

British Journal of Medicine & Medical Research 12(6): 1-9, 2016, Article no.BJMMR.22552 ISSN: 2231-0614, NLM ID: 101570965

SCIENCEDOMAIN

SCIENCEDOMAIN international

www.sciencedomain.org

Prevalence and Determinants of Common Fears in Children and Their Socio-Demographic Characteristic

Abdulbari Bener^{1,2*}, Elnour E. Dafeeah³ and Suhaila Ghuloum³

¹Department of Biostatistics and Medical Informatics, Cerrahpaşa Faculty of Medicine, Istanbul University, Istanbul, Turkey.

²Department of Evidence for Population Health Unit, School of Epidemiology and Health Sciences, University of Manchester, Manchester, UK.

³Department of Psychiatry, Rumailah Hospital, Hamad Medical Corporation, Qatar.

Authors' contributions

This work was carried out in collaboration between all authors. Author AB was involved in data collection, statistical analysis, interpretation of data, writing and editing the manuscript. Author SG was involved in data collection and writing the manuscript. Author EED involved in interpretation of data and writing manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/BJMMR/2016/22552

Fditor(s)

(1) Domenico De Berardis, Department of Mental Health, National Health Service, Psychiatric Service of Diagnosis and Treatment, "G. Mazzini" Hospital, Italy.

Reviewers:

(1) Pietro Scicchitano, Hospital "F. Perinei", Altamura (BA), Italy.
(2) Diana C. Tapia-Pancardo, National Autonomous University of Mexico, Mexico.
(3) Franco Mantovan, Universita degli studi di Verona, Italy.
Complete Peer review History: http://sciencedomain.org/review-history/12283

Original Research Article

Received 9th October 2015 Accepted 27th October 2015 Published 12th November 2015

ABSTRACT

Objective: Most children experience some degree of fear during their development. Excessive fears can create serious obstacles to children. The aim of this study was to identify the most common fears in a sample of children and adolescents and examine the socio-demographic correlates of fears.

Materials and Methods: This cross-sectional study was conducted during the period from July 2010 to February 2012 at Public and Private Schools of the Ministry of Education and Higher Education, State of Qatar. Out of 2188 students approached, 1703 students agreed to participate in this study, with a response rate of 77.8%. The questionnaire includes socio-demographic information, academic performance, behaviour at home and various fears.

Results: More than half of the children experienced fears (56.7%). Most of them were in the intermediate level, 12 - 15 years old (46.1%). Overall, reported fears were significantly more frequent in girls (62.6%) than boys (37.4%) (p<0.001). A significant difference was observed between girls and boys who experienced fears in their age group (p<0.001), education of mother (p=0.04), household income (p=0.008) and academic performance (p<0.001). The most frequent reported fears were fear of someone dying in the family (85.2%), parents getting divorced (84.5%), breaking religious law (82%), being kidnapped (78.2%), family members ill (78%) and dying (76.7%).

Conclusions: The study findings revealed that fears were highly prevalent in Arab children and adolescents in Qatar. Girls reported more fears than boys. There was a significant difference observed between girls and boys in their age group and academic performance for the reported fears.

Keywords: Fear; adolescents; children; Qatar.

1. INTRODUCTION

Childhood fears are common and universal [1]. Most of them disappear within months without specific treatment and certain fears are more likely to occur at specific developmental stages and at certain age. Most children have some fears and for many children, they are distressing. However, children's fears generally decrease in intensity and frequency in the later years of adolescence [2]. Although childhood fears should be considered as a normal developmental phenomenon, marked individual differences in fearfulness of children can be observed. Fear is an intense aversion to or apprehension of a person, place, activity, event or object that causes emotional distress and often avoidance behaviour. Fears often can be handled with proper guidance and counselling from the Paediatrician [3].

Children report various types of fear including social fears, medical fears, fears related to animals, fears of danger and fears of the unknown [4] A study by Muris et al reported that anxiety symptoms have been found prevalent in school children with the rates for fears (75.8%), worries (67.4%) and nightmares (80.5%) [5]. It has been suggested that cultures that favour inhibition, compliance and obedience serve to increase internalizing behaviours such as fear, anxiety and depression [6]. Thus, it seems that the prevalence and patterns of fear among children may be influenced by cultural factors.

