Original Article

MENTAL HEALTH: ADOLESCENTS, THEIR KNOWLEDGE AND ATTITUDE

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ABSTRACT

Background : The aims of this current study were to prepare and validate a Bengali questionnaire to assess knowledge and attitude of adolescents about the various mental health issues related to them, and to conduct a pilot study with this questionnaire.

Method : It was a cross sectional study conducted on adolescent school girls (N=107, 12 to 18years age) from rural background of West Bengal. A 13 item Bengali questionnaire was constructed, validated and administered on the subjects. Statistical analysis was done using SPSS (16th version).

Results: Most of the items had good test re-test reliability. Mean age of the population was 13.09 years. Three knowledge based questions had more correct responses (50.5%, 52.3%, 50.5%) and one had 72% incorrect responses. Majority of the subjects recognised problem behaviours, expressed an helping attitude, tended to seek help from parents, and thought sharing worries with others and spending time with friends could make them happy.

Conclusions : This questionnaire appears reliable to assess knowledge and attitude of adolescent girls. There is need to inform adolescents about various mental health issues. Attitude to help and a sense of cohesion was conspicuous in this population. A larger and more inclusive study needed to generalize the findings.

Key word : Adolescents, Awareness, Reliability

BACKGROUND

Adolescence and its crisis has been object of amazement and awe since ages. With the recent rise of the instances of problem behaviour like self harm, criminal acts and various risk taking acts by adolescents, especially in our country (Gopi Krishna et al, 2013), it has become necessary to look into the problem through an adolescents'-lens, to know about how much aware they are about the phenomenon of transformation from a child to an adult, about the various changes, challenges and problems typical of this period. Part of this transition is a plethora of changes pertaining to the manner they view the things around them, about others, about themselves. Often these changes become too much for them to cope up with, resulting in various mental health issues like adjustment problems, depression, and self harm behaviours (Patel et al, 2008). At times problems such as pervasive unhappiness and depression, quarrelling, using abusive language and delinquent behaviour in school students, especially at secondary level, have been found to be posing serious threat to proper academic and personality development of the students (Hiremath et al, 2012).

Owing to a number of factors like, the different developmental trajectories for boys and girls, explained by the negative experience of intensification of stereotypical gender roles (Zahan-waxler, 2000) and differences in pubertal development resulting in earlier maturity of girls leading to apparent differences in processes of family

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influence, girls during adolescence have a typical pattern of disclosing their inner world and spending time alone or with peers and parents which is distinct from the boys in adolescence (Alsaker, 1996). These, along with cultural practices, often result in problems like excessive anxiety, depression, feelings of low self esteem, avoidant behavior and excessive dependence on others, more in adolescent girls (Garnefski and Dickstra, 1996).

To face the challenges of this critical period, to cope up with the crises and to deal effectively with others with those problems one need to be aware about those issues (Hoven et al, 2008). Inspite of the fact that, gathering information about their awareness of mental wellbeing and their attitude towards mental health problems forms a critical step for behavioural scientists to intervene into those situations, Little attention has been focused on promoting mental health awareness, especially in less economically developed nations where the burden is great (Sherer, 2002; Miranda and Patel, 2005). Studies have suggested that direct targeting of children themselves is ideal for increasing awareness (Bijl et al, 2003; Hoven et al, 2008; Rahman et al, 2000).

As part of 'Adolescence Health Training Program', a joint venture of SarvaShiksha Mission (Dept. of School Education, Govt. of West Bengal) and Burdwan Science Centre (National Council of Science Museums, Ministry of Culture, Govt. of India), adolescent girls from different schools (class 6 to 10) were brought, in batches, in a convention centre of Burdwan (a town in West Bengal) to be addressed about the different problems of adolescence. They attended lectures by Psychiatrists and Gynaecologists on different aspects of adolescents' problems. In an attempt to assess their awareness about mental health a questionnaire was needed. After searching literature a number of questionnaire were found that assesses the problems and problem behaviours of adolescents, though not much was found that assesses the knowledge and attitude of adolescents about the mental health issues that are so particular of their age. This dearth seemed to be more glaring when the target population was adolescent girls coming from rural parts of West Bengal. So one questionnaire was devised in the Department of Psychiatry, Burdwan Medical College, with the purpose of assessing adolescents' knowledge and attitude pertaining to certain common mental health issues of their age.
Before using this questionnaire in larger perspective it was needed to validate this tool and to undertake one pilot study. This pilot study was conducted as a forerunner of another bigger study targeting around 1000-2000 adolescents meant to explore various mental health issues of that age group in order to formulate plans to help them cope up with those problems more effectively.

