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Mental Health Literacy Regarding Eating Disorders in Female Japanese University

Students

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Clinical Implications

The mental health literacy regarding eating disorders in female Japanese university students is inadequate.

The mental health literacy about bulimia nervosa is limited, and the disorder is perceived more negatively than anorexia nervosa.

It is necessary to develop programs for improving mental health literacy for eating disorders.

Abstract

Mental health literacy (MHL) refers to one's knowledge and beliefs about mental disorders. MHL is necessary for the prevention and early detection of eating disorders, but little research exists on the MHL of Japanese people. This paper aims to reveal the degree of MHL about eating disorders in the Japanese individuals most susceptible to them (namely, female university students). Female Japanese university students were surveyed with a self-report questionnaire, using the Japanese versions of anorexia nervosa and bulimia nervosa vignettes. Most participants responded that the main problem described in each vignette were "eating disorders" and tended to suggest medical care for the treatment. However, many still believed these issues to be simple problems of eating behavior. Overall, the participants demonstrated inadequate MHL about eating disorders. Initiatives to improve this population's knowledge and understanding of eating disorders are necessary.

Keywords: eating disorders, mental health literacy, vignette, bulimia nervosa, anorexia nervosa, university students

The Current State of Mental Health Literacy Regarding Eating Disorders in Female Japanese

University Students

The prevalence of eating disorders in Japanese individuals between the ages of 15 and 29 is lower than rates observed in Western European countries. In Japanese individuals, the rate is 17.10 per 100,000 for anorexia nervosa (AN), and 5.79 per 100,000 for bulimia nervosa (BN). However, some argue that the prevalence of eating disorders may actually be higher than what is reported, and that numbers are continuously increasing (Chisuwa & O'Dea, 2010). For instance, a study of female Japanese students, aged 16 to 23, spanning from 1982 to 2002, reported that the number of students who may have an eating disorder rose by approximately 10-fold (Nakai, Nin, & Noma, 2014). Therefore, little comfort can be found in the knowledge that the prevalence rate of these disorders in Japanese individuals living in Japan is less than the rate observed in Western Europe. Eating disorders are serious, and chronic, disorders. For example, while the prognosis varies by subtype in Japanese individuals, eating disorders exhibit a high mortality rate (Nakai et al., 2014). Unfortunately, even though the number of individuals with eating disorders continues to increase, the number of individuals actively seeking treatment remains limited (Stice, Marti, Spoor, Presnell, & Shaw, 2008). As such, even though prevention and avoidance of increased severity through early interventions are essential, there is little evidence that appropriate eating disorder prevention and early treatment occurs (Mond, 2014).

Jorm et al. (1997) introduced the term "mental health literacy" (MHL) to refer to the "knowledge and beliefs about mental disorders which aid their recognition, management or prevention." MHL is necessary for the prevention and early detection of eating disorders, as well as to eliminate the stigma toward patients who suffer from them. Specifically, it is important to impart the knowledge that individuals with eating disorders have thoughts about food that are different from those without eating disorders (Blodgett Salafia, Jones, Haugen,

& Schaefer, 2015). Further, it is important to educate people about how the strong ideal of thinness in modern Japanese society has been proposed as a cause of the increase in eating disorders (Chisuwa & O'Dea, 2010). The eating disorder MHL of Japanese individuals has not been adequately examined (Dryer, Uesaka, Manalo, & Tyson, 2015).

In previous research on MHL about eating disorders, surveys utilizing the vignette method have often been used to measure MHL levels (Mond, Hay, Rodgers, Owen, & Beumont, 2004; Mond, Robertson-Smith, & Vetere, 2006; Mond & Hay, 2008; Mond & Arrighi, 2011; Darby, Hay, Mond, & Quirk, 2012; Star, Hay, Quirk, & Mond, 2015). These surveys have included target respondents who were female members of an Australian community (Mond et al., 2004), female Singapore high school students (Chen, Mond, & Kumar, 2010), university students (Mond & Arrighi, 2011), and more. Such research has found that MHL about eating disorders varies depending on respondents' sex (Mond & Arrighi., 2011), age, and whether or not they are inclined to have an eating disorder (Mond et al., 2004). In addition, it has been reported that there are differences in problem recognition and perceptions of severity and prevalence among respondents regarding AN and BN (Chen et al., 2010). The possibility that MHL education may only be effective in preventing eating disorders in the short term (Carter, 1997), as well as the difficulties of carrying out first and second stage prevention simultaneously, have also been pointed out (Mann, 1997). In order to study how MHL education programs should be conducted in the future, it is necessary that current MHL levels be determined.