The exact etiology of childhood fears is poorly understood. Research on normal fears experienced by children and adolescents is important as it provides us with information about developmental patterns and the frequency,

intensity, and duration of the phenomena from which pathological fears and phobias can be identified [7]. Also, initial fear score have been found to be good predictors of later fear scores, suggesting a trait component of fearfulness. Females worldwide tend to report higher percent of fear [8].

As a country develops and urbanizes, life becomes more complex, and problems related to social, cultural and economic changes arise. The rapid social changes and economic growth that occurred in the State of Qatar have produced a dramatic improvement in the standard of living which has caused stress in life of the people. The effects of familial and societal factors seem to have a particularly negative impact on children and adolescents in the society. Also, global events, crisis, diseases and disasters have prompted researchers to study fears of children and adolescents. Everyday social situations which are readily negotiated by most people can provoke extreme fear and anxiety in others. The Health Organization suggest that screening is well justified, when a disorder poses a significant public health problem [9]. Hence, it was important to conduct a cross-sectional survey among children and adolescents to identify the most common fears reported in students from different grade levels and examine the socio-demographic correlates of fears.

2. SUBJECTS AND METHODS

This is a cross sectional study. The study included schoolchildren and adolescents in the age group 6 – 18 years, studying at primary, preparatory and secondary levels in government and private schools in the State of Qatar. A multistage stratified random sampling technique was

used and the schoolchildren were selected randomly. The list of names of schools in urban and semi-urban areas was obtained from the Supreme Council for Education and higher Education. Schools were segregated according to sexes. A total of 151,050 students are studying in primary, preparatory and secondary schools. There are 299 schools, of which 152 are for boys and 147 for girls located in 21 different districts. 30 schools were selected with fifteen each of boys' and girls' located in 10 districts. During the first stage, one school from each of these 5 districts was selected randomly, thus overcoming the so called 'cluster effect'. Similarly, the classrooms and schoolchildren were selected in the second and third stages using the same simple random sampling procedure, finally resulting in the selection of 2188 students who were a true random sample of the study population, which is 1.5% of the total students in Qatar.

Data collection took place from July 2010 to February 2012. The questionnaires with a letter of explanation were distributed to the children studying in primary Preparatory and secondary school students. They had completed the questionnaires and returned to the nurse incharge of the school. A total of 2188 students were approached and 1703 students participated in the study with a response rate of 77.8%. The survey instrument was tested on 100 students and thus validated the questionnaire. The study excluded students aged below 6 years and above 18 years and who refused to give consents to take part in the study.

This is a self reported questionnaire covering the full range of fear behaviours for children 6 – 18 years. The questionnaire included the socio-demographic details of the students, behaviour at home, academic performance and various 39 fears. Students were asked to answer the questions by not frightened "1", quite frightened "2" and extremely frightened "3". IRB approval was obtained from the Hamad Medical Corporation for conducting this research in Qatar.

Student-t test was used to ascertain the significance of differences between mean values of two continuous variables and confirmed by non-parametric Mann-Whitney test. Chi-square analysis was performed to test for differences in proportions of categorical variables between two or more groups. The level p<0.05 was considered as the cut-off value for significance.

3. RESULTS

Table 1 compares the socio-demographic characteristics of the students with fear and without. A significant difference was observed in nationality (p=0.02), rank of students in school exams (p=0.005), occupation of mother (p=0.03), type of house (p<0.011) and consanguinity (p=0.04) between students with and without fear.

Table 2 shows the socio-demographic characteristics of the children and adolescents who experienced fears according to gender. More than half of the children were sufferers of fears (56.7%). Fears were more frequent among girls (62.6%) than boys (37.4%). Nearly half of the children with fears were in the intermediate level, 12-15 years old (46.1%). A significant difference was observed between girls and boys who experienced fears in their age group (p<0.001), education of mother (p=0.04), household income (p=0.008) and academic performance (p<0.001).