AIM

The aims of this current study were :

- To prepare a Bengali questionnaire to assess knowledge and attitude of adolescents about the various mental health issues related to adolescence and validate it.

- To conduct a pilot study with this questionnaire on adolescent school girls from rural background of West Bengal.

METHOD

It was a cross sectional study conducted on 107 adolescent school girls from rural background of West Bengal.

Inclusion criteria

- 12 to 18 years old school going girls

- Able to read, write and understand Bengali

- Informed consent from both the girl and accompanying teacher

Exclusion criteria

- Poor comprehension of Bengali
- Disability hindering reading, writing or hearing
- Below average comprehension as assessed on clinical interview
- Unwilling to participate in study

Tools

A data sheet specially devised for this study containing certain personal data (like age, class etc) and Mental Health Awareness Questionnaire

Mental Health Awareness Questionnaire

This questionnaire was devised in the Department of Psychiatry, Burdwan Medical College, West Bengal. Psychiatrists, counsellors posted in Child and Adolescent guidance clinic, school teachers who watch child and adolescent population closely and a number of persons who have adolescent children were told about the project and were requested to submit sample questions (in Bengali) pertaining to mental health issues of adolescents based on their day to day experience. Then based on opinions of senior psychiatrists who attend to child and adolescent population in the OPD regularly, 20 questions from this list were selected and a questionnaire was constructed in Bengali. Then it was presented to the two counsellors posted in Child and Adolescent guidance clinic in the hospital, school teachers and parents of adolescents. Based on the consensus 13 questions were retained in the questionnaire.

Out of these 13 questions, 12 have multiple options to choose from and the last one is open ended. Some of the questions are case vignettes presented in simple words depicting certain situation, followed by choices. Out of these first 12 questions, four (no. 1, 2, 7 and 9) are meant to assess knowledge about mental health issues in adolescence, while eight questions are kept to observe their attitude towards some real life examples related to mental health issues. The subjects are requested to tick one choice for each of the first 12 question that they think right. In the 13th question they are requested to note down up to three ways they think that could help them feel happy.

For each of the knowledge questions one choice is correct and the frequency of correct answers are seen. For the attitude questions the frequency of the choices used by the subjects are observed. And for the open ended question the ideas expressed by the subjects are noted.

Conduction of the study

This pilot study was conducted after validating the questionnaire and after obtaining approval from the ethical committee.

The purpose of the study was explained to the students and their accompanying teacher. Subjects who met the inclusion criteria were taken up in the study. The 13 item Bengali questionnaire were given to the girls, individually, after explaining the procedure to respond to it, before they attended the lecture. They were requested to complete the questionnaire on their own, unaided. Most of the girls returned the completed questionnaire within 30 minutes. After rejecting two data for multiple response in a few questions (from no. 1 to 12) and one data for not being returned, finally 107 samples were retained in this pilot study.

Validation of the questionnaire:

Face validity was determined by a group discussion by experts.

Test-retest reliability was seen by administering the questionnaire on a group of 20 girls of class VIII from a rural school nearby, twice, after a gap of 10 days.

Statistics:

Statistical Package for Social Sciences, 16th version, was used for the analysis of data.
Validation: Test-retest reliability was seen by kappa statistics.

