

Family Structure and Function During Adolescence: Relationship With Social Support, Tobacco, Alcohol and Drugs Consumption, and Psychic Discomfort

Alejandro Pérez Milena,^a Rafael Pérez Milena,^b María Luz Martínez Fernández,^c Francisco Javier Leal Helmling,^d Inmaculada Mesa Gallardo,^d and Idoia Jiménez Pulido^f

Objectives. To find out the family structure and functionality of the family of the adolescent and their relationships with social support, consumption of drugs and alcohol, and psychic discomfort.

Design. Cross-sectional descriptive study.

Setting and population. Pupils in obligatory secondary education in one rural and one urban area.

Material and methods. Self-administered questionnaire in which details of, age, sex, family structure, family Apgar test, Saranson social support questionnaire (SSQ-6), drug and alcohol consumption, and the Goldberg anxiety-depression scale (GADS), were recorded.

Results. A total of 386 adolescents participated, and had a mean age of 14.3 years ± 0.3 and with 51 ± 2.5 . The nuclear family structure was predominant, with 84% $\pm 1.9\%$, single parent family in 7% $\pm 1.3\%$, extended in 7% $\pm 1.3\%$, and binuclear in 2% $\pm 0.6\%$, and was not associated with any of the variables studied. The family function was normal in 54.5% $\pm 2.5\%$, with slight dysfunction in 38.3% $\pm 2.5\%$ and severe dysfunction in 7.2% $\pm 1.3\%$. The SSQ-6 (satisfaction 4.6 ± 0.1 ; number of supports 3.1 ± 0.1) varied according to family function (satisfaction: normal, 4.9 ± 0.6 ; slight dysfunction, 4.4 ± 0.5 ; severe dysfunction, 3.4 ± 1.8 ; $P < 0.01$, ANOVA). Severe family dysfunction was associated with a higher consumption of drugs and alcohol: there was 27% $\pm 6.4\%$ ($P < 0.01$, χ^2 test) higher alcohol consumption, with a quantitative increase of 4.3 ± 0.9 standard drink units/week ($P < 0.001$, ANOVA); 32% $\pm 5.9\%$ ($P < 0.01$, χ^2 test) more smoking, with an increase in consumption of 4.3 ± 1.4 cigarettes/day ($P < 0.001$, ANOVA), and the consumption of other illegal drugs increased to 13% $\pm 4.7\%$ ($P < 0.087$, χ^2). A high prevalence of psychic discomfort (GADS: anxiety, 92.0% $\pm 1.4\%$, depression, 74.1% $\pm 2.2\%$); there were more depressive symptoms when the family function was more intense ($P < 0.01$, χ^2 test).

Conclusions. Structure does not influence family function during adolescence. However, the adolescent perception of the family structure influences social support, the consumption of drugs and alcohol, and the presence of depressive symptoms.

Key words: Adolescent. Family structure. Family function. Social support.

ESTRUCTURA Y FUNCIONALIDAD DE LA FAMILIA DURANTE LA ADOLESCENCIA: RELACIÓN CON EL APOYO SOCIAL, EL CONSUMO DE TÓXICOS Y EL MALESTAR PSÍQUICO

Objetivos. Conocer la estructura y la funcionalidad de la familia del adolescente y su relación con el apoyo social, el consumo de tóxicos y el malestar psíquico.

Diseño. Estudio descriptivo, transversal.

Emplazamiento y población. Alumnos de educación secundaria obligatoria de una zona rural y otra urbana.

Material y métodos. Encuesta autoadministrada en la que se recogían la edad, el sexo, la estructura familiar, el test de Apgar familiar, el cuestionario de apoyo social de Saranson (SSQ-6), el consumo de tóxicos y la escala ansiedad-depresión de Goldberg (EADG).