Table 3 presents the top 20 fears reported in children according to gender and age group. Reported fears were significantly more frequent in girls than boys (p<0.001). Fear of someone dying in the family was the most frequently reported fear in boys (79.8%) and girls (88.4%), followed by fear of parents getting divorced (78.7% and 87.9%), then breaking religious law (75.1% and 86.1%) with a significant difference between both the genders (p<0.001). The top three fears; fear of someone dying in the family (89.3%), fear of parents getting divorced (85.6%) and breaking religious law (87.2%) were more frequent in adolescents in the age group 16-18 years.

Table 4 reveals the mean score of top 20 fears reported in children according to gender. The mean score of every type of fear was significantly higher in girls compared to boys (p<0.001). Children clearly scored highest mean score on fear of someone dying in the family (2.49±0.74), followed by parents getting divorced (2.47±0.75) and breaking religious law (2.37±0.77).

Table 5 shows the predictors of fear in studied children and adolescents using multivariate logistic regression. Socio-demographic factors were considered as the main factors associated with fear in children. Among the socio-economic factors, female gender was found to be the most significant determinant of the fear (OR=2.01; P<0.001), followed by children in urban area (OR=1.51; P=0.035) and poor exam results (OR=1.43; P=0.05).

Table 1. Socio-demographic characteristics of the studied subjects according to fear (N=1703)

Variables		Fe	P-value	
		Yes (n=965)	No (n=738)	
Age (Mean±SD)		12.4±3.4	12.1±3.7	0.096
Age group				
	11 Years (primary)	333(34.5)	277(37.5)	0.143
12-	15 Years (Intermediate)	445(46.1)	305(41.3)	
16-	18 Years (Secondary)	187(19.4)	156(21.1)	
lationality				
Qat	tari	673(69.7)	552(74.8)	0.021
Noi	n-Qatari	292(30.3)	186(25.2)	
Rank of students	in school exam	` ,	, ,	
Ver	ry Good	313(32.4)	198(26.8)	0.005
God		280(29.0)	255(34.6)	
	erage	268(27.8)	226(30.6)	
Pod	8	104(10.8)	59(8.0)	
Father's education		()	00(0.0)	
	erate	29(3.0)	22(3.0)	0.403
	mary	82(8.5)	51(6.9)	0.100
	ermediate	254(26.3)	221(29.9)	
	condary	273(28.3)	193(26.2)	
	versity	327(33.9)	251(34.0)	
Tather's occupation	•	321 (33.8)	201(04.0)	
	on : Working	95/9 9\	65(9.9)	0.813
	3	85(8.8)	65(8.8)	0.013
	dentary/Professional	295(30.6)	219(29.7)	
	nual	56(5.8)	43(5.8)	
	siness Man	219(22.7)	186(25.2)	
	vernment Officer	310(32.1)	225(30.5)	
Mother education				
	erate	87(9.0)	70(9.5)	0.556
	mary	113(11.7)	75(10.2)	
	ermediate	246(25.5)	172(23.3)	
	condary	214(22.2)	182(24.7)	
Uni	versity	305(31.6)	239(32.4)	
Mother occupation	n			
Ho	use Wife	519(53.8)	417(56.5)	0.030
Sed	dentary/Professional	274(28.4)	175(23.7)	
Ma	nual	68(7.0)	74(10.0)	
Bus	siness Women	104(10.8)	72(9.8)	
Marital status of p	arents			
Ma	rried	885(91.7)	676(91.6)	0.320
Div	orced	33(3.4)	18(2.4)	
One	e of the Parent is Dead	47(4.9)	44(6.0)	
Household incom		(- /	` '/	
	000	58(6.0)	34(4.6)	0.567
	00 – 9999	288(29.8)	234(31.7)	
	000 – 14,999	250(25.9)	188(25.5)	
	5,000	369(38.2)	282(38.2)	
Type of house	-,	230(00.2)	(
	oular House	195(20.2)	137(18.6)	<0.011
Fla		101(10.5)	51(6.9)	10.011
Villa		520(53.9)	450(61.0)	
	a ngalow	149(15.4)	100(13.6)	
	igaiow	149(10.4)	100(13.0)	
Place of living	an .	005/02 0	674(04.0)	0.053
Urb		905(93.8)	674(91.3)	0.053
	mi-Urban	60(6.2)	64(8.7)	
Consanguinity	Bulger	400/50 4)	075/50 0	0.000
	Relation	483(50.1)	375(50.8)	0.036
1°' -nd	Degree	322(33.4)	272(36.9)	
2""	Degree	160(16.6)	91(12.3)	

