

Knowledge and perceptions of eating disorders among young adult university students in Brunei Darussalam: A qualitative study.

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ABSTRACT

Introduction: Eating disorders are very well reported in western societies. However, prevalence of eating disorders among Asians is on the rise. This study aims to explore the knowledge and perceptions of young adults regarding eating disorders in Brunei Darussalam. **Materials & Methods:** A qualitative study through four focus groups was conducted with 23 young adults from Universiti Brunei Darussalam. Participants were recruited through open meetings. Transcribed audio data were analysed under the guidance of thematic analysis. **Results:** Five key themes were identified. 1) Brunei university students have some 'understanding about eating disorders' however it is most associated with obesity; 2) 'awareness about eating disorders' explores the participant's knowledge on the psychological causes and complications; 3) 'maintaining body image' describes the vulnerability of women and teenagers to eating disorders; 4) 'affluent Brunei Society' describes how living in abundance can influence individual's perspectives on eating disorders; and 5) 'taking stock on services' illustrates the services and facilities available in Brunei. **Conclusions:** Young adult university students, living in an affluent society like Brunei, have limited awareness on eating disorders and the services available. Community based mental health interventions should be increased, as there is a possibility of eating disorder being a serious health issue in the near future.

Keywords: Anorexia, Bulimia, Brunei Darussalam, Obesity, Qualitative study

INTRODUCTION

Emerging evidence indicates eating disorders occur in a wide range of ethnicity, cultures, and socioeconomic groups.¹⁻³ Currently majority of studies exploring the views of people with eating disorders, such as bulimia and anorexia are conducted among Western population.⁴⁻⁸ Yet there has been a recent increase in eating disorders among Asian popu-

lation and this is now widely acknowledged.^{9,10} When taken at a scientific basis, eating disorders in Singapore can be considered similar in terms of clinical presentation and pathology, to eating disorders in the West.¹¹ Yet, despite the increasing incidence of eating disorders, there has been very few publications on South East Asian perspectives on eating disorders.^{12,13}

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The discovery of abundant petroleum resource in numerous third world developing countries have led to rapid economy growth

and combined with globalization of trade, have shifted many of these countries to become affluent societies.¹⁴ Brunei Darussalam is one of the oil and natural gas rich countries situated in South East Asia. The economic and political stability with grace of monarchial government enabled the residents to lead a high quality of life with world's top fourth GDP per capita and top ten richest economies in purchasing power.¹⁵ To date, there is no published literature on eating disorders in Brunei Darussalam, other than a local newspaper reporting on six cases of eating disorders in Brunei Darussalam from 2010 to 2014.¹⁶ Thus, the aim of this paper is to explore the perspectives and knowledge of eating disorders among young adults in Brunei Darussalam.

METHODS

Study design

This study uses a qualitative exploratory approach of informed focus group to explore the perspective and knowledge of eating disorders among young adults in Brunei Darussalam. Qualitative studies are useful in exploring sensitive topics, especially unknown territories of knowledge and expanding the horizon of known knowledge.^{17,18} Focus groups were chosen as method of data collection as it allows members to share and construct the collective meanings on the phenomenon under investigation.¹⁹ Focus group discussions can nurture different perceptions and are used to gather information for discovery, bench marking, evaluating, feelings, opinions and thoughts.²⁰

Sampling and Recruitment

The study population were students from University of Brunei Darussalam (UBD). Students are eligible to participate if they: (1) are aged 18 years or over; (2) could speak English; and (3) are able to give written and informed consent. We excluded students below the age of 18 years as they need parental consent.

Prospective students were identified through UBD student registry and contacted via email attached with study invitation flyers. Study flyers were also posted in UBD social media platform such as UBD facebook page and WhatsApp groups. However, both these approaches achieved zero recruitment yield. Finally, lecturers from different university programmes were approached and acted as facilitators to conduct open meetings with their students on the nature and purpose of this study and to hand out participation information sheets. Potential participants volunteered to stay back after their lectures to participate in focus groups. Written consents were obtained before starting focus groups.

Fieldwork

Four focus groups were conducted across faculties of the university from January to April 2016. After obtaining consent, focus groups' discussions were audio recorded. In majority of cases, participants' focus groups' discussions were conducted using a mixture of both English and Malay languages. This reflects their everyday usage of languages. Before starting the focus groups, participants were reminded of the confidentiality and the anonymity of the study. The focus groups' discussion lasted between 45 to 60 minutes. A topic guide was used as prompt to conduct and facilitate discussion among the focus group (Table 1).