Therefore, this study's purpose was to identify the levels of MHL regarding eating disorders in Japanese people. As is common in studies on MHL about eating disorders, we used the vignette method to conduct surveys on female university students, a population that is particularly susceptible to BN. We also investigated whether there is a difference in the levels of MHL in female Japanese university students by type of eating disorder (namely, AN

and BN).

Methods

Study Design and Participants

Ethical approval for the study was obtained from University A. Consent to participate in the research was confirmed by the question on the survey, and only data from individuals that provided consent were analyzed. Participants were female Japanese university students currently enrolled at University A, a small-scale university in a rural area. A document explaining the research and a survey form were distributed to 1,101 individuals. Of these, 610 voluntarily submitted surveys (a recovery rate of 55.4%). Surveys with missing responses were excluded, resulting in a final sample of 599 (an effective response rate of 98.2%) participants.

Study Composition

To create the vignettes used in this study, Japanese translations, based on the vignettes created by Mond et al. (Mond et al., 2004; Mond et al., 2006; Mond & Hay, 2008), were back-translated with the approval of the original authors. See Appendix A for the full text of the vignettes.

Following a preliminary survey administered to female Japanese university students, questionnaire items were created with reference to the results of Mond et al.'s surveys (Mond & Arrighi, 2011; Mond et al., 2004; Mond et al., 2006; Mond & Hay, 2008) and the Practice Guideline for the Treatment of Patients with Eating Disorders (Japan Society for Eating Disorders, 2012). The respondents first read an vignette, then selected their answers to questions from a given set of choices. Afterwards, they would read a vignette about BN, then give answers to the same questions posed about the AN vignette by selecting from the same set of choices.

Of the items on the questionnaire, the following were totaled and used in the analysis in accordance with the aims of the research: nationality, age, knowledge of the vignette (namely, the main problem, cause, who would be able to help, and treatment), and participants' impression of the condition in the vignette (namely, how much distress the characters are in, if the participant can empathize, if treatment is necessary, if the participant thinks the issue is temporary, if the participant thinks the issue is serious, and if the participant thinks the character in the vignette is solely responsible for the issue).

Statistical Analysis

Participant responses are shown as a percentage of the total effective response rate (*N* = 599). To regulate differences in the contents of each vignette for statistical processing, responses related to the main problem of the vignette of "an eating disorder (anorexia nervosa)," "an eating disorder (bulimia nervosa)," and "an eating disorder (do not understand the detailed name of the disorder)" were categorized as "eating disorder" and other responses were categorized as "other." For these "other" responses, "do not have a meal" and "overeating" were categorized as "amount of food consumed," and responses for "too thin" and "obesity" were categorized as "physical constitution." Differences between recognition of an "eating disorder" and "other," and between cause and treatment within each vignette, were investigated with a chi-square test. Less than 5% of respondents selected "Other" as their answer in the questions about AN and BN. We examined the variation of the trends in their recognition of eating disorder symptoms in the AN and BN vignettes by carrying out the Mann-Whitney U test.

IBM SPSS Statistics 23 (IBM, Japan) was used for all data analyses. A *p* value of 0.05 was considered statistically significant (two-tailed test).

Results

Characteristics

All participants were female Japanese university students with a mean age of 20.6 ± 1.78 years (range 18-29 years). Body mass index (BMI) could be calculated for 585 participants. BMI mean was 20.8 ± 2.91 (range 15.2-37.9). BMI was below 18.5 for 111 participants (19.0%) and above 25 for 44 participants (7.5%).

Main Problem

Participants were asked what the main problems depicted in the vignettes were, and the answers are shown in Table 1. For AN and BN, 34.7% and 51.2% answered "An eating disorder," respectively, demonstrating correct understanding. A significant difference was observed for whether an eating disorder could be recognized in each vignette ($\chi^2 = 33.4$, p < 0.001), indicating that the degree to which each vignette was recognized as an eating disorder differed. Among answers other than "An eating disorder" to what the main problem was, "Wrong diet" (19.7%) was most frequent for AN. For BN, the belief that the problem was a "Lack of self-control" (20.0%) was most frequent.