Table 2. Socio-demographic characteristics of children and adolescents with fear by gender (N=965)

Variables	Total		nder	P-value	
		Boys (n=361)	Girls (n=604)		
Age (Mean±SD)	12.4±3.7	12.5±3.6	12.3±3.2	<0.001	
Age group					
06-11 Years (Primary)	333(34.5)	134(37.1)	199(32.9)	< 0.001	
12-15 Years (Intermediate)	445(46.1)	139(38.5)	306(50.7)		
16-18 Years (Secondary)	187(19.4)	88(24.4)	99(16.4)		
Nationality					
Qatari	673(69.7)	247(68.4)	426(70.5)	0.490	
Non-Qatari	292(30.3)	114(31.6)	178(29.5)		
Rank of students in school exam					
Very Good	313(32.4)	85(23.5)	228(37.7)	<0.001	
Good	280(29.0)	116(32.1)	164(27.2)		
Average	268(27.8)	113(31.3)	155(25.7)		
Poor	104(10.8)	47(13.0)	57(9.4)		
Father's education					
Illiterate	29(3.0)	15(4.2)	14(2.3)	0.106	
Primary	82(8.5)	27(7.5)	55(9.1)		
Intermediate	254(26.3)	106(29.4)	148(24.5)		
Secondary	273(28.3)	104(28.8)	169(28.0)		
University	327(33.9)	109(30.2)	218(36.1)		
Father's occupation	05(0.0)	04/0.0\	04/40 4)	0.040	
Not Working	85(8.8)	24(6.6)	61(10.1)	0.013	
Sedentary/Professional	295(30.6)	129(35.7)	166(27.5)		
Manual	56(5.8)	25(6.9)	31(5.1)		
Business Man	219(22.7)	69(19.1)	150(24.8)		
Government Officer	310(32.1)	114(31.6)	196(32.5)		
Mother education	07(0.0)	00(40.0)	F4(0,4)	0.4.40	
Illiterate	87(9.0)	36(10.0)	51(8.4)	0.148	
Primary	113(11.7)	37(10.2)	76(12.6)		
Intermediate	246(25.5)	106(29.4)	140(23.2)		
Secondary	214(22.2)	79(21.9)	135(22.4)		
University	305(31.6)	103(28.5)	202(33.4)		
Mother occupation	E40/E2 0)	404/50.0)	220/54.2\	0.050	
House Wife	519(53.8)	191(52.9)	328(54.3)	0.256	
Sedentary/Professional	274(28.4)	101(28.0)	173(28.6)		
Manual	68(7.0)	33(9.1)	35(5.8)		
Business Women	104(10.8)	36(10.0)	68(11.3)		
Marital status of parents Married	995/04 7\	334(02.5)	551(01.2)	0.778	
Divorced	885(91.7)	334(92.5)	551(91.2) 22(3.6)	0.770	
One of the Parent is Dead	33(3.4)	11(3.0)	\ /		
Household income (QR)	47(4.9)	16(4.4)	31(5.1)		
< 5000	58(6.0)	23(6.4)	35(5.8)	0.775	
< 5000 5000 – 9999	288(29.8)	23(6.4) 114(31.6)	174(28.8)	0.775	
10,000 – 9999 10,000 – 14,999	250(25.9)	90(24.9)	160(26.5)		
> 15,000 = 14,999 > 15,000	369(38.2)	134(37.1)	235(38.9)		
Type of house	303(30.2)	107(01.1)	200(00.9)		
Popular House	195(20.2)	82(22.7)	113(18.7)	0.004	
Flat	101(10.5)	51(14.1)	50(8.3)	0.004	
Villa	520(53.9)	172(47.6)	348(57.6)		
Bungalow	149(15.4)	56(15.5)	93(15.4)		
Place of living	170(10.7)	30(13.3)	JJ(1J.7)		
Urban	905(93.8)	338(93.6)	567(93.9)	0.879	
Semi-Urban	60(6.2)	23(6.4)	37(6.1)	0.013	
Consanguinity	00(0.2)	20(0.7)	07 (0.1)		
No Relation	483(50.1)	175(48.5)	308(51.0)	0.389	
1 st Degree	322(33.4)	130(36.0)	192(31.8)	0.008	
2 nd Degree	J22(JJ.7)	100(00.0)	102(01.0)		