Table 1: Focus group Topic guide

1.	Can you tell me anything you know about eating disorders?
2.	Share with us any stories related to people you know of with eating disorders in Brunei Darussalam.
3.	Share with us if you have heard or have any myths on eating disorders?
4.	Tell us your views on causes of eating disorders
5.	How can eating disorders be prevented?
6.	What are your thoughts on cultural values of eating disorders?
7.	Share with us your knowledge and awareness about availability of health services for eating disorders in Brunei Darussalam

Data management and analysis

The audio recordings were checked against field notes taken during data collection to improve accuracy and then transcribed by the main researcher. Other researchers then verified the field notes. Transcripts were analysed using thematic analysis allowing us to 'identify, analyse and report patterns (themes) within data'.²¹ Transcripts underwent five phases of thematic analysis: (1) familiarising with data, (2) generating initial codes, (3) searching themes, (4) reviewing themes, (5) defining and naming themes, (6) report writing.²² All researchers (IWHKZ, YCL, MRV) met frequently to review initial coding to apply 'inter coder reliability' and search, review and define the themes. Final report was presented to open meetings with young adults students of the University to clarify and confirm our final themes.

Ethical Considerations

Ethical committee approval was obtained prior to the start of the study (Institute of Health Sciences Research and Ethics committee (IHSREC), UBD). Verbal explanation was given to ensure participants understand the ethical considerations after reading the participant information sheets. Participants were informed there were no right or wrong answers, and all their answers will be kept confidential. As 'eating disorders' is considered a sensitive topic, students were reminded of their rights to refuse to participate. Recorded audio discussions were only used for the purpose of the study and not made available to a third party. The research team included both

experienced qualitative researcher, who guided the data analysis and study conduct and an interviewer with local knowledge on cultural and religious issues, who conducted interviews with adequate cultural/religious considerations (including use of sensitive language and religious needs before and after data collection).

RESULTS

Four focus groups of 23 young adults (9 male and 14 female) from UBD participated in this study. Characteristics of each focus group is shown in Table 2.

Data analysis resulted in the construct of five main themes: (i) 'understanding about eating disorders', (ii) 'awareness of risk and complication of eating disorder', (iii) 'maintaining body image', (iv) 'affluent society' and (v) 'taking stock on services'. Table 3 summarises the description of each theme.

Theme 1: Understanding about eating disorders

The interviewees were able to differentiate different types of eating disorders such as anorexia and bulimia. Interviewees mentioned that eating disorders refer to individuals who either refuse to eat anything or goes on dieting to lose weight:

I think the people with this sort eating disorder, like attempt to take bulimia or anorexia because they want to lose weight right so they tend to think, oh! If I'm gonna lose weight I should do like that's so

Table 2: Participant demographic characteristics.

	Study Participants (Focus group)			
	Focus group 1	Focus group 2	Focus group 3	Focus group 4
Age	Between 18 and 25	Between 18 and 25	Between 18 and 25	Between 18 and 25
Gender	3 males 2 females	2 males 4 females	6 females	4 males 2 females
Year of Study	Year 4	Year 2	Year 2	Year 2
Faculty	PAPRSB Institute of Health Sciences	Faculty of Arts & Social Sciences	Faculty of Science and Faculty of Integrated Technology	Faculty of Business and Economic studies

Table 3: Description of each theme.

THEME	Description of Theme
1. 'understanding about eating disorders'	To determine the knowledge and meaning of eating disorders understood by the participants
2. 'awareness of risk and complication of eating disorder'	To gauge participants 'understanding of causes and complications of eating disorders at the end
3. 'maintaining body image'	To describe the societal stereotypical acceptance of certain body image leading to eating disorders
4. 'affluent society'	To assess how living in abundance can influence individual's perspectives on eating disorders
5. 'taking stock on services'	To explore the health services and facilities available to treat eating disorders in Brunei Darussalam

quick in a matter of weeks. (Female, Focus group 2)

I have a close family relative who have an eating disorder. I think she's anorexic. She doesn't eat. Like sometimes in a day she just drink water. (Female, Focus group 1)

Participants also reported imbalanced diet and frequency of eating as having a relation to eating disorders. For example, some respondents reported that sufferers of eating disorders are individuals who do not have a balanced diet. Others also said that they have an abnormal Body Mass Index (BMI):

