

ANXIETY AND DEPRESSION AMONG SIBLINGS OF CHILDREN WITH CEREBRAL PALSY ATTENDING NEUROLOGY CLINIC AT ALEXANDRIA UNIVERSITY CHILDREN'S HOSPITAL

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INTRODUCTION

- CP is a group of permanent disorders of motor function, which are due to a non-progressive lesion, or abnormality of the developing/immature brain. Motor function disorders are often accompanied by other dysfunctions, such as: sensation, perceptual, cognitive, communication and behavioral disorders, epilepsy, and secondary musculoskeletal disorders.
- It is the most common cause of motor disability in childhood.
- The worldwide prevalence of CP ranges from 1 to 4 per 1,000 live births. In Egypt, the prevalence is about 2.6-4.6 per 1,000 live births.
- Having a child with CP in the family not only affects parents' lives including physical and psychological well-being, financial stability and support of services, but also affects normal siblings, who are considered as "population at risk to experience psychological difficulties".
- According to the American Psychiatric Association, behavioral disorders, anxiety disorders, and depression are the most common pediatric psychiatric disorders.
- Anxiety disorders are among the most common childhood emotional problems, with lifetime prevalence ranging from 8.3% to 27%.
- Depression is a mental state or chronic mental disorder characterized by feelings of sadness, loneliness, despair, low self-esteem, signs of psychomotor retardation, or less frequently, agitation, withdrawal from social contact, change of appetite and insomnia.
- The overall prevalence of pediatric depressive disorders is 12.3% with 14.1% for females and 8.6% for males.

Aim of the work

- The aim of the present work was to study the prevalence of anxiety and depression in sibling of children with CP attending neurology outpatient clinic at Alexandria University Children's Hospital (AUCH), Alexandria Egypt.

SUBJECTS & METHODS

- The study included 130 children divided into two groups, group I (cases) included 65 siblings of children with CP aged 7 - 17 years living in the same household, excluding cases with chronic medical or surgical disorder. Group II (controls) included 65 apparently normal children matched according to age, sex, and socioeconomic status with children in group I, with no chronic medical or surgical disorder.
- All studied children were subjected to history taking with special emphasis on socio-demographic data, family history, history of CP in siblings of group I.

- Assessment of depression was done using an Arabic form of Children Depression Inventory (CDI). Assessment of anxiety was done using an Arabic form of Children Manifest Anxiety Scale (CMAS). The socioeconomic status was assessed using the scoring system made by El-Gilany A, El-Wehady A, El-Wasify M for measurement of socioeconomic status in health research in Egypt.

RESULTS

Socio-demographic data, family history & Socioeconomic status of the two studied groups

	Cases (n = 65)		Control (n = 65)		Test of sig.	P
	No.	%	No.	%		
Gender						
Male	32	49.2	34	52.3	$\chi^2=0.123$	0.726
Female	33	50.8	31	47.7		
Age (years)						
Min. - Max.	7.0 - 17.0		7.0 - 17.0		t= 0.863	0.390
Mean \pm SD.	11.57 \pm 3.61		11.08 \pm 2.85			
Median (IQR)	12.0 (8.0 - 15.0)		11.0 (9.0 - 12.0)			
Consanguinity						
+	25	38.5	28	43.1	$\chi^2=0.287$	0.592
-	40	61.5	37	56.9		
Marital status						
Intact Marriage	62	95.4	60	92.3	$\chi^2=0.710$	MCp=0.763
Divorced	2	3.1	3	4.6		
Widows	1	1.5	2	3.1		
History of mental illness						
+	4	6.2	1	1.5	$\chi^2=1.872$	FEp=0.365
-	61	93.8	64	98.5		
Socioeconomic status						
Very low	1	1.5	2	3.1	$\chi^2=0.848$	MCp=0.736
Low	51	78.5	53	81.5		
Moderate	13	20.0	10	15.4		
High	0	0.0	0	0.0		

Comparison between the two studied groups according to prevalence of depression & anxiety

	Cases (n = 65)		Control (n = 65)		χ^2	P
	No.	%	No.	%		
Depression						
None	41	63.1	54	83.1	6.608*	0.010*
Mild	11	16.9	8	12.3		
Moderate	11	16.9	2	3.1		
Severe	2	3.1	1	1.5		
Total	24	36.9	11	16.9		
Anxiety						
Low	41	63.1	52	80.0	4.571*	0.033*
Moderate	16	24.6	10	15.4		
High	8	12.3	3	4.6		
Total	24	36.9	13	20.0		

Correlation between depression and anxiety in siblings of children with CP and number of associated disabilities with CP

Associated disabilities with CP	Two or less disabilities (n = 28)		More than two disabilities (n = 37)		χ^2	MCp
	No.	%	No.	%		
Depression						
None	23	82.1	18	48.6	7.629*	0.002*
Mild	2	7.1	9	24.3		
Moderate	3	10.7	8	21.6		
Severe	0	0.0	2	5.4		
Anxiety						
Low	22	78.6	19	51.4	5.0706	0.0122*
Moderate	4	14.3	12	32.4		
High	2	7.1	6	16.2		

CONCLUSION

- Siblings of children with CP have a higher prevalence of anxiety and depression compared to the control group.
- As regard depression, there is a significant correlation between the number of associated disabilities with CP and depression among siblings of children with CP.

- As regard anxiety, there is a significant correlation between number of associated disabilities with CP and anxiety among siblings of children with CP.
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