Original Article

Visual Impairment

Depression, Anxiety and Stress among Adolescent Girls with Congenital Visual Impairment

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ABSTRACT

Background: Visual difficulties may influence the life of the individual in physical, mental, social, educational and vocational aspects. An adolescent with visual impairment has to deal not only with the difficulties of his/her physical impairment but also with the specific difficulties of adolescence. Many studies reported that individuals with visual impairment experience severe psychological and behavioural problems specifically during adolescence. In this period, an individual has to face significant physical, psychological and social changes. These changes have a significant impact on the psychological state of the adolescent. It can be stated that the difficulties experienced by the adolescent in this period are necessary for the formation of autonomy and development of problem solving abilities required for dealing with future problems. Objectives: To examine and compare depression, anxiety and stress among adolescent girls with congenital visual impairment and sighted. Sample: The study was conducted at two blind school Ranchi, Jharkhand. A total 60 students participated in the study. Design: For the present study cross sectional survey design was used. Tool: The Depression, Anxiety and Stress Scale (DASS) developed by LoviBond and LoviBond (1995) was used to assess depression, anxiety and stress. This scale has 21 items answer on four point scale. The items are divided into three domain depression, anxiety and stress. High score shows high level of depression, anxiety and stress. Result: The result of the study indicated that depression, anxiety and stress were found higher among adolescent girls with visual impairment in comparison to sighted. Conclusion: Study suggests urgent need of appropriate assessments and necessity of the psychosocial intervention. Keywords: Visual Impairment, Sighted, Depression, Anxiety and Stress

Introduction

Eye is one of the most important sensory organs in human body which accounts for a very large segment of the total information available to persons through their senses. Persons with visual impairment are an integral part of society but lack of sight bars the individual to perceive the real world. Social and physical isolation also creates problem of anxiety, depression, stress and adjustment problems in person with visual impairment. Blindness is defined as "absence or loss of visual ability or perception of visual stimulus" Andrews & Shirley (2005) & World Health Organisation (2004).

Visual difficulties may influence the life of the individual in physical, mental, social, educational and vocational aspects. An adolescent with visual impairment has to deal with the difficulties of his/her physical impairment as well as the specific challanges of adolescence. Many studies reported that individuals with visual impairment experience severe psychological and behavioural problems specifically during adolescence. Adolescence is also a difficult period for healthy individuals. In this period, an individual has to face significant physical, psychological and social changes. These changes have a significant impact on the psychological state of the adolescent. It can be stated that the difficulties experienced by the adolescent in

this period are necessary for the formation of autonomy and development of problem solving abilities required for dealing with future problems. It was reported that children with visual impairment have limited facial expression and lower response levels to stimuli in comparison to their peers. Dorn (1993) reported that social smiling is delayed in children with visual impairment. Researchers have stressed that social smile and eye contact are very important for an individual's psychosocial development, Ahrens et al. (1954), Rheingold et al. (1961), Spitz et al. (1946), Wolf et al. (1963)

Difficulties experienced in this critical phase have a significant impact on the psychology of the adolescents. The prevalence of depressive disorder increases significantly compared to that occurring during previous developmental phases. Point prevalence rates of depressive disorder are reported to be 1-2% in children; 3-8% in adolescents and 20% in follow-up studies conducted throughout adolescence. The prevalence of depressive disorder is reported to be three times higher in adolescent girls than adolescent boys Costello et al. (2003), Lewinsohn et al. (1998), Reinherz et al. (1993).

Objective:

To examine and compare depression, anxiety and stress among

adolescent girls with congenital visual impairment and with sighted.

Methods and Materials:

Sample:

The study was conducted at two blind school of Ranchi, Jharkhand. A total 60 students participated in the study.

Design:

A cross sectional survey design method was used.

Tool:

Socio Demographic Data sheet: It was self-prepared sociodemographic data sheet to obtain background information of the subjects on different dimensions like age, religion, category, class, family size, type of family, no of family members, etc.

Depression, Anxiety and Stress Scale (DASS) Lovi Bond and Lovi Bond (1995): It was developed to assess depression, anxiety and stress. This scale has 21 items answer on four point scale. The items are divided into three domain depression, anxiety and stress. High score shows high level of depression, anxiety and stress.

Procedure:

A cross sectional survey design method was adopted for the study. The study was conducted at Blind school Brij Kishor Netrahin Balika Vidyalaya, Ranchi, Jharkhand and Anita Girls High School, Kanke, Ranchi, Jharkhand. This study was approved by Institute ethics committee. Permission to conduct study at school was sought from school authority. Study aim and objectives were explained to the participants Following the verbal consent the participants were interviewed with standardized tools. The tools used for the study were sociodemographic data sheet and Depression, Anxiety and Stress Scale (DASS-21).