[Insert Table 1 here]

Beliefs About Causes, the Most Helpful Person, and Treatments

Beliefs about causes, the most helpful person, and best treatments for the disorder described in each vignette are shown in Table 2. Regarding the primary cause, "Way of thinking about body shape" was the most common answer for AN (40.7%), while "Strict dieting" (27.0%) was most common for BN.

For the most helpful person, "Psychiatrist, psychotherapist" (23.7%) was the most common answer for AN. For both AN and BN, "Mother" was also frequently selected (AN = 22.7%, BN = 25.7%). In BN, this was followed by "Psychiatrist, psychotherapist" (19.4%).

Concerning the best treatment, the most common answer for AN was "Cognitive-behavior therapy" (29.5%), followed by "Counseling" (16.0%). For BN, "Getting advice about diet and nutrition" (20.9%) and "Counseling" (19.5%) were most frequent. For AN and

BN questions, significant differences were confirmed between the responses for each vignette (Cause $\chi^2 = 170.0$, p < 0.001, Most helpful person $\chi^2 = 53.8$, p < 0.001, Treatment $\chi^2 = 36.5$, p < 0.001).

[Insert Table 2 here]

Differences in Understanding of Disorders

Differences in the understanding of the condition described in each vignette are shown in Table 3. Significant differences in response trends between the AN and BN vignettes were observed for "How important do you think it is for people with a condition like that of the person in the vignette to receive medical treatment in a hospital?" (z = -4.254, p < 0.001). "Do you think that a condition like that of the person in the vignette is temporary?" (z = -3.435, p < 0.001), and "How medically serious do you think a condition like that of the person in the vignette is?" (z = -5.345, p < 0.001). Regarding how important medical treatment was, many answered "Extremely" (AN = 39.9%, BN = 31.7%) for both vignettes, but for the BN vignette, many chose "Low" as well (AN 8.3%, BN = 16.9%). Even for the question of whether the problem was serious, more people chose "Extremely" for AN than for BN (AN = 51.6%, BN = 31.7%), and there was a tendency among respondents to choose "Moderate" (AN 10.8%, BN 19.7%) and "Low" (AN = 4.5%, BN = 8.5%) for BN.

As to whether the condition was viewed as temporary, a difference in response trends was observed between AN and BN (AN vs. BN, z = -4.254, p < 0.001). The response of "Not at all" was more common for AN than for BN (AN = 51.4%, BN = 43.1%). There was no significant difference observed between the two vignettes regarding responses to the questions "How much do you think the person in the vignette is suffering from her condition?," "How much can you sympathize with the person in the vignette because of her condition?," or "How much personal responsibility do you think a person with a condition like that of the person in the vignette has for her condition?"

[Insert Table 3 here]

Discussion

The most susceptible age for eating disorders in Japanese individuals is from 10 to 30. While AN is particularly common during puberty, a later age of onset is reported for BN (Nakamura et al., 2000). The objective of this study was to understand the eating disorder MHL of female Japanese university students. These students are at a susceptible age for the development of BN, and the goal of this study was to create a reference point for use in the future prevention of eating disorders.

Results revealed that roughly half of the participants surveyed could recognize AN and BN as the main problem from the conditions presented in the vignettes, demonstrating that knowledge of disorder names and symptoms is increasing. In a report studying female university students in Australia, the percentage of participants who could correctly identify the disorder names was 73.7% for AN and 25.3% for BN (Mond & Arrighi, 2011). The rate was 14.5% in a study of BN focusing on female university students in Singapore (Chen et al., 2010). Compared to the results of this study, it seems that, even though the recognition rate of AN was lower in Japanese students than was observed in Australian students, Japanese students demonstrated a higher level of recognition of BN symptoms than samples from both Australia and Singapore.

For the most helpful person and treatment, "Psychiatrist, psychotherapist" was the most common answer in AN. Accordingly, there was a tendency to select treatments that one would receive from professionals, such as "Counseling" and "Cognitive-behavior therapy." On the questionnaire used in this study, an explanation of cognitive-behavior therapy was provided. Therefore, it is assumed that even respondents who did not know much about cognitive-behavior therapy could recognize it as an effective treatment method. However, though BN was recognized as an eating disorder, "Mother" was commonly selected as the

most helpful person to contact, and the most common treatment suggestion was "Getting advice about diet and nutrition." The percentage of respondents who chose "Psychiatrist, psychotherapist" for treatment was relatively low compared to the percentage that indicated that an "Eating disorder" was the main problem. There is a possibility that the respondents considered BN a problematic eating behavior, and not an eating disorder, which is a type of mental disorder.