Pilot study: In the pilot study the distribution of age, class and religion in the sample was analysed using descriptive statistics. For the knowledge questions the frequency of correct response was seen by descriptive statistics. For the attitude questions the frequency of using the choices in each question was noted through descriptive statistics. For the last question, i.e., the open ended one, subjects expressed a number of ideas about how to feel happy. So the statements were grouped into eight broad categories, after reaching a consensus by experts. The frequency of responses in each category was seen by descriptive statistics.

RESULT

Test re-test reliability

Eight out of twelve questions from 1 to 12 had kappa value more than 0.7 indicating good test re-test reliability. Questions 2 (0.875), 3 (0.861), 9 (0.886) and 11 (0.914) showed excellent test re-test reliability. Two questions had kappa value slightly less than 0.7 (questions 4 and 5), while the value was not satisfactory for questions 7 (0.596) and 12 (0.490). In question no 13 most of the categories showed good to excellent test re-test reliability, though the category 'no response' had poor kappa
value (0.200) **(Table 1)**

Pilot study

The mean age of our study population was found to be 13.09 years, majority of the girls were Hindu (69.2%) and were studying in class VIII (67.3%) **(table 2).**
While observing the response for the questions pertaining to knowledge **(table 3**) it was found that there were more correct response in questions 1 (50.5%), 2 (52.3%) and 7 (50.5%), though majority gave incorrect responses to question 9 (72%). Only 0.9% of the study population refrained from responding to each of the questions 1 and 9, while for each of the questions 2 and 7 it was 4.7%.

Regardin the questions pertaining to attitude **(table 4),** question no 10 was attempted by all the subjects. 13.1% of the girls did not respond to question no 6, though this number was much less for rest of the questions (from 0.9% to 4.7%). For most of the questions the subjects preferred one particular response over others, more so in questions 4 (86% choice 1) and 12 (81.3%).

In the open ended question most of the girls came out with ideas about how to feel happy (question 13) **(table 5**). Most of their ideas were related to categories 'sharing' (52.3%), 'sports' (43%) and 'food' (39.3%). 9.3% of them refrained from responding to this particular question.

Table 1. Test re-test reliability

	Questions		kappa
1	Adolescence is the period between : Youth and old age/Childhood and old age/Childhood and youth		0.783
2	Being listless, restless, losing temper and feeling guilt for no apparent reason during this period: Is usual/Should not happen/Happens with some but not with others		0.875
3	The problem mentioned in the previous question: Is serious/Nothing could be done about this/Pass away uneventfully with help of friends and near and dear ones		0.861
4	If someone starts having adolescence related problems: One should try to help him out/Avoid him/Avoid discussing the topic with him		0.630
5	Priyanka has consumed poison out of anger after being scolded at home. Her behaviour is: Abnormal/Normal /An ideal way to teach her parents a lesson /An attempt to commit suicide		0.697
6	After failure in exam your classmate Partha has been remaining absent in class for last 3 months. You have come to know that he is depressed. You think: Since he has failed he shouldn't come to school/Depression is a mental illness that needs to be treated/His absence is due to failure. He will become alright without any help.		0.746
7	What, do you think, causes mental illness: Influence of spirit and supernatural elements/Bad karma of past life /Poor hygiene/Heredity /Both environmental and hereditary causes		0.596
8	Your best friend Uma has become withdrawn, remains absent in class frequently and has become irritable for quite some time. You think: It's wise to avoid her/You should complain to teacher against Uma /She is doing this intentionally/She needs help. You should come forward		0.727
9	Reduced sleep and appetite, lack of concentration and excessive worries for a long time is a sign of: Physical illness/Mental illness/Is normal/Undisciplined life		0.886
10	In case you are observing those symptoms mentioned in the previous question in yourself for last one month, you will seek help from: Parents/Teachers/Friends/Doctor/ Fortune-teller		0.839
11	You are upset because of poor performance in exam, in spite of studying hard. You feel unable to speak out your distress. You think you should: Hide your suffering from others/Seek help and support from friends /Should leave home/Should try to calm down through relaxation		0.914
12	How, would you like to describe your relation with parents: They are understanding and supportive/They are supportive, though do not understand you/They do understand you, though do not cooperate/Always oppose you		0.490
13	What, you think, are the ways to remain happy?	Sports	0.700
		Health and Hygiene	0.733
		Food	0.886
		Discipline	0.681
		Sharing, remaining Tension free, Resilience	0.886
		Spending time with friends	0.659
		Others	0.700
		No response	0.200

