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Parental concerns' prevalence and socio-demographic variables in general parenting

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Abstract
Objective: The aim of this study was to evaluate parental concerns in general parenting. Methods: The participants were 3842 parents of children between 3 and 10 years old, attending public preschools and primary schools, from a stratified random sample of Portuguese parents. Parents completed a parental concerns' scale that comprises five subscales: family and school problems; eating, sleep and physical complaints; preparation; fears; and negative behaviours. Results: The results reported that 93.4 per cent of parents expressed some concern about the issues presented in the scale. Comparative analysis reported significant differences between mothers and fathers; child's gender; child's schooling level; mothers' and fathers' level of education, age at childbirth, marital status, and employment status. Conclusions: These results may indicate that parental concerns are an expected aspect of parenting, and that they should be addressed in family practice. Moreover, the reported differences between groups pointed to the need to develop specific intervention strategies.

Keywords
Childhood, family, health promotion, parenting

Introduction

Prior research addressing parental concerns about general parenting reinforced the importance for health professionals to be guided by parents' needs. Parental concerns play an important role in family practice, from the initial referral of the parents and child, to the parents' adherence to different intervention strategies. Additionally, parental concerns about children's problems should

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be attended at their onset otherwise they may result in impaired family functioning and relationships (e.g. Lampe et al., 2008).

Several studies showed that parental concerns were highly sensitive regarding the children's developmental and behavioural problems (e.g. Glascoe et al., 1991). These results reinforced the importance of eliciting parental concerns in health settings. In addition, these results supported evidence for the possibility of considering parental concerns as a pre-screening test, or even as a screening test when eliciting concerns systematically (Glascoe, 1997). Ford et al. (2005) also confirmed the specificity and the negative predictive power of parental concerns.

Parental concerns were considered a sign of interest for the child's needs, they influence parental behaviour, promoting healthier parenting practices. Furthermore, they were predictive of positive outcomes for childhood behaviour (e.g. Lampard et al., 2008). When these parental concerns are excessive, they may promote a more controlling and restrictive behaviour from parents, which might lead to a disruption in the child's independence and autonomy processes, as well as to negative outcomes for the child's personality and behaviour (Soenens et al., 2010). Moreover, these excessive concerns were related to a poor adherence to the child's medical treatments (e.g. Conn et al., 2005). The lack of concern was also related to poor adherence to prevention strategies, for example in childhood obesity (Lampard et al., 2008), and to negative outcomes for the child's personality and behaviour (Anhalt and Morris, 2008).

It is important in family practice to distinguish between the complaints expressed by the parents, the professional assessment, and the psychosocial elements that interfere with the actual concern. Usually parents report more problems than those verified by a professional assessment (Blanchard et al., 2006; Reijneveld et al., 2008; Stickler et al., 1991). However, regarding the child's developmental and behavioural problems, Glascoe (1997) considered that this disproportionate anxiety may reflect a more subtle observation by parents, which is not diagnosed in formal testing. Moreover, even when the clinical impact of the problem is considered, by the professional, to be minor, parents need to perceive that their concerns are taken seriously (Farrell et al., 2003).

There is also evidence to support that those parents who present unvalidated concerns are likely to respond quickly to early intervention (Glascoe and Dworkin, 1995). Regarding adherence to treatments, studies reported that when parents' concerns are heard and discussed, they are more likely to comply with the child's medical treatment (e.g. Cuffwright, 2008; Fredrickson et al., 2004).

Previous studies addressing parental concerns reported high frequencies of concern about the parents' own contribution to their child's well-being (Slater et al., 2010; Stickler et al., 1991), family relations, the child's negative behaviours (Akister and Johnson, 2002; Mesibov et al., 1993; O'Brien, 1996), and feeding and sleep (Stickler et al., 1991). According to Stickler et al. (1991) parental worries were much higher than the actual risks.

The prevalence studies that were conducted in Great Britain, the United States, and in the Netherlands, focused on the child's behavioural, emotional and developmental problems (Blanchard et al., 2006; Ellingson et al., 2004; Ford et al., 2005; Halfon et al., 2002; Long et al., 2008; Reijneveld et al., 2008). Parental concerns were highly prevalent in most studies, except in the British study (Ford et al., 2005) that had a different operationalization of variables, based on the problems the child actually had, as well as in the study by Long et al. (2008) where the frequency of concerns was only determined for parents with high levels of concern, as this study aimed at comparing this variable and parental stress.

