

## ‘DAR KENN GHAL SAHHTEK’ - AN EATING DISORDER AND OBESITY SERVICE IN MALTA

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### SUMMARY

This paper will describe the incidence of eating disorders, with particular focus on obesity and binge eating, within the Island of Malta. The development of and ‘Dar Kenn Ghal Sahhtek’, the first centre for eating disorders in Malta will then be recounted, and the effective therapeutic interventions provided in it will be described. One important function of this unit is the treatment of excessive obesity. Some epidemiological data on the Obese Patients in DKS, relating to the incidence of Binge Eating Disorder in the DKS patient group will be given. This data was collected during a collaborative research project between the Psychiatry Department of Cambridge University and ‘Dar Kenn Ghal Sahhtek’.

**Key words:** eating disorder – obesity - multidisciplinary team – research - Binge eating disorder (BED) - Dar Kenn Ghal Sahhtek (DKS)

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### INTRODUCTION

Malta is in the lead when considering people suffering from overweight and obesity. For this reason, a centre for eating disorders and obesity was set up in 2014. This unit is called ‘Dar Kenn Ghal Sahhtek’, a residential and semi-residential facility located in the town of Mtarfa, in the North of Malta. With the professional help of a multidisciplinary team of doctors, psychiatrists, nurses, physiotherapists and psychologists patients suffering from both eating disorders (anorexia and bulimia nervosa) and obesity (binging and non-binging) are guided towards adopting a healthier lifestyle which will in turn decrease morbidity and mortality in the Maltese population. In this paper, focus will be made on binge eating disorder as a causality for the tremendously high BMIs found in Malta.

### EATING DISORDERS ACCORDING TO DSM-V

The chapter on Feeding and Eating Disorders in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has undergone several changes to better represent the symptoms and behaviors of patients dealing with these conditions. Among the most substantial changes are 1) The recognition of binge eating disorder 2) revisions to the diagnostic criteria for anorexia nervosa and bulimia nervosa, and 3) inclusion of pica, rumination and avoidant/restrictive food intake disorder. In recent years, clinicians and researchers have realized that a significant number of individuals with eating disorders did not fit into the DSM-IV categories of anorexia nervosa and bulimia nervosa. By default, many received a diagnosis of “eating disorder not other-

wise specified.” Studies have suggested that a significant portion of individuals in that “not otherwise specified” category may actually have binge eating disorder.

### BINGE EATING DISORDER

Binge eating disorder was approved for inclusion in DSM-5 as its own category of eating disorder. In DSM-IV, binge-eating disorder was not recognized as a disorder but rather described in Appendix B: Criteria Sets and Axes Provided for Further Study and was diagnosable using only the catch-all category of “eating disorder not otherwise specified.”

#### Criteria for BED

##### Criterion 1

Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:

- eating, in a discrete period of time (for example, within any 2-hour period), an amount of food that is definitely larger than most people would eat in a similar period of time under similar circumstances;
- a sense of lack of control over eating during the episode (for example, a feeling that one cannot stop eating or control what or how much one is eating).

##### Criterion 2

The binge-eating episodes are associated with three (or more) of the following:

- eating much more rapidly than normal;
- eating until feeling uncomfortably full;
- eating large amounts of food when not feeling physically hungry;
- eating alone because of feeling embarrassed by how much one is eating;

- feeling disgusted with oneself, depressed, or very guilty afterwards.

**Criterion 3**

Marked distress regarding binge eating is present.

**Criterion 4**

The binge eating occurs, on average, at least once a week for three months.

**Criterion 5**

The binge eating is not associated with the recurrent use of inappropriate compensatory behavior (for example, purging) and does not occur exclusively during the course Anorexia Nervosa, Bulimia Nervosa, or Avoidant/Restrictive Food Intake Disorder (American Psychiatric Association 2013).

**STATISTICS FOR EATING DISORDERS IN MALTA**

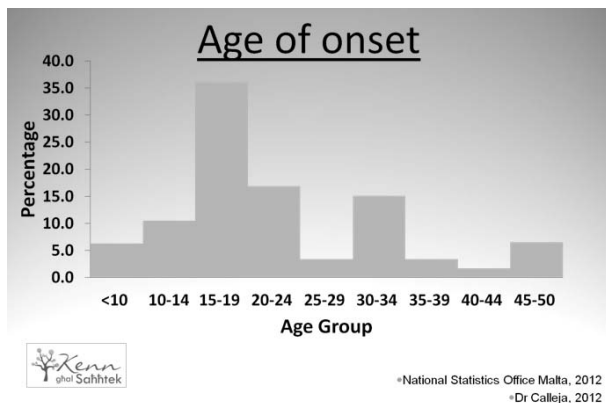
According to the National Statistics survey carried out in Malta in 2012 the percentage population suffering from an eating disorder accounts to 0.9% equivalent to 1914 people while those who suffered an eating disorder in the past amount to 2.0% of the population which is equivalent to 4053 people. In this survey the response rate was 53.1% and was carried out in June 2012 (National statistics office Malta 2012). In table 1 is a subdivision of the percentage population suffering from an eating disorder.