We know that individuals with eating disorders do not typically present themselves for evaluation and treatment at hospitals (Moessner, Minarik, Özer, & Bauer, 2016). It is possible that the selection of treatment methods was incorrect because, as seen in a survey of female Japanese individuals, BN is considered a condition occurring due to misguided eating habits and diet, rather than as a psychiatric disorder requiring treatment from a professional (Dryer et al., 2015). Even in the survey, many respondents considered overeating the main problem with regard to BN, and this shows that it is often considered a mere eating behavior problem. In addition, from the fact that many chose "Mother" as the most helpful person, it can be assumed that, in order to carry out early detection and intervention for eating disorders among young people like female university students, it is necessary to better educate mothers. With regard to their awareness toward the status of another person's eating disorder, responses differed regarding AN and BN, but there is an awareness in common that the symptoms are difficult for the patients, and that the responsibility for the disorder lies not on the patients themselves. Further, participants indicated that they believed AN was a more serious problem than BN, and that the medical treatment of it was more important. Consequently, the survey shows that, based on both the answers to the "Most helpful person" and "Best treatment," BN is not recognized as a disorder that requires medical treatment to the same degree as AN. These negative opinions about BN may be the result of an emphasis on reducing obesity to prevent lifestyle diseases. Additionally, information on the effects of

obesity and overeating is prevalent in society through the media (Dryer et al., 2015). Thus, it is possible that a negative opinion of obesity, due to overeating, caused by BN—which is perceived as simply eating too much—was observed in this study. It has been previously reported that obesity is believed to be due to a lack of self-discipline (Rothblum, Miller, & Garbutt, 1988).

This study is not without limitations. First, participants were limited to university students from one region, and because the response rate was low, it is possible that there is some level of response bias. Also, because all survey sheets asked first about AN then about BN, it is possible that the AN vignettes affected the trend of answers about BN.

The results of this study demonstrate that the eating disorder MHL of female Japanese university students is inadequate. In particular, understanding of BN—which includes overeating—is limited. Additionally, it was shown that BN is perceived more negatively than AN. This becomes a large burden on individuals with BN, resulting in a barrier to treatment. Increasing MHL for eating disorders is necessary for the elimination of stigma improves and early detection. In particular, spreading knowledge to increase understanding of BN is essential. It also may be necessary to conduct studies on how best to educate mothers, whom many young people perceive as the best people to consult about eating disorders. For these reasons, it is important that future research investigate the effects of eating disorder MHL. It is also necessary to develop a program for improving eating disorder MHL and observe its effects.

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Table 1

Answers to "What is the main problem for the person in the vignette, if she has a problem?" (n=599)

	A	N	I	BN		
Main problem	n ((%)	n	(%)	χ2	p
An eating disorder ^a	208	(34.7)	307	(51.2)	33.4	< 0.001***
Other responses	391	(65.3)	292	(48.8)	33.4	< 0.001
Wrong diet	118	(19.7)	66	(11.0)	-	-
Lack of self-control	26	(4.4)	120	(20.0)	-	-
Amount of food consumed (Do not have	20	(3.3)	12	(2.0)		
a meal, Overeating)	20	(3.3)	12	(2.0)	-	-
High stress	6	(1.0)	54	(9.0)	-	-
A strong feeling of anxiety	84	(14.0)	12	(2.0)	-	-
Mental health problem other than an	64	(10.7)	10	(1.7)		
eating disorder	04	(10.7)	10	(1.7)	-	-
Low self-esteem	64	(10.7)	16	(2.7)	-	-
Physical constitution (Too thin, Obesity)	6	(1.0)	2	(0.4)	-	-
Do not know	1	(0.5)	0	(0.0)	-	-

^aSum total of these answers: "Anorexia nervosa," "Bulimia nervosa," "An eating disorder other than anorexia nervosa or bulimia nervosa," and "Do not know the exact name of disorder"

EATING DISORDER MENTAL HEALTH LITERACY

Table 2

Answers about causes, most helpful people, and treatments for the disorders described in each vignette (chi-square tests; n=599)