The National Survey of Early Childhood Health, conducted in the United States, aimed at parents of children under 3 years old (Halfon et al., 2002), as did the study by Ellingson et al. (2004). Reijneveld et al.'s (2008) prevalence study with Dutch parents used a questionnaire where

parents were asked if they had concerns regarding parenting, and the behaviour or development of their children during the previous 12 months that could have caused the need for professional help or advice from someone outside the family.

The parental concerns' analysis, by family and child background, reported higher prevalence rates among parents with a lower socioeconomic level, and in single parents (Long et al., 2008; Reijneveld et al., 2008). Additionally, Reijneveld et al. (2008) found higher prevalence rates in parents with younger children, from labour immigrant families, in families with a single child, and in fathers with a medium educational level; while Long et al. (2008) found higher rates in parents of boys when compared to parents of girls, and in parents with a lower educational level.

The aim of our study was to assess the parental concerns' prevalence about general parenting, rather than concerns confined to the children's current problems, in parents of preschool and of primary school children. Prior research supported that parents reported more concerns when a checklist was used than when they were asked to voice their own concerns (Kanoy and Schroeder, 1993; Triggs and Perrin, 1989). For this reason, we considered that parental concerns should be assessed based on a checklist that regarded the parents' reported concerns. Moreover, we considered that the intensity of concern should be assessed, as prior research reported the negative effects of excessive parental concern on parent–child relationships (Lampard et al., 2008; Lampe et al., 2008).

Methods

Participants

The participants were 3842 parents of children between 3 and 10 years old ($M = 7.06$, $SD = 1.873$), with a similar proportion of boys (47.1%) and girls (52.9%). The other participants included in this study were the children's legal guardians, such as grandparents or foster carers. Mothers were aged from 21 to 55 years ($M = 36.2$, $SD = 5.063$) and fathers were aged from 23 to 72 years ($M = 38.8$, $SD = 5.739$). Mothers had a higher educational level, 30.6 per cent of the mothers had completed University, compared to 18.4 per cent of the fathers. According to Portuguese Official Statistics (Statistics Portugal, 2010), in the Portuguese active population there were 12 per cent of men and 21 per cent of women that had completed higher education. The majority of the parents were married or cohabited (89.3%), and were both currently employed (Table 1).

Procedure

In order to study parental concerns in a nationally representative sample of the Portuguese population of parents, with children attending public preschools and primary schools, we obtained ethical approval for the study by the Ministry of Education. Compulsory education in Portugal begins with primary school by the age of 6, and it is free in public schools. Preschool, between the ages of 3 and 5, is facultative and free in public schools. The majority of children in Portugal attend public schools; in 2009/2010 88.5 per cent of children were attending public primary schools, and 51.4 per cent were attending public preschools (GEPE, 2010). We selected a two-stage stratified design sample from a database of all public schools in Portugal. The sampling scheme selected 10 per cent of the schools in each of the 18 Portuguese districts; 820 schools were selected from a total of 8200. A letter was sent to all school Directors, followed by a telephone call, explaining the study and asking for their collaboration. Three schools alleged excessive work and declined the

Table 1. Participants' characteristics

Demographic characteristics	*N*	%
Child's gender (female)	2028	52.9
Siblings		
Only child	1127	29.6
One sibling	2119	55.7
Two siblings	425	11.2
Three or more siblings	133	3.5
Child's school attendance (primary school)	2954	77.0
Respondent		
Mother	2481	64.9
Father	286	7.5
Parents	1025	26.8
Others	32	0.8
Parents' marital status		
Married	3240	85.3
De facto union	151	4.0
Divorced	255	6.7
Single	132	3.5
Widow	21	0.6
Mother's level of education		
More than high school	1162	30.5
High school graduate	922	24.2
Less than high school	1723	45.3
Father's level of education		
More than high school	681	18.4
High school graduate	803	21.7
Less than high school	2221	59.9
Mothers' employment status (employed)	3080	81.4
Father's employment status (employed)	3581	97.2
Mother's age at childbirth		
$\leq$ 20 years	158	4.1
21–34 years	3134	82.1
$\geq$ 35 years	523	13.7
Father's age at childbirth		
$\leq$ 20 years	33	0.9
21–34 years	2690	71.9
$\geq$ 35 years	1016	27.2

invitation to participate, and were replaced with other schools from the same cities. All the schools that accepted participation in the study received the questionnaires by post mail, each one with an open pre-paid envelope for an easy return of the completed questionnaires. Teachers explained the purpose of the study to the parents in parents' meeting, and that the data collected would be anonymous and confidential, and asked for the participation of 10 per cent of the parents in each school. In Portugal, parents are informed about their children's grades and evaluations in a parents' meeting, so usually all the parents attend these meetings. Those who agreed to participate filled in the questionnaire, and returned it via post mail. From the total of the 820 schools participating, the average return rate was 82 per cent.