**Table 1.** Percentage of population suffering from an eating disorder in Malta

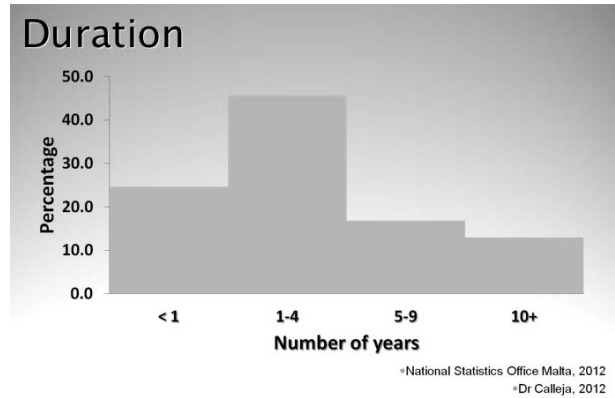
Eating disorder	% Population
Anorexia Nervosa	34
Bulimia Nervosa	13
Binge Eating Disorder	57

It is also interesting to note how Malta compares to European statistics as shown in table 2.

Outlined below is also a figure 1 and figure 2 and representation of the age of onset and duration of eating disorders within the Maltese population.



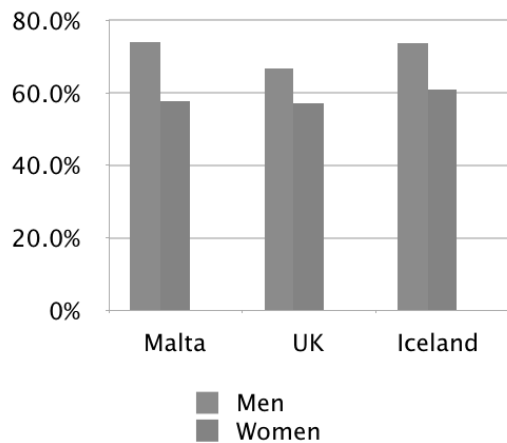
**Figure 1.** The age of onset of eating disorders



**Figure 2.** The duration of an eating disorder

**STATISTICS FOR OBESITY IN MALTA**

Malta stands amongst the highest ranked countries in Europe with regards to the percentage population of overweight and obese people. Statistics reveal that Malta is the highest ranked country for males; scoring 74.0% while ranking second when it comes to the female gender; scoring 57.8%. Below is a graphical representation of the latter (Figure 3).



**Figure 3.** Malta as compared to other countries with regards to obesity and overweight percentage population

**THE CONCEPT BEHIND 'DAR KENN GHAL SAHHTEK'**

Given the above statistics, the first centre in Malta offering treatment for obesity and eating disorders was developed. After identifying suitable premises outside the hospital setting which could cater for the needs and offer a comfortable and suitable environment for the patients, construction works was started. The Government also started discussions with the Umbria region of Italy to draw up a collaboration agreement so as to train staff for the Unit and receive advice on implementing treatment programs.

DKS is divided into two separate and distinct sections. One part caters for morbidly obese patients and the other section for patients suffering from ED.

**Table 2.** Percentage of patients with Anorexia, Bulimia and Binge Eating in Malta compared to Europe

Age Group (years)	Europe			Malta		
	Anorexia	Bulimia	BED	Anorexia	Bulimia	BED
18-29	1.1%	0.9%	2.5%	1.3%	0.6%	0.7%
30-44	0.6%	0.8%	1.1%	1.1%	0.2%	1.9%

A multidisciplinary professional team offers a holistic approach to treatment at the centre. After being referred by their GP, the centre's medical team responsible for admissions discuss and agree upon an individual treatment programme which varies from residential, semi-residential, to out-patients. Patients are offered various services varying from nutritional counseling, physiotherapy sessions, psychological group therapy. All patients are followed by psychiatrists and dietitians. Duration of treatment may vary from 3 months up to several months in cases of ED and 8 weeks in patients suffering from morbid obesity. Upon completion of prescribed treatment programme all patients are followed for a period of two years. This will keep patients motivated and engaged in the therapy programme which promotes a change in lifestyle for both patients and their relatives or carers.