Results

Table-1: Socio-demographic variables among adolescent girls with visual impairment & sighted:

Variable		Group			
		Visual Impairment	Sighted	df	X ²
Religion	Hindu	10(33.33%)	13(43.3%)		2.78NS
	Islam	7(23.3%)	10(33.3%)	3	
	Christian	10(33.3%)	5(16.7%)		
	Other	3(10%)	2(6.7%)		

Category	GEN	19(63.33%)	18(60%)		
	OBC	5(16.66%)	5(16.66%)	3	0.07NS
	SC	1(3.33)	3(10%)		0.07113
	ST	5(16.66%)	7(23.33%)		
Residence	Rural	17(56.7%)	13(43.3%)		
	Urban	11(36.7%)	12(40%)	2	0.39NS
	Semi urban	2(6.7%)	5(16.7%)		
Family	Nuclear	19(63.3%)	20(66.7%)	1	1.00NS
ranniy	Joint	11(36.66%)	10(33.3%)		1.00115
Occupation	Govt. Job	5(16.7%)	1(3.3%)		
	Pvt. Job	6(20%)	12(40%)	3	0.09NS
	Business	5(16.7%)	8(26.7%)		0.05110
	Other	14(46.7%)	9(30%)		

10 (33.33%) Hindu, 7 (23.3%) Islam, 10 (33.33%) Christian and 3 (10%) were from other religion were visually impaired while 13 (43.3%) Hindu, 10 (33.3%) Islam, 5 (16.7%) Christian and 2 (6.7%) participants were sighted. In residence, 17 (56.7%) rural, 11 (36.7%) urban and 2 (6.7%) semi urban participants were visually impaired while 13 (43.3%) rural, 12 (40%) urban and 5 (6.7%) semi urban participants were sighted.

Table-2: The difference of age among adolescent girls with visual impairment and sighted:

Variable	Group	N	Mean	SD
Age	Visual Impairment	30	14.93	2.03
1150	Sighted	30	14.73	1.79

Table-2 revels that mean ages of adolescents with visual impairment respondents were 14.93±2.03 while the mean ages of adolescents with sighted were 14.73±1.79.

Table -3: Comparison of Depression, Anxiety and Stress among adolescent girls with visual impairment and sighted:

Variables	Group	N	Mean	SD	t
Stress	Visual Impairment	30	16.26	3.81	7.59**
	Sighted	30	6.43	5.98	
Anxiety	Visual Impairment	30	15.06	2.87	7.79**
	Sighted	30	6.20	5.52	
Depression	Visual Impairment	30	14.73	2.66	7.77**
	Sighted	30	6.13	5.43	

^{**=}Significant at 0.01 Level

Table 3 shows that mean score of depression were 14.73 ± 2.66 in adolescents with visual impairment while $6.13\pm5.436.13\pm5.43$ was the mean score of adolescents with sighted. The mean score of anxiety were 15.06 ± 2.87 among adolescents with visual impairment while 6.20 ± 5.52 was mean score of adolescents with sighted. The mean score of stress were 16.26 ± 3.81 among adolescents with visual impairment while 6.43 ± 5.98 was the mean score of adolescents with sighted.

Discussion

Adolescence is a difficult period for human life, and during this period they face many type of challenges such as physical, psychological and social. These changes have a significant impact on the psychological state of the adolescent. It can be stated that the difficulties experienced by the adolescent in this period are necessary for the formation of autonomy and development of problem solving abilities required for dealing with future problems. Findings of this study shows that adolescents girls with visual impairment have to face more problem of depression, anxiety and stress in comparison to adolescent with sight. This study is in agreement with the study conducted by Huure and Aro (1998) with 54 visually impaired adolescents and reported that visually impaired adolescents have more problems in social life when compared with their sighted peers. Follow-up studies conducted during adolescence found that the prevalence of depressive disorder among adolescents is 20% (Costello et al. 2003, Lewinsohn et al. 1998, Reinherz et al. 1993). Depressive symptoms are reported that observed during the normal development of many adolescents. A Turkish also study by Bolat et al. (2010) anxiety scores of adolescents with visual impairment was significantly higher than those of the sighted adolescents. McAnarney (1985) stated that adolescents with visual impairment generally have difficulty in being away from their families. The author suggests that this may result from physical inadequacy and the dependency of the visually impaired person on his/her family, together with the family's disapproval of the disabled individual's separation. Kirk et al. (2000) reported that visually impaired children have delayed motor and social skills as a result of inadequate early experiences and this may contribute to inadequate independence and socialization. Apart from physical impairment, visually impaired adolescents have more orientation problems due to their developmental characteristics and their probability of having accidents is higher than that of the general population. Jan et al. (1977) reported that 57% of children and adolescents with visual impairment have psychiatric disorders including diagnoses of adjustment disorder, conduct disorder and personality disorder.

Conclusion

The results of our study show that depression, anxiety and stressone higher found high in adolescents with visual impairment in comparison to adolescent with sighted. In this study sample was relatively small and it was taken from only one blind school and one general school hence the study cannot be generalised. The psychosocial problems of girls with visual impairment need to be studied further in order to fill the gap in the literature and such studies will help in planning appropriate psychosocial interventions.

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