Table 3. Percent distribution of top twenty fears by gender and age (N=965)

	Variable	Total	Boys		P-Value	Age group		P-Value	
			n=361%			6-11	12-15	16-18	_
		` ,				n=333 n(%)	n=445 n(%)	n=187 n(%)	
1	Someone dying in the family	822 (85.2)	288 (79.8)	534 (88.4)	<0.001	280 (84.1)	375 (84.3)	167 (89.3)	0.209
2	Parents getting divorced	815 (84.5)	284 (78.7)	531 (87.9)	< 0.001	279 (83.8)	376 (84.5)	160 (85.6)	0.865
3	Breaking religious law	791 (82.0)	271 (75.1)	520 (86.1)	< 0.001	261 (78.4)	367 (82.5)	163 (87.2)	0.041
4	Being kidnapped	755 (78.2)	233 (64.5)	522 (86.4)	< 0.001	253 (76.0)	364 (81.8)	138 73.8)	0.039
5	Someone in the family getting ill	753 (78.0)	247 (68.4)	506 (83.8)	< 0.001	250 (75.1)	354 (79.6)	149 (79.7)	0.273
6	Dying	740 (76.7)	235 (65.1)	505 (83.6)	< 0.001	260 (78.1)	337 (75.7)	143 (76.5)	0.743
7	Going Crazy	736 (76.3)	252 (69.8)	484 (80.1)	< 0.001	253 (76.0)	335 (75.3)	148 (79.1)	0.574
3	Being adopted	687 (71.2)	223 (61.8)	464 (76.8)	< 0.001	234 (70.3)	315 (70.8)	138 (73.8)	0.673
9	Separation from parents	674 (69.8)	211 (58.4)	463 (76.7)	< 0.001	225 (67.6)	319 (71.7)	130 (69.5)	0.462
10	Germs / poisoned food	657 (68.1)	226 (62.6)	431 (71.4)	0.005	232 (69.7)	292 (65.6)	133 (71.1)	0.297
11	Becoming ill	648 (67.2)	197 (54.6)	451 (74.7)	< 0.001	230 (69.1)	292 (65.6)	126 (67.4)	0.596
12	War	644 (66.7)	160 (44.3)	484 (80.1)	< 0.001	226 (67.9)	306 (68.8)	112 (59.9)	0.084
13	Having an operation	636 (65.9)	187 (51.8)	449 (74.3)	< 0.001	216 (64.9)	300 (67.4)	120 (64.2)	0.650
14	Hell / Evil spirit	633 (65.6)	161 (44.6)	472 (78.1)	< 0.001	221 (66.4)	297 (66.7)	115 (61.5)	0.419
15	People with deformities	610 (63.2)	160 (44.3)	450 (74.5)	< 0.001	202 (60.7)	293 (65.8)	115 (61.5)	0.288
16	Nightmares	598 (62.0)	160 (44.3)	438 (72.5)	< 0.001	212 (63.7)	276 (62.0)	110 (58.8)	0.551
7	Making mistakes	597 (61.9)	184 (51.0)	413 (68.4)	< 0.001	197 (59.2)	273 (61.3)	127 (67.9)	0.136
8	Seeing someone wounded	593 (61.5)	161 (44.6)	432 (71.5)	< 0.001	207 (62.2)	277 (62.2)	109(58.3)	0.613
19	Tests or examinations	565 (58.5)	168 (46.5)	397 (65.7)	< 0.001	178 (53.5)	264 (59.3)	123 (65.8)	0.021
20	Rats or mice	556 (57.6)	122 (33.8)	434 (71.9)	< 0.001	185 (55.6)	265 (59.6)	106 (56.7)	0.515