Not having a balanced diet. (Female, Focus group 3)

Just judging from the BMI of the person itself you can also suspect that they could also be some eating disorders. (Male, Focus group 1)

Most of the participants agreed that an eating disorder meant either excessive or inadequate eating. Others linked eating disorders with obesity and reported that the sufferers eat every type of food:

I strongly believe that eating more than 3 (meals per day) or less than 3 (meals per day) can be considered as eating disorder. (Male, Focus group 1)

What I know about these eating disorders is they eat everything (Male, Focus group 2)

Awareness of risk and complication of eating disorder

Some of the participants had refused the myth that states eating disorder is a disease by choice as they explained that eating disorders have a psychological basis. These include stress, low self-esteem and peer pressure. Most attributed stress as a main contributor to eating disorders as it impacts an individual's appetite. One participant conveyed that eating distracts a person from stressful thoughts:

For me, I would think it's more of a psychological thing. (Female, Focus group 2)

I would say that stress is a big factor. (Male, Focus group 2)

So it's something like that, so when you eat you're distracted by how full you are that you forget how stressed you are. (Female, Focus group 2)

Because when we're stressed like when we're busy we don't have the appetite. Yeah loss of appetite. (Female, Focus group 3)

Another cause of eating disorder mentioned is the individual's 'mindset' such as low self-esteem and insecurity with regards to the individual's body image. Due to low self-esteem and insecurity, these individuals feel the need to lose weight to achieve a supermodel body image in their perceptions:

It's about the mindset basically like it affects how you eat at the same time. (Female, Focus group 2)

Self-esteem. (Female, Focus group 3)

I think, sometimes they have eating disorders because of (feelings of) insecurity. (Female, Focus group 2)

The next cause of eating disorders raised is peer pressure, with the participants stating that the sufferers wanted social acceptance. The thought of wanting to be 'like others' might stem from being bullied for their appearances as mentioned by one of the participants. One participant described that the sufferer does not want to be the fattest among his/her circle of friends for fear of being rejected or isolated due to less than 'ideal' body image:

Yeah, I think as she mentions, peer pressure. She wants to be liked by others, like to be thinner. That's another factor. (Male, Focus group 1)

Because she weighs a lot, she got bullied because of it so she stopped eating to lose a lot of weight. (Female, Focus group 2)

I think its peer pressure. When we ask her why, she doesn't directly answer it because of her friends, but she said that among her friends she's the fattest. (Female, Focus group 1)

When inquired regarding the complications of eating disorders, most participants were quite knowledgeable on the topic. The complications that were mentioned by the participants included malnutrition, mental health deterioration such as suicidal thoughts and depression, fatigue or dizziness, organ failure, and also death:

All I know is they will be malnourished and therefore they will be feeling weaker and weaker (Male, Focus group 1)

They got too stressed from thinking too much and they think there's no point in life so they try to stop it by suicide. (Female, Focus group 3)

Yeah. Organ and your teeth. Yeah, if it's bulimia it's going to affect your teeth. (Female, Focus group 2)

Starving to death. (Female, Focus group 3)

Maintaining body image

Demographic factors such as age and gender

have an impact on the risk of eating disorder. Most participants agreed that teenagers are the most likely age group to suffer from eating disorders:

I mean it's more prevalent in teenagers or young adult. I don't really hear kids having eating disorders or elderly. (Female, Focus group 2)

The vulnerability of teenagers to eating disorders is due to their consciousness of their outer appearances at puberty age. They are more prone to being influenced by images of 'ideal' body type portrayed by the media:

Most probably the teenagers, because from what I understand they care about what people think of their looks. That's the period of time where they start trying to be trendy. (Female, Focus group 1)

They're easily influenced by the outside culture. (Male, Focus group 2)

According to participants, females are more vulnerable to eating disorders than males:

There are absolutely males who have eating disorders, but not as many as females. It's not really common among the guys. (Female, Focus group 3)

The portrayal of images of 'ideal' woman by society is a cause of pressure towards female to possess similar image that are considered attractive. In addition, females tend to be more sensitive regarding comments on their looks as compared to males:

Caused by society because how we view female right now that they have to be thin to be attractive. (Female, Focus group 1)

Because women like to criticize women. (Female, Focus group 4)

We don't really care about what other thinks of our image especially concerning our weight. These comments affect males less than females. (Male, Focus group 1)