Table 2. Particulars of the sample

		Frequency (%)
Age in years (Mean: 13.09)	11	6 (5.6)
	12	11 (10.3)
	13	62 (57.9)
	14	26 (24.3)
	18	1 (0.9)
Class	7	27 (25.2)
	8	72 (67.3)
	9	8 (7.5)
Religion	Hindu	74 (69.2)
	Muslim	33 (30.8)

Table 3. Response to Knowledge-questions

	Questions (Q)		Frequency (%)
Q1	Adolescence is the period between	no response	1 (0.9)
		correct	54 (50.5)
		incorrect	52 (48.6)
Q2	Being listless, restless, losing temper and feeling guilt for no apparent reason during this period	no response	5 (4.7)
		correct	56 (52.3)
		incorrect	46 (43.0)
Q7	What, do you think causes mental illness	no response	5 (4.7)
		correct	54 (50.5)
		incorrect	48 (44.9)
Q9	Reduced sleep and appetite, lack of concentration and excessive worries for a long time is a sign of	no response	1 (0.9)
		correct	29 (27.1)
		incorrect	77 (72.0)

Table 4. Response to Attitude-questions

Questions (Q)			Frequency (%)
Q3	Perception about adolescence crisis	no response	5 (4.7)
		choice 1	64 (59.8)
		choice 2	17 (15.9)
		choice 3	21 (19.6)
Q4	Intervention in adolescence crisis	no response	2 (1.9)
		choice 1	92 (86.0)
		choice 2	8 (7.5)
		choice 3	5 (4.7)
Q5	Perception about self harm behaviour	no response	3 (2.8)
		choice 1	49 (45.8)
		choice 2	7 (6.5)
		choice 3	25 (23.4)
		choice 4	23 (21.5)
Q6	Perception regarding adolescence depression	no response	14 (13.1)
		choice 1	22 (20.6)
		choice 2	61 (57.0)
		choice 3	10 (9.3)
Q8	Attitude regarding adolescence depression	no response	1 (0.9)
		choice 1	8 (7.5)
		choice 2	21 (19.6)
		choice 3	16 (15.0)
		choice 4	61 (57.0)
Q10	Help seeking in mental illness	choice 1	56 (52.3)
		choice 2	19 (17.8)
		choice 3	9 (8.4)
		choice 4	23 (21.5)
Q11	Attitude regarding Stress management	no response	3 (2.8)
		choice 1	18 (16.8)
		choice 2	35 (32.7)
		choice 3	1 (0.9)
		choice 4	50 (46.7)
Q12	Attitude regarding parental relationship	no response	4 (3.7)
		choice 1	87 (81.3)
		choice 2	5 (4.7)
		choice 3	6 (5.6)
		choice 4	5 (4.7)

Table 5. Response to the Open ended question (question no. 13)

	Categories of responses	*Frequency (%)*
What, you think, are the ways to remain happy?	Sports	46 (43)
	Health and Hygiene	29 (27.1)
	Food	42 (39.3)
	Discipline	30 (28)
	Sharing, remaining Tension free, Resilience	56 (52.3)
	Spending time with friends	29 (27.1)
	Others	34 (31.8)
	No response	10 (9.3)

DISCUSSION

Opinion from different quarter of persons and professionals who deal with adolescents regularly ensured that the questionnaire remains relevant to the target population, as well as, to the culture. Since knowledge and attitude about a problem influence a person's behaviour towards it, questions pertaining to both of these domains were kept in the questionnaire. Having knowledge about adolescents' view of wellness and the ways to it might help us while dealing with their mental health issues (Hoven et al, 2008). So one open ended question was kept to know about the ways, they think, could make them feel happy. A few questions were kept pertaining to stress, depression, anxiety and self harm based on experience from previous studies (Garnefski and Dickstra, 1996; Hoven et al, 2008; Patel et al, 2008; Hiremath et al, 2012). Since majority of the school girls from this part of rural Bengal use Bengali as the primary language of communication the questionnaire was composed in Bengali.