Table 4. Mean score of top twenty fears by gender (N=965)

	Variable	Total	Boys	Girls	P-Value
		Mean ± SD	Mean ± SD	Mean ± SD	
1	Someone dying in the family	2.49±0.74	2.34±0.80	2.59±0.69	< 0.001
2	Parents getting divorced	2.47±0.75	2.32±0.81	2.55±0.70	< 0.001
3	Breaking religious law	2.37±0.77	2.23±0.83	2.46±0.73	< 0.001
4	Being kidnapped	2.32±0.81	1.96±0.82	2.54±0.72	< 0.001
5	Someone in the family getting ill	2.10±0.73	1.93±0.75	2.20±0.70	< 0.001
6	Dying	2.33±0.83	2.06±0.87	2.49±0.76	< 0.001
7	Going Crazy	2.24±0.81	2.06±0.82	2.35±0.79	< 0.001
8	Being adopted	2.21±0.86	2.01±0.89	2.32±0.83	< 0.001
9	Separation from parents	2.21±0.88	2.00±0.91	2.34±0.83	< 0.001
10	Germs / poisoned food	1.91±0.73	1.81±0.73	1.96±0.73	< 0.001
11	Becoming ill	1.92±0.75	1.71±0.74	2.03±0.74	< 0.001
12	War	2.02±0.83	1.63±0.78	2.25±0.76	< 0.001
13	Having an operation	2.00±0.83	1.74±0.80	2.16±0.80	< 0.001
14	Hell / Evil spirit	2.06±0.87	1.69±0.84	2.29±0.80	< 0.001
15	People with deformities	1.96±0.84	1.63±0.78	2.16±0.81	< 0.001
16	Nightmares	1.99±0.87	1.66±0.82	2.19±0.84	< 0.001
17	Making mistakes	1.84±0.76	1.67±0.74	1.95±0.76	< 0.001
18	Seeing someone wounded	1.84±0.77	1.57±0.70	2.00±0.76	< 0.001
19	Tests or examinations	1.80±0.77	1.64±0.77	1.89±0.75	< 0.001
20	Rats or mice	1.91±0.87	1.51±0.77	2.16±0.83	< 0.001

4. DISCUSSION

The present study has demonstrated that fears are quite common in children of all ages and those younger children reported fears more frequently than the older children of 16-18 years. Also, the study revealed the significant differences in the number and type of reported fears and related anxiety in students by grade level and gender, controlling for perceptions of family atmosphere. In this study, we first explored the most common self-reported fears in 1703 Arab children. Consistent with other studies, fears were highly prevalent in the Arab children [10-13]. The overall prevalence rate of fears in children was 56.1%. The Child Anxiety Network reports that fear is such a natural part of a child's development that 90% of children aged 2 to 14 admits having "atleast one specific-fear' [14].

Spence et al. stated that girls generally report greater number of fears than do boys and there are developmental changes in the types of fears children exhibit [2]. This is true in our study that girls (62.6%) reported significantly higher levels of fearfulness than boys (37.4%). Even the logistic regression supported this study finding that female gender was found to be the most significant determinant of the fear (OR=2.01; P<0.001). The studied girls (62.6%) reported more fears than older adolescents in the age group 12-15 years old (46.1%) which is similar to a study done by Ollendick et al. [10]. It is interesting to note that children of 12-15 years

expressed more fears than their counterparts. Also, there was an age related decline in fears observed in the studied children. Nearly half of the sufferers were in the age group (12-15) years, and then it declined to 19.4% in the older students of 16 – 18 years. A fear survey also noted a similar age decline in fears. Fear in children suddenly become different as the child approaches adolescence [11].