The Affluent Society

Many participants noted that there are more overweight or obese individuals than bulimics, anorexics or underweight individuals in Brunei. They reported that the higher socio-economic status of the people may lead to excessive eating. These factors promote life-style diseases such as obesity:

I think mostly in Brunei case, it's mostly linked to obesity. (Male, Focus group 4)

I think because we can afford it. I don't think there's any problem in trying to buy food. (Female, Focus group 1)

Yeah. I think its Brunei's culture that.. makes us eat. (Female, Focus group 3)

Therefore, obesity is much more advocated compared to the counterparts of eating disorders. The poor advocacy of anorexia or bulimia as compared to obesity may be due to the lack of awareness of such disorders. In addition, abnormal eating behaviors might not be dealt with:

Because in Brunei, I think we're not really aware about eating disorders. (Male, Focus group 2)

They never seem to advertise you know eating disorder not even at posters so I think if people don't see it then probably people won't think about it. (Male, Focus group 4)

We observed that some of our participants reported that they felt worried, scared, and sad to see their family members with abnormal eating habits and are concerned about their wellbeing. In a culture of abundance, where food is affordable and easily available, an individual's refusal to eat might be seen as something negative:

My dad usually eats more. Even though when he is full already he keeps eating and eating and eating non-stop like as long as he see got any food on the table he will just keep eat. Like the 2kg langsung and the 2 kg rambutan, he ate it all. And it's quite scary because once he ate one whole Durian (local fruit) then he got

sick the next day and then he have to go to the hospital. Very scary. (Female, Focus group 1)

It feels sad to see her not eating because she used to be fine then suddenly she became like that. It is kind of sad to see her becoming worse. (Female, Focus group 1)

Others reported how family values influence the sensitivity of discussing eating disorder as a disease within family. For example, a participant reported that as a daughter, she did not dare to approach her 45-year-old father regarding his eating disorder as it is a sensitive subject at home:

We don't dare to ask him about it. Because he is quite sensitive about it. (Female, Focus group 1)

Taking stock on (eating disorder) services

With the lack of awareness on eating disorder, people therefore are not able to identify abnormal eating behaviors. As many participants have pointed out, sufferers of eating disorder might not perceive what they are doing as a problem as they may have been doing it for a long time. Hence, they will not be seeking treatment due to their belief that it is a habit, and they are therefore healthy individuals:

But actually, I think it's normal because I'm always like this. (Female, Focus group 3)

They will only do something about it when problems actually arise. Yeah so that's why they think that since they have been doing it (for) a long time and they do not feel any problem so they will just keep on doing it because they think it's normal to them already. (Male, Focus group 1)

Many reported about the lack of services for management of eating disorders in Brunei. They indicated their lack of awareness and knowledge regarding facilities on treatment of eating disorders available in Brunei:

Not sure actually. (Male, Focus group 4)

I haven't search. (Male, Focus group 4)
I don't think so. I don't know. But do we?
(Male, Focus group 1)

Others reported that current services were highly focused on obesity and healthy eating in Brunei since obesity has a higher prevalence than eating disorders. Some recognized that eating disorders have the potential to be a serious disease in the future and should be tackled early to prevent it from wide spreading:

Yeah we have for obesity. But for anorexic and bulimic, don't have. I don't think so.
(Female, Focus group 3)
It's a potential serious disease in the future, Brunei should do something before it becomes serious. (Female, Focus group 3)

Participants suggested support groups, awareness campaigns or educational talks, rehabilitation centers, and consultations as intervention avenues:

First a support group. It's just Brunei don't have support group, right? So they have to have that one first so they don't feel ashamed to come forth with their problem. (Female, Focus group 3)
Giving awareness. (Male, Focus group 2)
Make a talk so that people will realize that this thing, too thin or overweight is dangerous for their health. (Female, Focus group 3)
I think this has to be through government initiative to do such facilities or to open such facilities. (Female, Focus group 4)
I think seeing a doctor or get perspective from health professionals would help them to see the problem. (Male, Focus group 1)

There were mixed responses about influence of social media with regards to eating disorder in Brunei. As social media exerts a certain degree of influence, this can be used as an effective platform to increase the awareness of both the disorder itself and the services or facilities that are available in Bru-

nei:
I don't think so in Brunei. I don't think they are influenced. (Female, Focus group 3)
I think that social media is very... very influential in Brunei. (Male, Focus group 1)