		AN		BN		
	n (%)		n (%)		χ2	p
If the condition the person in the						
vignette has can happen to anyone,					170.0	< 0.001***
what do you think is the main cause?						
Influence of the mass media, such as	105	(17.5)	42	(7.2)		
TV or magazines	105	(17.5)	43	(7.2)	-	-
Character of the person	59	(9.9)	68	(11.4)	-	-
Opinions, such as those from family, a	27	((2)	1.7	(2.9)		
friend, or lover	37	(6.2)	17	(2.8)	-	-
Daily stress	17	(2.8)	122	(20.4)	-	-
Strict dieting	106	(17.7)	162	(27.0)	-	-
Way of thinking about body shape	244	(40.7)	128	(21.4)	-	-
Others ^a	28	(4.7)	54	(9.0)	-	-
Do not know	3	(0.5)	5	(0.8)	-	-
	599	(100.0)	599	(100.0)		
Which person do you think would be						
the most helpful for the person in the					53.8	< 0.001***
vignette?						
Friend	123	(20.5)	101	(16.9)	-	-
School counselor (Work counselor)	34	(5.7)	41	(6.8)	-	-

Mother	136	(22.7)	154	(25.7)	-	-
Dietitian or nutritionist	68	(11.4)	114	(19.0)	-	-
Psychiatrist, psychotherapist	142	(23.7)	116	(19.4)	-	-
Instructor of a fitness club	56	(9.3)	11	(1.8)	-	-
Others ^b	24	(4.0)	42	(7.0)		
Do not know	16	(2.7)	20	(3.4)	-	-
	599	(100.0)	599	(100.0)		
What do you think the person in the						
vignette should do in order to improve					36.5	< 0.001***
her condition as much as possible?						
Treatment from hospital	68	(11.3)	83	(13.9)	-	-
Counseling	122	(20.4)	117	(19.5)	-	-
Cognitive-behavior therapy	177	(29.5)	102	(17.0)	-	-
Getting advice about diet and nutrition	80	(13.4)	125	(20.9)	-	-
Just talking or talking about the present	24	(5.7)	20	(6.2)		
state with a family or a friend	34	(5.7)	38	(6.3)	-	-
Getting information about one's state	46	(7.7)	37	(6.2)	-	-
Others ^c	69	(11.5)	93	(1.0)	-	-
Do not know	3	(0.5)	4	(0.7)	-	-
	599	(100.0)	599	(100.0)		

^aIncluding: "Having a pre-existing psychological problem," "A recent traumatic event,"

[&]quot;Body shape at childhood," and "The condition is genetic"

^bIncluding: Teacher of the school / Counselor out of the school / Family, except mother / Doctor, except psychiatrist and psychotherapist / Telephone consultation or internet consultation

'Including: "Use medication" "Use vitamin/mineral supplements," "Get advice about weight loss," "Find a friend with a similar condition," "Surround herself with people who show understanding," "Go to a fitness club or a beauty treatment salon for weight loss," "Find some new hobbies, "Get out," and "Increase or decrease her amount of exercise."

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Table 3 $Answers \ regarding \ understanding \ of \ the \ condition \ described \ in \ each \ vignette \ (Mann-Whitney \ U-tests; \ n=599)$

			AN	-	BN		
		r	ı (%)	n	(%)	Z	p
How much do you think the							
person in the vignette is				5		-0.618	0.536
suffering from her condition?							
	Not at all	14	(2.3)	64	(0.8)	-	-
	Low	68	(11.4)	129	(10.7)	-	-
	Moderate	112	(18.7)	218	(21.5)	-	-
	High	200	(33.4)	183	(36.4)	-	-
	Extreme	205	(34.2)	599	(30.6)	-	-
How much can you sympathize							
with the person in the vignette						-1.204	0.229
because of her condition?							

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	Not at all	117	(19.5)	176	(29.4)	-	-
	Low	254	(42.4)	201	(33.5)	-	-
	Moderate	185	(30.9)	133	(22.2)	-	-
	High	34	(5.7)	64	(10.7)	-	-
	Extreme	9	(1.5)	25	(4.2)	-	-
How important do you think it							
is for people with a condition							
like that of the person in the						-4.254	< 0.001***
vignette to receive medical							
treatment in a hospital?							
	Not at all	5	(0.9)	8	(1.3)	-	-
	Low	50	(8.3)	101	(16.9)	-	-
	Moderate	105	(17.5)	112	(18.7)	-	-
	High	200	(33.4)	188	(31.4)	-	-
	Extreme	239	(39.9)	190	(31.7)	-	-

like that o	of the person	in	the
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vignette is temporary?