With regard to the mean score of fears of children and adolescents in the study sample, significant gender differences have been noted with girls experiencing more fear on worries of family members, fear of physical illness, fear of dangers and death than boys (P<0.001). But, another study of Stevenson-Hinde et al reported a gender difference regarding the type of fear with girls experiencing worries on family members, while boys tend to worry about their own performance [15]. Our study sample of girls had higher fearful behaviour compared to boys in every type of fear. A similar study done in UAE cited that the six most frequent fears fell in the category of physical injury [16]. The possible explanation for the difference in type of fears is that children's fears differ in nature across different ethnic groups because culturally mediated beliefs, values and traditions may play a role in their expression.

According to surveys, the top ten list of fears are flying, heights, clowns, intimacy, death, rejection, people, snakes, success and driving [17]. The Arab children in Qatar rated the top six fears as

fears about someone dying in the family (85.2%), parents getting divorced (84.5%), breaking religious law (82.0%), being kidnapped (78.2%), someone in the family getting ill (78.0%) and dying (76.7%), while children in Australia reported fears about burglars, bombing attacks, and being hit by car to be among their ten most common fears; a result found by Muris et al. [13]. This shows that fears related to death and danger were the most commonly reported fears and phobia [18,19] among children in Qatar which is similar to the study findings of other studies, while for children in Australia it was related to fear of unforeseen dangers [3,12]. Findings in few western studies indicated a different pattern of fears related to physical injury based on manmade dangers [20]. These study findings show that in general, children appear to be most afraid of two things; the threat of pain or death and the threat of social rejection and isolation. Media exposure and societal changes could be the main causes of the contemporary fears of children.

Findings in the present study indicated that the top 20 fears were remarkably consistent across gender. For the top list of ten fears, girls endorsed the same fears in exactly the same order as the total. More girls consistently endorsed each fear. But all ages endorsed 5 of the 20 fears in the same order as the total. Many common childhood fears emerge because the child is increasingly being able to perceive danger in the situation, but has not advanced to the point of fully understanding it, not able to exercise control over it.

Table 5. Predictors of fear among studied children and adolescents using multivariate logistic regression

Predictors	Adjusted OR	P value	
Age(in years)	1.04(1.01-1.08)	0.013	
Gender (female)	2.01(1.63-2.47)	< 0.001	
Exam ranking	1.43(1.13-2.11)	0.050	
(poor)			
Living in flat	1.41(1.10-2.18)	0.001	
Urban resident	1.51(1.03-2.21)	0.035	
Consanguineous	1.41(1.04-1.89)	0.025	
parents			

Outcome variable (fear Yes=1, No=0)

During the last decade, mass media has emerged more frequently as a factor in children's fears. It is important that we develop a better understanding of children's fears, using a wider variety of assessment approaches and developing a range of strategies to assist them to cope with their fears. The fears in children should

not be under-estimated since they cause personal distress to the child and also much interference with daily activities [21].

Fear among children is recognized as a major global public health problem and one of the main chronic syndromes currently affecting child population regardless of socio-economic status and geographic location [22,23].

5. CONCLUSION

The study findings revealed that fears were highly prevalent in Arab children and adolescents in Qatar. Girls reported more fears than boys and age differences also were found; younger children reported a greater number of fears than older children of 16-18 years. There was a significant difference observed between girls and boys in their age group and academic performance for the reported fears. Nearly half of the sufferers were in the age group (12-15) years. Fears were related to death and danger was the most commonly reported fears among children. Fear of someone dying in the family and parents getting divorced were the most commonly reported fears.

ETHICAL APPROVAL

It is not applicable.

ACKNOWLEDGEMENTS

This study was generously supported and funded by the Qatar National Research Fund- QNRF NPRP 30-6-7-38. The authors would like to thank the Research Department at the Hamad Medical Corporation and at the Weill Cornel Medical College for their ethical approval.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Muris P, Ollendick TM. The assessment of contemporary fears in adolescents using a modified version of the fear survey schedule for children – Revised. J Anxiety Disord. 2002;16:567-584.
- 2. Spence SH, McCathie H. The stability of fears in children: A two year prospective study: A research note. J Child Psychol Psychiatry. 1993;34:529-585.