DISCUSSION

The aim of this study was to explore the knowledge and understand the perceptions of young adult in Brunei regarding eating disorders. Key findings of this study were that although the participants have some knowledge on eating disorders, this knowledge is mostly associated with obesity. Similar to other studies, these young adults reported on abnormal eating behaviors such as imbalanced diet and frequency of eating as underlying causes for eating disorders.^{23,24} Psychological factors such as stress and self-esteem were also reported as causes of eating disorders in this study.²⁵⁻²⁸ Social factors, importantly peer pressure, were also perceived to cause body image dissatisfaction that lead to eating disorder.²⁹⁻³² Our study reports the perceived link between gender and eating disorder. In particular, females were perceived to be more prone to develop eating disorders than males. Indeed the incidence rate of anorexia nervosa, particularly in young females aged 15-19 years is increasing.⁷ Two key reasons were postulated. First, peer pressure among young women to achieve low weight and second, anorexic models are usually portrayed as models in media.³³ Both these reasons are thought to pressurize women to desire to achieve low body weight.³⁴

Furthermore, our study shows that unique features of Brunei society influence perspectives on eating disorders. Thus, living in affluent society and presence of higher incidence of lifestyle diseases seem to influence the meaning of eating disorders among young adults in Brunei. Members of 'affluent society' commonly achieve higher level of economic

well-being due to less scarcity of resources.³⁵ Brunei Darussalam may be considered as an affluent society, with one of the top performing GDP growth.¹⁵ Our findings are congruent with other studies that reported those of the higher socioeconomic status tend to suffer from eating disorders due to the culture of abundance.^{36,37} There is indeed evidence that an affluent society tend to have a higher prevalence of obesity.³⁸ Such high prevalence of obesity seems to influence these young adults to view obesity as eating disorder.

Final theme 'taking stock on services' reports that the young population is unaware of health care services for people with eating disorders in Brunei Darussalam. As this is the first study done on eating disorders in Brunei, there is currently no available literature on the extent of eating disorders in Brunei apart from a local newspaper article that reported six 'clear cut' cases of bulimia and anorexia during 2010 to 2014.¹⁶ It is noteworthy to mention that the problem of eating disorders may be underreported. The Ministry of Health in Brunei urged residents with abnormal eating habits and concerns on their body image to access local clinical psychology services. Eating disorders in developed countries receive cognitive behavior therapy (CBT), and family therapy.³⁹ Schmidt *et al* reported that CBT guided self-care has the slight advantage of offering a more rapid reduction of bingeing, lower cost and greater acceptability for adolescents with bulimia or eating disorder not otherwise specified compared to family therapy.⁴⁰ Future research should explore evaluation of current health service provision for people with eating disorders in affluent societies such as Brunei Darussalam.

Our study reported on strategies to improve knowledge on eating disorders in the public sector of Brunei. As the use of social media has an impact on eating behaviors, educating the public using social media reduce the negative impact as well as educate

the public of healthy eating.^{41,42} Other means of educating people about healthy eating include support groups, awareness campaigns or educational talks, rehabilitation centers, and consultations. A study amongst USA university students reported that educational talks and awareness campaigns are effective in reducing the needs for mental health services due to eating disorders.⁴³

Limitations

Although our study is the first qualitative study that explored views of young adults in Brunei Darussalam on eating disorders, this scope is still limited. First, our sample consisted of university students only, neglecting young adults from general public. Second, the presence of dominant voices of male participants in a few focus groups cannot be prevented. This may drive the discussion to a biased end. Third, as this is a qualitative study with small sample size, further work to explore the perceptions and attitudes of a larger scale of the Brunei population with diverse study designs would prove more useful.

CONCLUSION

We conclude that meaning of eating disorder in an affluent society like in Brunei Darussalam is often misinterpreted with lifestyle diseases such as obesity. Social factors and womenisation held their role to influence understanding of eating disorders among the community. There is a need for community-based intervention on improving public awareness on eating disorders. Health services need to pilot community friendly eating disorder services to improve care for people with eating disorders.

DECLARATIONS

Competing interests

The authors declare that they have no competing interests.

Authors' Contributions

IWHKZ reviewed the relevant literature to develop

the project research questions and rationale, conducted the interviews and interpreted the results, as well as drafting the paper for publication. YCL contributed to development of the study rationale and methodology, interpretation of results and writing and editing of paper for publication. MRV developed the study methodology and contributed to the interpretation of the results and writing of paper for publication. All authors read and approved the final manuscript.

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