Table 2. Parental concerns' scale, subscales and items

Subscales	Items
Family and school problems	1. parents disagree on rules and discipline
	2. if teacher understands child
	3. parents argue a lot
	4. child abuse
	5. what should the child be told in case of separation
Eating, sleep and physical complaints	6. what should the child eat
	7. won't eat certain foods
	8. troubled sleep
	9. stomach aches
	10. headaches
Preparation	11. preparation for new home
	12. understands death
	13. understands death of someone who was close
Fears	13. fears
	14. fears dark
	15. fears monsters
Negative behaviours	16. lacks self control
	17. doesn't obey
	18. has tantrums
	19. won't go to bed
	20. bossy and demanding

Instruments

Parents completed a socio-demographic questionnaire (see Table 1), and a parental concerns' scale, based on Mesibov's et al. (1993) study, developed in a previous related study (Algarvio et al., 2010). Mesibov et al. (1993) developed a longitudinal study to address parental concerns in a call-in and come-in service, plus educational groups in a paediatric setting. As a result, from their study, they presented a list of parental concerns that was used in the development of our scale.

The Parental Concerns' Scale assesses parental concerns in parents of children between 3 and 10 years old. The scale is divided into 5 subscales, family and school problems; eating, sleep and physical complains; preparation; fears; and negative behaviours; comprising 21 items. Parents' responses are scored on a 5-point Likert-type scale, ranging from 1 – not concerned, to 5 – extremely concerned, allowing the calculation of a mean value for the total scale, and for each of the subscales (see Table 2).

The validation study of this instrument reported good psychometric properties. The confirmatory factorial analysis reported construct validity for the 5 subscales defined. The present study reported a strong reliability assessed with Cronbach's alpha; $\alpha = .94$, for the total scale; subscale I – family and school problems, $\alpha = .84$; subscale II – eating, sleep and physical complains, $\alpha = .82$; subscale III – preparation, $\alpha = .77$; subscale IV – fears, $\alpha = .78$; and subscale V – negative behaviours, $\alpha = .87$.

Data analysis

Data was analysed with SPSS 18 for statistical procedures. Descriptive statistics were conducted to calculate means and standard deviation for the subscales, and Pearson's correlation to analyse the

Table 3. Mean values and standard deviation of the subscales of the parental concerns scale

Statistic	Subscale I	Subscale II	Subscale III	Subscale IV	Subscale V	Total scale
M	4.02	3.77	3.38	3.18	3.37	3.60
SD	0.76	0.73	0.83	0.85	0.83	0.67

Notes: Subscale I – Family and school problems; subscale II – Eating, sleeping and physical complaints; III – Preparation; IV – Fears; V – Negative behaviours

Table 4. Correlations between the parental concerns subscales and the total scale

	Total scale	Subscale I	Subscale II	Subscale III	Subscale IV	Subscale V
Total scale		.86**	.88**	.75**	.82**	.87**
Subscale I			.71**	.56**	.62**	.67**
Subscale II				.59**	.68**	.68**
Subscale III					.57**	.55**
Subscale IV						.67**
Subscale V						

Notes: Subscale I – Family and school problems; subscale II – Eating, sleeping and physical complaints; III – Preparation; IV – Fears; V – Negative behaviours; **$p < .01$.

correlation between subscales. Responses were analysed for socio-demographic differences with Student's t-test with Welch's correction for heterogeneity of variances, and MANOVA followed by one-way ANOVA with Post-Hoc Tests for more than three groups. Statistical significance was assumed for $p < .05$.