- Benun J, Lewis C, Siegel M, et al. Fears and phobias. Pediatr Rev. 2008;29:250-251.
- Johansson K, Hasselberg M, Laflamme L. Exploring the neighbourhood: A web based survey on the prevalence and determinants of fear among young adolescent girls and boys. Int J Adolesc Med Health. 2009;21: 347-59.
- Muris P, et al. Fears, worries and scary dreams in 4 to 12 year old children: Their content, developmental pattern and origins. J Clin Child Psychol. 2000;29(1):43-52.
- Svensson L, Ost L. Fears in Swedish children a normative study of the fear survey schedule for children – Revised. Scandinavian Journal of Behaviour Therapy. 1999;28:23-36.
- Gullone E. The development of normal fear: A century of research. Clin Psychol Rev. 2000;20:429-451.
- Ter Horst G, De Wit CA. Review of behavioural research in dentistry 1987 – 1992, Dental anxiety, dentist-patient relationship, compliance and dental attendance. Inter Dent J. 1993;43:265-278.
- Derogatis LR, Lynn LL. Screening and monitoring psychiatric disorder in primary care populations. In Maruish ME, (Ed.), hand book of psychological assessment in primary care settings, NJ: Lawrence Erlbaum Associates. 2000;115-152,
- Ollendick TH, King NJ. Fears and their level of interference in adolescents. Behav Res Ther. 1994;32(6):635-638.
- Elbedour S, Shulman S, Kedem P. Children Fears: Cultural and developmental perspectives. Behav Res Ther. 1997;35(6): 491-496.
- Meltzer H, Vostanis P, Dogra N, et al. Children specific fears. Child Care Health Dev. 2009;35(6):781-9.
- Muris P, Merckelbach H, Collaris R. Common childhood fears and their origins. Behav Res Ther. 1997;35:929-937.
- 14. Chansky Tamer E. Freeing your child from anxiety; powerful, practical solutions to

- overcome your child's fears, worries, and phobias. New York: Broadway Books; 2004.
- Stevenson-Hinde J, Shouldice A. 4.5 to 7 years: Fearful behaviour, fears and worries.
 J child Psychol Psychiatry. 1995;36(6): 1027-38.
- 16. Mohammed NA, Eapen V, Bener A. Prevalence and correlates of childhood fears in Al-Ain, United Arab Emirates. EMHJ. 2001;7(3):425-427.
- Malthy W, Kirsch I, Mayers M, et al. Virtual reality exposure therapy for the treatment of fear of flying: A controlled investigation. J Couns and Clin Psychol. 2002;70(5):112-118.
- Bener A, Ghuloum S, Dafeeah EE. Prevalence of most common phobias, and its socio-demographic correlates in children and adolescents in a traditional developing society. Afr J Psychiatry. 2010;14(2):140-145.
- Bener A, Ghuloum S. Ethnic differences in the knowledge, attitude and beliefs towards mental illness in a traditional fast developing country. Psychiatria Danubina. 2011;23(2):157-164.
- Ollendick TH, Yang B, King NJ, et al. Fears in American, Australian, Chinese, and Nigerian children and adolescents: A crosscultural study. J Child Psychol Psychiatry. 1996;37:213-220.
- King NJ, Muris P, Ollendick TH, et al. Childhood fears and phobias: Advances in assessment and treatment. Behav Change. 2005;22(4):199-211.
- 22. Bener A, Dafeeah EE, Chaturvedi SK, Bhugra D. Somatic symptoms in primary care and psychological comorbidities in Qatar: Neglected burden of disease. International Review of Psychiatry. 2013; 25(1):100-106.
- 23. Bener A, Dafeeah EE, Samson N. Does consanguinity and family history increase the risk of schizophrena? A population based study. Mental Health Fam Med. 2013;9:241-249.

© 2016 Bener et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/12283