology Clinic
885-1211 ext. 3842

32. S. Malabar, Director of Nursing
Waterloo Regional Health Unit, 850 King Street West, Kitchener
744-7357

33. Jane Daley, Supervisor of Nurses
Waterloo Regional Health Unit, 850 King Street West, Kitchener
744-7357

APPENDIX N (CONT.)

34. Colleen Spaetzel, M.S.W.
911 Queens Boulevard South, Kitchener
749-6416 ext. 2-2511

MEDICAL SERVICES

1. Dr. W. Friday, M.D., Paediatrition
751 King Street West, Kitchener
743-1486

2. Susan M. Bowman, Head Nurse, Paediatrics
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext. 2711
*limited to females 16 years and younger

3. John R. Selh, M.D., Gynecologist
495 Park Street, Kitchener
744-8561

BOTH MEDICAL AND PSYCHOLOGICAL SERVICES

1. Joanne Brohman, R.N., Inpatient Psychiatry
Kitchener-Waterloo Hospital, 835 King Street West, Kitchener
742-3611 ext. 2230

2. Kitchener Educational and Counselling Services
86 Weber Street East, Kitchener
576-3977

3. Health and Safety Services
University of Waterloo, Waterloo
885-1211 ext. 3541
*must be a registered student at the university

NUTRITIONAL SERVICES

1. Theresa Schumilas, Nutritionist
Waterloo Regional Health Unit, 850 King Street West, Kitchener
744-7357
**referral resource for teachers and professionals only

2. Sheila Jarvie, R.P.Dt.
Nutrition Counselling, Kitchener-Waterloo Hospital
835 King Street West, Kitchener
749-4212
*require a referral from a physician and must currently be under psychiatric care

3. Mary Durnford, Senior Therapeutic Dietitian
700 Coronation Boulevard, Cambridge
621-2330 ext. 1224
*require a referral from a physician

APPENDIX N (CONT.)

4. Trudy R. Bricker, R.D.N., M.H., R.N.C.
   1454 King Street East, Kitchener
   579-8960 or 579-8962

5. Kirsten B. Skafte, R.N.C.
   15 Westmount Road South, Waterloo
   886-1861

SELF HELP GROUPS

1. Overeaters Anonymous
   P.O. Box 491, Waterloo
   579-3800

FAMILY SUPPORT GROUPS

1. F.R.E.E.D., Canadian Mental Health Association, Waterloo Region
   607 King Street West, Kitchener
   744-7645

APPENDIX O

CONFERENCE EVALUATION RESULTS

Categories

1. Not Specified	37
2. Psychometrist, Psychologist, Psychiatrist, Counsellor, M.S.W., Family Therapist, Consultant	21
3. M.D., Family Physician, Nurse	6
4. School Counsellor, Teacher	10
5. Student, Graduate Student	6
6. Dietician	4
7. Recovered Bulimic	1
8. Parent, Non-Professional	2

Enjoyed the Conference in General

Strongly Agree	32
Agree	51
Neither Agree or Disagree	3
Disagree	1

Learned Something that will be Useful in my Work

Strongly Agree	20
Agree	54
Neither Agree or Disagree	9
Disagree	2
Strongly Disagree	2

Was Able to Meet and Dialogue with Other Professionals

Strongly Agree	6
Agree	53
Neither Agree or Disagree	21
Disagree	4
Strongly Disagree	1
Blank	2

Felt I Increased My Knowledge in the Area of:

Diagnosis and Early Identification

Strongly Agree	13
Agree	42
Neither Agree or Disagree	23
Disagree	4
Strongly Disagree	5

APPENDIX O (CONT.)

Prevention

Strongly Agree	21
Agree	48
Neither Agree or Disagree	16
Disagree	1
Blank	1

Education

Strongly Agree	24
Agree	52
Neither Agree or Disagree	10
Disagree	1

Treatment

Strongly Agree	15
Agree	54
Neither Agree or Disagree	14
Disagree	2
Blank	2

Waterloo Region Needs and Resources

Strongly Agree	11
Agree	35
Neither Agree or Disagree	16
Blank	25

APPENDIX P

CONFERENCE EVALUATION - FURTHER COMMENTS

David Garner was excellent! Barb Carney had a hard act to follow. Perhaps a different forum would have been better for her presentation (i.e. a smaller select group). More specific methods which I, as a counsellor and Health/Phys. Ed. Teacher could implement into my program.

Exceptional presentation by Garner.

An area not directly addressed was early identification and intervention, particularly regarding eating pathology (before a full-blown disorder) as may be evidenced in schools. Overall, I greatly appreciated Dr. Garner's presentation both for the content of his talk and for the style of presentation, thanks!

Very useful topic. Appreciated expertise of David Garner - excellent resource. Notion of regional interest group helpful.

I was quite disappointed in the lack of information offered on how to identify people with eating disorders and how to help these people. Much of Mr. Garner's lecture seemed to be based on convincing us that being underweight is more harmful than being overweight. Although this is an interesting issue, I question its relevance to the topic of "Early Identification and Prevention".