Not at all	308	(51.4)	258	(43.1)	-	
Low	199	(33.2)	205	(34.2)	-	-
Moderate	72	(12.0)	109	(18.2)	-	
High	18	(3.0)	21	(3.5)	-	
Extreme	2	(0.4)	6	(1.0)	-	

How medically serious do you

think a condition like that of

the person in the vignette is?

Not at all	0	(0.0)	3	(0.5)	-	-
Low	27	(4.5)	51	(8.5)	-	-
Moderate	65	(10.8)	118	(19.7)	-	-
High	198	(33.1)	189	(31.6)	-	-
Extreme	309	(51.6)	238	(39.7)	-	_

How much personal

-1.334 0.182

-5.345 < 0.001***

FATING	DISORDER	MENTAL	HEALTH I	I ITER AC	\mathbf{V}^r
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4

responsibility do you think a

person with a condition like

that of the person in the

vignette has for her condition?

Not at all	26	(4.3)	21	(3.5)		
Low	157	(26.2)	151	(25.2)	-	-
Moderate	242	(40.5)	236	(39.4)	-	-
High	127	(21.2)	123	(20.5)	-	-
Extreme	47	(7.8)	68	(11.4)	-	-

Appendix A

Vignettes

Anorexia nervosa (AN)

A is a 15-year-old female school student. Although A was always skinny, changes to her body type during puberty became a great concern to her. Since then, she has only been thinking about losing weight. When A was 13, she enrolled in a fitness club and started training every day. Due to these efforts, A's weight started to decrease. At the same time, A started restricting her diet based on a strict regime, such as not eating food products with a high fat content, not snacking, and only eating fixed amounts of "healthy food." There were days on which she would not eat at all. Through this combination of diet and exercise, A's weight decreased further, to the point that her current weight is much lower than the average for her height and age, and her menstruation has stopped. Although A is extremely thin, she will not acknowledge this. She is afraid of "getting fat" and will do anything to avoid increasing her weight. Furthermore, she will not accept that she needs help. As a result, A's relationship with her family has worsened and her grades at school have started to drop.

Bulimia nervosa

B is a 19-year-old female university student. Although she was "chubby" when she was a child, her weight was always within the normal range. However, B is convinced that she is fat. When she was 16, B created a program for losing weight and started jogging regularly. B also started restricting her diet based on a strict regime, such as not eating food products with a high fat content, not snacking, and only eating fixed amounts of "healthy food." Through these efforts, B's weight started to decrease. However, B has found it difficult to sustain this life pattern and her weight has greatly fluctuated. When

she comes home from university, B has some snacks. However, when she starts eating, she cannot stop and continues to eat without any control. For example, she will eat a whole loaf of bread, a box of biscuits, a block of chocolate, various flavors of ice cream, and a few slices of fruit all at once. At times, B uses laxatives to prevent weight gain. On other occasions, she forces herself to vomit after eating. Due to such behavioral patterns, B's relationship with her family and friends is more and more difficult.

Appendix B

Questionnaire Items

- 1. If A (or B or C) has a problem, what would you think A (or B or C)'s problem is?
- 2. If A (or B or C)'s symptoms could be developed by anybody what would be the causes?
- 3. Who would be the person who could help A (or B or C)?
- 4. What would be helpful treatment for A (or B or C)?
- 5. What kind of person do you think you would be if you had A (or B or C)'s condition?
- 6. How distressing do you think it would be to have A (or B or C)'s conditions?
- 7. How sympathetic would you be towards someone with A (or B or C)'s condition?
- 8. How difficult do you think it would be to treat A (or B or C)'s condition?
- 9. What would you think is A (or B or C)'s likely prognosis with treatment?
- 10. What would you think is A (or B or C)'s likely prognosis without treatment?
- 11. Do you think you have ever had a condition like A (or B or C)'s?
- 12. Do you think you that you might currently have a condition like A (or B or C)'s?
- 13. Do you think you might have a condition like A (or B or C)'s in the future?
- 14. Do you think you might not be bad to become to like A (or B or C)'s condition?
- 15. Do you think anyone in your family or circle of friends ever had a condition like A (or B or C)'s?

16. How many women of the same age as you in the general community do you think might have A (or B or C)'s condition?