While assessing test re-test reliability, the subjects were given the questionnaire second time after a period of 10 days to minimize repetition of the same responses which could have been a problem had the questionnaire been presented in a smaller gap. The fact that most of the questions had satisfactory to excellent kappa values demonstrates its reliability. Also, the categorization of the responses to the open ended question stands the test of reliability. Poor kappa value of the 'no response' category (question 13) might have resulted from the fact that some of the girls who refrained from responding to this question on first instance responded to it when presented the second time. Acceptability and feasibility was good as none of the subjects refused to respond to the questionnaire and most of them responded to almost all the questions unaided.

From the results it could be observed that though most of the girls answered the questions pertaining to what is meant by adolescence, mood swings during adolescence and cause of mental illness correctly, the difference between frequency of correct and incorrect responses was very less. Regarding question no 9 where common depressive symptoms are elaborated,

a little more than one fourth of the subjects could recognise those to be part of mental illness. Most of them thought these to be arising from reckless lifestyle or some physical illness. Coming to the questions related to attitude, in the question (no 3) that raises the issue of mood swings, most of the girls think that the problem is serious, though next in number are those who think this could be overcome with help of close ones. While on direct question a good number of the subjects failed to recognise depressive symptoms as psychological in origin (question 9), on presenting case vignettes most of them readily identified the problem behaviours and came out with helping attitude (questions 4, 5, 6 and 8). This seems to be in concert with previous observations (Yeap and Low, 2009) where inspite of a lack of knowledge about mental illness most of participants expressed helping attitude. In the question pertaining to self harm (question 5) most of the girls thought this to be problem behaviour, though quite a few of them think this to be a way of expressing grievances against parents. It was also observed that most of them perceive their parents to be understanding and supportive and would seek help from them when faced with problems that think to be illness (questions 10 and 12). Though while faced with academic setback most of the participants preferred to overcome the stressor themselves or to seek support from friends (question 11). This observation supports the findings of studies by Patel et al (2008), Yeap and Low (2009) and Gopi Krishna et al (2013) where the subjects chose parents and friends as first point of contact to seek help.

Thus, it appears that adolescent girls, though have limited knowledge about adolescence, about mental health issues related to this period, they do identify when someone is in trouble and expressed readiness to help. They expressed reliance and grievances about their relation with parents, and at the same time wanted to seek help from parents and friends when faced with some problem. This observation could be explained in the light of the theories dealing with conflicts of adolescents (Smetana et al, 1995). This comfort zone with near and dear ones was further emphasized in their response about how to remain happy (question 13). Most of them thought that sharing worries with friends, parents and others they feel close to; not worrying too much and resilience ('remaining calm in face of problems', 'mental strength' etc) could help them to be happy. Those observations highlight some of the aspects of positive mental health (Patel et al, 2008). Though insignificant from statistical point of view, yet quite striking an observation was that two of the girls thought one can be happy if he/she can love others. A good number of opinion came in favour of games and sports as a way to remain happy. While a conspicuous number of the participants thought food can make them happy. This could be explained by the construct of 'Societal indicators of positive mental health' (Patel et al, 2008) that mentions 'adequate food' along with some other factors.

Conclusion

This questionnaire appears to be a reliable tool to assess knowledge and attitude of our target population (adolescent school girls from rural background) regarding various common mental health issues related to adolescence. From the pilot study it could be concluded that acceptability and feasibility of this tool is satisfactory. Based on the responses it appears that there is a need to discuss various mental health issues related to adolescence to this population. This study exposed some the strengths of our adolescent population, like, an attitude to help and a sense of cohesion, as well as some of their concepts of remaining happy.

The current study population did not include males, as well as, girls who were not going to school. Before generalizing the findings of this pilot study on adolescents larger and more inclusive studies need to be conducted.

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