As regards to morbid obesity treatment programme, the centre promotes a healthy lifestyle whereby patients are taught how to shop, cook, plan their budget, eat in a balanced manner and adopt an active lifestyle which could be maintained even during daily routine life. The daily programme schedule is quite intensive and includes group sessions targeting motivation, self-esteem, psychological group therapy, daily gym sessions with physiotherapists and daily evening walks. Individual sessions to target specific issues are carried out on a weekly basis by a number of professionals. Practical cooking sessions with nutritionists are also an integral part of the programme. The unit targets independence and integration within society after programme completion. Upon discharge patients are given written activity programmes and continue to keep their food diaries which will then be reviewed by their nutritionist during their outpatients sessions. Patients are given adequate tools to prevent relapse once they are back in society.

The first group of patients suffering from morbid obesity was admitted on the 26<sup>th</sup> May of 2014.

Upon admission, a number of tests are done to patients. These include the quality of life questionnaire, blood tests and physical tolerance tests including the 2 minute step test and the 6 minute walking test. A screening via clerking is also done prior to admission were physical and psychological co-morbidities are taken into account and dealt with prior to initiation of the programme. Even though to – date the number of patients treated is still small, very positive and encouraging results are being noted. Improvement both in mobility, blood cholesterol levels, blood glucose levels and reduction in blood pressure are quite noticeable during the course of treatment.

With regards to the Eating Disorders (ED) therapy programme, in the same way as with the obesity programme, the ED residential programme is very intensive and patients are given space whereby they express their emotions through various media. Group sessions include psychological therapy, motivation, self-esteem, expression groups, pilates, self-care and nutritional sessions. Patients are monitored by dietitians and nutritionists and the menu is designed according to their needs. Sensory groups are also held whereby various foods are re-introduced gradually and according to the patients' recovery progress. Mirror therapy is used to guide patients to self-acceptance and work together with a psychologist to target dysmorphia. Their families are assisted through family therapy (Zerafa 2015).

## OTHER FINDINGS

In order to assess outcomes of the Obesity Program, A set of questionnaires are also carried out at the start and four weeks before the end of the programme. These include; Quality of Life Questionnaire (QOL), General Anxiety Disorder-7 (GAD-7), BDI-II (Beck's depression inventory). A two minute step test and six minute walking test is also carried out in the same time frame. Noticeable improvement can be noted in table 3. The minimum % values signify the results obtained prior to admission and initiation of the programme as compared to the maximum % values which are the results of the questionnaires and test carried out prior to discharge from the programme.

**Table 3.** A comparison of the BDI, GAD, QOL and 2 minute step and 6 minute walk on admission (minimum %) and prior to discharge (maximum %)

Test	Minimum %	Maximum %
BDI	1.10	53.33
GAD	4.55	400
QOL	6.67	350
2 minute step	Average range – 73 – 114 steps	
6 minute walk	Average range – 440 – 625 m	

## RESEARCH

In a recent collaboration between the department of Psychiatry in Addenbrooks Hospital, Cambridge and 'Dar Kenn Ghal Sahhtek', Malta, a research project was carried out on a group of morbidly obese subjects recruited from the same Maltese premise. 30 subjects with a BMI of 30 and above and 30 healthy subjects

were asked to participate in a cognitive based study. The latter focused on the understanding of the role of habit formation and incentive motivation using computerized tasks in patients with disorders with repetitive behaviours as compared to healthy volunteers. In this case, repetitive behavior refers to binge eating disorder.

In this paper we report on the incidence of Binge Eating Disorder among the patients who took part in this study.

It is interesting to note that when patients were screened for BED, 46.7% were found to suffer from all criteria for BED. Out of the remaining obese subjects the following data was obtained, which implies that there was a high prevalence of some of the criteria for BED even among those without the full syndrome:

- 26.7% had recurrent episodes of eating abnormally large amount of food;
- 26.6% felt a lack of control during bingeing;
- 26.7% performed binge eating that is associated with at three of the following ; eating until you're uncomfortably full, eating large amounts of food even when not hungry, eating alone out of embarrassment, feeling depressed, disgusted or guilty after eating;
- 46.7% were concerned about their eating;
- 40% binged at least once a week for at least three months;
- 40% carried out binge eating that is not associated with purging, self induced vomiting or other compensating behavior such as excessive exercise or laxative use.

## DISCUSSION

As has been indicated above, there are numerous patients in Malta who suffer from morbid obesity, with BMIs above 30. DKS is the first unit in Malta to provide help for these subjects. It is particularly interesting to find that most of the thirty morbidly obese patients we observed have either all of the criteria for diagnosis of binge eating disorder or at least some of these criteria.

## CONCLUSION

'Dar Kenn Ghal Sahhtek' appears to offer helpful therapeutic interventions and also can be the base for interesting research given the alarming incidence of high BMIs in Malta. National campaigns are intended to be launched by the same entity in schools, aiming to tackle obesity in the younger generation in order to lower morbidity and mortality rates in the general population.

**Acknowledgements:** None.

**Conflict of interest:**

I Mark Agius is a Member of an advisory board to Otsuka, Japan.

## References

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