I think that David Garner should have gone into more detail about early warning signs, what to do with people who are exhibiting these signs, what typical reactions of people will be etc. As someone who is involved in a large student residence, I would have liked much more practical information as opposed to theoretical studies.

More time needed to tackle the area of treatment. Well organized workshop - materials and information excellent. Dr. Garner is an eloquent presenter and obviously well-versed on the subject of eating disorders.

Wish I had been able to stay for the afternoon session.

Nice lunch! Need a follow-up conference to explore methods of treatment and successful interventions.

I appreciated that you kept on time.

The morning session was advertised as Early Identification. I didn't feel that Dr. Garner really gave us any handle on how to detect this illness. He spoke about various studies but didn't really say "these are symptoms of the disease". In that respect I was disappointed.

Excellent lunch.

APPENDIX R (CONT.)

Thanks to organizers! It was a good day with an interesting presentation! I expect the handouts will also increase my information.

Since I wasn't here to relate what I learned today to present work a lot of these questions don't really apply. My overall impression of the day was that it was very good. I would say, yes, my conscious was raised and I am more interested than ever to learn more about eating disorders, so it was a very worthwhile day.

Parking was not appropriate. Confirmation of pre-registration was not made.

Great! Thank you.

Strategy for small group question/answer time needed! Maybe a chance to meet in a cross-section of professions or a chance to meet and share with your own profession. Possibly a question box to be used in the p.m. treatment session. Possibly too long a conference. Good finish time would be 3:30 or 4:00 p.m. Possibly a p.m. choice option area.

Speaker for Windsor was not really necessary - she even commented that our region is not like hers, so her info wasn't really applicable. Dr. Garner was excellent. I would have liked more time for Q & A.

The B.A.N.A. speaker really didn't fit into the previous session. I really would have preferred to have continued with Prevention and Treatment, this would have been more beneficial to me personally.

As a Dietician, I found this conference very confusing as to how the research was presented by David Garner, Ph.D. Constructive criticism and various approaches for counselling the obese to prevent anorexia and bulimia would have benefited this audience.

As a recovered Bulimic I found many of the areas touched on for treatment by David Garner could have been expanded into a conference itself.

Very interesting chance to reflect on my own attitudes and prejudices towards obesity. Interesting to be made aware that all the personal accounts of A.N. do glamorize/create something of an "in group" mentality and provide an identity.

More opportunity for question/answer with Dr. Garner would have been beneficial. Barb Carney's presentation would be more appropriate for a smaller group whose <u>prime concern</u> is to establish a support group or Community Information Centre - or perhaps have this portion of the program earlier in the day.

Very worthwhile - especially enjoyed hearing David Garner. Would have liked more time for questions.

APPENDIX P (CONT.)

The presentation following Dr. Garner could have been brief - may not have been appropriately timed. Consequently many people left early who might otherwise have remained. Personally I was concerned with the study results.

Barb Carney - difficult for her to follow David Garner - In comparison she was very low key, not very interesting speaker.

I am a grade 13 student completing a study on the subject. This conference has helped me a great deal. Many thanks to Tammy Lee Morrell and Dr. David Garner.

David Garner gave an excellent presentation. Perhaps he could have spent less time on the topic of obesity. The timing for Barb Carney was not good. She had an interesting presentation but perhaps could have been offered as an optional part of the program, for those who would be interested in learning about the set up of B.A.N.A. Let's hope K-W and Cambridge can effectively address and provide support for this disorder.

Excellent!

Very good conference - lots of information. Hopefully helpful in our treatment of eating disorder patients. Thank you.

Perhaps more time could have been spent on methods of approach re: detection of disorders and actual intervention techniques. David Garner was excellent - very informative.

Garner is so very obviously anti-dietician or belittles any contribution a dietitian could make that I now hesitate to offer my services. Well organized facilities - hall very appropriate, comfortable.

Well done!

At long last [redacted]

Highschool survey very interesting. Unclear on how she separates possible eating disorders and possible weight problems.

Presenter of high school surveys material interesting but slides are inadequate and unintelligible.

More time for questions and answers. To answer Regional question, need regional report. Multidisciplinary approach necessary.

APPENDIX P (CONT.)

Would have preferred additional information on treatment. Most present were mental health professionals who already had basic information. David Garner excellent speaker. Would like to hear him speak again - just on treatment. Would have appreciated it if books re: topic had been available to examine/purchase. Lunch excellent, not overfilling (how about brown bread!). Liked the idea of juice at breaks. Not interested in background info on B.A.N.A. - too much time spent, not important in my work at present. Organization in Windsor not helpful in Waterloo, 15 minutes at most, not 45. Less time on info. re: student studies.

I am particularly interested in self concept, particularly body image. I would value more information about presenting programs to adolescents and younger children. Although todays speakers provided valuable material, I was surprised that there wasn't more concentration on prevention strategies re: changing body image.

Excellent - thank you very much.

Is there a way of continuing the impetus of today - establishing a network to meet the Community needs is probably one way, but is there a more general conference that can be planned for local people to share their talents, approaches etc.?

More treatment emphasis would have been helpful - "hands on".

Would have appreciated more time for questions fielded by Dr. Garner.