Results

Parents expressed an overall concern about all the items in the scale (see Table 3); 93.4 per cent of the parents reported to be from reasonably to extremely concerned. The highest percentage of concern was obtained in subscale I – family and school problems, 95 per cent, and the lowest percentage in subscale IV – fears, 78.9 per cent. In family and school problems 79.7 per cent of the parents reported high to extreme concern, 29.2 per cent being extremely concerned, the highest result obtained. Concerning the eating, sleep and physical complaints subscale, 95 per cent of the parents expressed concern, from which 68.6 per cent expressed themselves as from highly to extremely concerned. Preparation concerned 85.4 per cent of the parents, with 44 per cent of the parents considering it to be a matter of high to extreme concern. Even though fears were the issue of less concern for parents, when compared to the other areas, it was cause for concern in 78.9 per cent of the parents, with 35.6 per cent being from highly to extremely concerned. Finally, negative behaviours caused concern in 85.1 per cent of parents, with 45.9 per cent highly to extremely concerned.

All the subscales were positively correlated. The highest correlations were obtained between the total scale and all the subscales, especially with subscale I – Family and school problems, $r = .86$, $p < .01$; subscale II – Eating, sleep and physical complaints, $r = .88$, $p < .01$; subscale IV – Fears, $r = .82$, $p < .01$; and subscale V – Negative behaviours, $r = .87$, $p < .01$. The family and school problems subscale and eating, sleep and physical complaints subscale reported a correlation of .71, $p < .01$, the highest value obtained between subscales (see Table 4).

The comparative studies reported several significant socio-demographic differences. Gender differences between children were obtained in the subscale fears ($t(3830) = -2.606$, $p = .009$), and quasi-significant differences were obtained in the subscale preparation ($t(3830) = -1.893$, $p = .058$). Parents of girls presented higher concerns when compared to parents of boys.

Regarding the child's schooling level, there were significant differences in subscale eating, sleep and physical complaints ($t(3834) = -2.253$, $p = .024$). Parents of primary school children presented higher levels of concern about eating, sleep and physical complaints than parents of preschool children.

The MANOVA showed significant differences between respondents for all the subscales ($F(3, 3820) = 7.631$, $p < .0005$; Wilk's $\Lambda = .97$; partial $\eta^2 = .010$). Mothers alone were more concerned than fathers alone or than both parents, for the total scale, and for the subscales preparation and fears. Mothers were more concerned than fathers about family and school problems, and eating, sleep and physical complaints, and more concerned than both parents with negative behaviours.

There were significant differences for the mothers' level of education in the MANOVA ($F(2, 3804) = 19.299$, $p < .0005$; Wilk's $\Lambda = .95$; partial $\eta^2 = .025$), as well as for the fathers' level of education ($F(2, 3702) = 15.835$, $p < .0005$; Wilk's $\Lambda = .96$; partial $\eta^2 = .021$). Post-hoc analysis revealed that parents with a lower educational level had higher levels of concern than parents with a higher level of education, for all the subscales.

The mothers' age at childbirth reported significant differences in the MANOVA ($F(2, 3812) = 6.793$, $p < .0005$; Wilk's $\Lambda = .98$; partial $\eta^2 = .009$), as well as fathers' age at childbirth ($F(2, 3736) = 3.750$, $p < .0005$; Wilk's $\Lambda = .99$; partial $\eta^2 = .005$). The level of parental concern decreased with the increase of parents' age at childbirth. Older parents at childbirth presented lower levels of parental concerns.

The MANOVA showed significant differences for parents' marital status ($F(4, 3794) = 3.750$, $p < .0005$; Wilk's $\Lambda = .99$; partial $\eta^2 = .005$). Widowed parents were the most highly concerned parents, followed by single parents, for the total scale, and for the subscales feeding, sleep and physical complaints, preparation and negative behaviours. There were no significant differences for the siblings' number.

Regarding mothers' employment status, there were significant differences for the total scale ($t(3783) = -4.638$, $p < .001$), for family and school problems ($t(3783) = -3.627$, $p < .001$), feeding, sleep and physical complaints ($t(3783) = -5.574$, $p < .001$), preparation ($t(3783) = -3.991$, $p < .001$), fears ($t(3783) = -3.488$, $p < .001$), and negative behaviours ($t(3783) = -2.969$, $p = .003$). Unemployed mothers were more concerned than employed mothers. The fathers' employment status only reported marginally significant differences for negative behaviours ($t(3683) = -1.780$, $p = .075$). Unemployed fathers reported higher levels of concern about the child's negative behaviours than employed fathers.