Resultados. Participaron 386 adolescentes con una edad media de 14,3 $\pm 0,3$ años y un 51 $\pm 2,5\%$ varones. La estructura familiar nuclear es predominante, con un 84 $\pm 1,9\%$, mononuclear en el 7 $\pm 1,3\%$, ampliada en el 7 $\pm 1,3\%$ y binuclear en el 2 $\pm 0,6\%$, y no se relaciona con ninguna variable estudiada. La función familiar es normal en el 54,5 $\pm 2,5\%$, con disfunción leve en el 38,3 $\pm 2,5\%$ y disfunción grave en el 7,2 $\pm 1,3\%$. El SSQ-6 (satisfacción 4,6 $\pm 0,1$; número de apoyos 3,1 $\pm 0,1$) varía según la función familiar (satisfacción: normal 4,9 $\pm 0,6$; disfunción leve 4,4 $\pm 0,5$; disfunción grave 3,4 $\pm 1,8$; $p < 0,001$, ANOVA) (número de apoyos: normal 3,8 $\pm 0,7$, disfunción leve 2,8 $\pm 1,0$; grave 2,4 $\pm 1,5$; $p < 0,01$, ANOVA). La disfunción familiar grave se relaciona con un mayor consumo de tóxicos: hay un 27 $\pm 6,4\%$ ($p < 0,01$, test de la χ^2) más consumo de alcohol, con un incremento cuantitativo de 4,3 $\pm 0,9$ unidades de bebida estándar/semana ($p < 0,001$; ANOVA); un 32 $\pm 5,9\%$ ($p < 0,01$ test de la χ^2) más tabaquismo, con un aumento del consumo de 4,3 $\pm 1,4$ cigarrillos/día ($p < 0,001$; ANOVA), y se eleva el consumo de otras drogas no legales un 13 $\pm 4,7\%$ ($p = 0,087$, χ^2). Observamos una alta prevalencia de malestar psíquico (EADG: ansiedad 92,0 $\pm 1,4\%$, depresión 74,1 $\pm 2,2\%$); hay más síntomas depresivos cuanto más intensa es la disfunción familiar ($p < 0,01$, test de la χ^2).

Conclusiones. La estructura no condiciona la función familiar durante la adolescencia. Sin embargo, la percepción del adolescente de la función familiar influye en el apoyo social, el consumo de tóxicos y la presencia de síntomas depresivos.

Palabras clave: Adolescente. Estructura familiar. Función familiar. Apoyo social.

Spanish version available at
www.atencionprimaria.com/143.044

A commentary follow
this article
(page 66)

^aFamily and Community Medicine, Jimena Primary Care Centre, Jaén, Spain.

^bDepartment of Orientation, Villanueva del Mar IHS, La Herradura, Granada, Spain.

^cHead of Studies, Jabalcuz IHS, Jaén, Spain.

^dFamily and Community Medicine, Jodar Health Centre, Jaén, Spain.

^eFamily and Community Medicine, Beas de Segura Health Centre, Jaén, Spain.

^fFamily and Community Medicine, DCCU Coordination, Ubeda Health District, Jaén, Spain.

Correspondence: Dr. A. Pérez Milena.
Travesía de San Joaquín, 6, 3.º dcha. 23007 Jaén. España.
E-mail: alejandropm@supercable.es

Manuscript received November 8, 2005.

Manuscript accepted for publication May 15, 2006.

The contents of this study were partially presented as an open presentation at the XV SAMFYC Congress held in Huelva (2-4 June 2005) and awarded the prize for the best poster by the Scientific Committee.

Introduction

The family life cycle is defined by the different phases present in the evolution of the family, and is very well defined in western culture.^{1,2} Adolescence is the third stage in the life of the family and can be a source of tension, due to the great relational complexity between parents and children. The adolescent seeks greater independence and his/her own identity, which begins by using the friends group.^{3,4} During this transition, the family has to adapt roles and rules to maintain family homeostasis, at the same time as it adapts to the new changes. In this context, the traditional nuclear family appears to be better prepared to cope with the changes and make the correct adjustments.⁵

This study attempts to find out the family structure of adolescents and how they perceive the functioning of their family, the relationship between both variables and its influence on social support, the consumption of toxic substances, and the feeling of psychic discomfort.