Discussion

Overall, in this study parents expressed concern about all the areas considered. These results confirm the idea expressed by Reijneveld et al. (2008) that parental concerns are a general aspect of parenting. The prevalence of concern was extremely high when compared to past research. One reason might be that prior studies addressed mostly parental concerns about child's developmental and behavioural problems, while this scale assessed general issues about parenting, and the child's normal development. Moreover, we assessed the intensity of concern, while previous studies only

considered the presence of concern or the problem's report. However, our results were consistent with those obtained by Stickler et al. (1991) who reported very high results in areas of general parenting, such as the child's security, feeding and sleep, and about the parental role.

Our findings were consistent with prior research regarding parental concerns about family relations, child abuse, the child's safety, feeding, sleep, and negative behaviours (Akister and Johnson, 2002; Halfon et al., 2002; Mesibov et al., 1993; O'Brien, 1996; Reijneveld et al., 2008; Stickler et al., 1991).

The total scale was strongly correlated with all the subscales, confirming the pertinence of considering parental concerns as a parenting dimension by itself, not only caused by the child's symptoms. The highest correlation between subscales was between family and school problems, and eating, sleep and physical complaints. There is evidence to support that children who are referred to mental health services because of family and schooling problems frequently have concomitant somatic symptoms, feeding or sleeping problems (e.g. Alfano et al., 2009; Garralda and Bailey, 1987).

Our study reported several socio-demographic differences. Parents of girls expressed more concern about their child's fears than parents of boys. Studies about the prevalence of fears in childhood indicate that girls usually reported more fears than boys (e.g. Burnham and Lomax, 2009). Parents of older children presented higher levels of concern about eating, sleep and physical complaints. Wald et al. (2007) reported that parental perceptions about their children's overweight were more often correct for parents of older children, when compared to those of younger children.

Overall, our results reported that mothers were more concerned than fathers. These results were confirmed in prior research in infancy (Swain et al., 2007), and about sleep problems (Sadeh et al., 2007). The percentage of respondents was also higher for mothers, which is in accordance with similar studies (e.g. Stickler et al., 1991). A study that addressed the fathers' participation in child health care, reported the need to develop more communication directed to fathers (Alehagen et al., 2011).

Parents with a lower educational level reported higher levels of concern, a result consistent with Stickler et al. (1991) and Long et al. (2008). Younger parents, widows, single parents, and unemployed parents reported higher levels of concern, corresponding to previous research by Long et al. (2008) and Reijneveld et al. (2008). The fact that more deprived parents reported higher levels of concern has been previously reported, however, their interest in participating in the study is a positive fact that should be further studied in relation to their need for intervention.

One limitation of this study is that parents volunteered to participate in the study, which may eventually indicate that these parents expressed more concern about their children than the parents who did not consider participating in the study. Another limitation is that it only regarded the Portuguese population of parents. However, we used Mesibov et al.'s (1993) data to develop the scale used in this study, and our results did not differ greatly from the ones obtained in previous research. Future research should use this scale with different populations to assess its validity.

This study provided additional information about the parenting process. Parental concerns are a general aspect of the parenting process, and enhance parents' ability to take care of their children. This study confirmed that parental concerns are highly prevalent in the general population, and that the scale we used was well accepted by the parents. Healthcare professionals should be aware of the importance of listening to parental concerns and of using checklists, such as this scale, that are easy to administer. It can be completed by the parents while they are in the waiting room, offering the parents the possibility of clarifying their concerns before meeting with the professionals, and also providing a collaborative approach.

Healthcare professionals should develop different intervention strategies to address parental concerns with parents expressing high levels of concern which may be confirmed (or not) by a professional assessment, parents with low levels of concern, and also with parents that are reasonably concerned about their children's problems, confirmed by a professional assessment. The socio-demographic differences reported, indicate that we must develop specific parent education programmes for parents of different ages, that might integrate pamphlets regarding parenting, and parenting classes.

The high prevalence rates obtained in this study should be considered in developing a national parenting programme through the School Health Local Teams, from the Portuguese National Health System.

Future research should further investigate children's and parents' individual and marital variables that might affect the intensity of concern. The relation between the high response rates and the parents' willingness for intervention should also be assessed.

The parent–professional relationship should be further studied, considering variables affecting the help-seeking process, and strategies to improve their communication. Specific strategies should be developed to help more deprived parents with the task of parenting, such as a change from a focus on the child's problems to one that takes into account the influence of these problems on the family, providing information about the children's normal development, and helping them develop the skills to seek help.

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