Methods

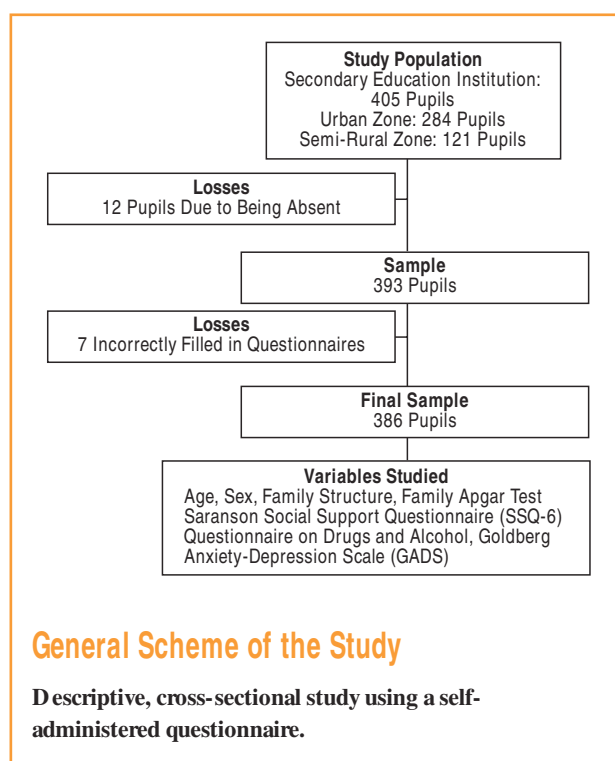
The study was carried out in 2 secondary education institutions (SEI), one in an urban area and another in a semi-rural area, in a low-medium and medium socioeconomic environment. All the pupils participated by means of a cross-sectional descriptive study using a self-administered and anonymous questionnaire. This was given out on the same school day, after previous training by their teacher.

The variables collected in the questionnaire were age, sex, the composition of the family (who shared the home), and the consumption of drugs and alcohol: standard drink units (SDU) per week, daily cigarette consumption, and contact with illegal drugs. Family function was evaluated by using the Apgar family test,⁶ which measures the subjective impression that the adolescent has on the functionality of their family, as well as their integration into it. Social support was evaluated using the Saranson questionnaire (SSQ-6),⁷ which quantifies 2 aspects of social support: availability (are there sufficient people who can help us if needed?, with a range from 0 to 9) and satisfaction (level of satisfaction with existing help, with a range of 0 to 6). Finally, the Goldberg⁸ anxiety and depression scale was administered, which has fairly high indices of sensitivity and specificity and is able to provide dimensional information on the severity, and is, therefore, recommended as an epidemiological screening tool.

The data were analysed using the Rsigma computer program (Horus Hardware[®]) and the Kolmogorov-Smirnov test was applied to check the normality of the data. The data are shown as mean \pm standard error of the mean or the proportion, and also as 95% confidence intervals. A statistical significance level of $P < .05$ was proposed and the Student *t* test and a one way ANOVA were applied to compare the means, and the χ^2 test for the comparison of the proportions.

Results

Out of a total of 405 pupils, 386 questionnaires were collected (97% of the total), with 19 lost due to lack of assis-



tance or not filled in correctly. The majority (67%) attended an urban SEI, with comparable results to the questionnaires from the semi-rural area. The mean age was 14.3 ± 0.3 years (range, 12-17 years), with 51% male and 49% females. The most common family structure was nuclear ($88\% \pm 1.9\%$) (Table 1) and $55\% \pm 2.5\%$ of the adolescents perceived that their family functioned well (Table 2), with a mean Apgar family test score of 7.3 ± 0.1 .

Slight family dysfunction was more common ($38\% \pm 2.5\%$) than the severe ($7\% \pm 1.3\%$) and had a similar distribution, independent of the type of family structure of the adolescent (Figure 1). Family structure and function were not related to age or sex (Tables 1 and 2).

Social support had similar means, independent of the family structure, with a level of satisfaction of 4.6 ± 0.1 out of 9 and the number of supports, 3.1 ± 0.1 out of 6 (Table 1). There was a positive association between the scores obtained in the Apgar family test and the SSQ-6: the adolescents who perceived a normal family function had more social support (Figure 2 and Table 2).

$44\% \pm 2.5\%$ drank alcohol, with a mean quantity of 6.8 ± 0.4 SDU consumed per week. Approximately one quarter ($24\% \pm 2.2\%$) smoked a mean of 8.2 ± 0.9 cigarettes daily and 12 ± 1.7 had consumed illegal drugs. There are small differences according to family structure but they were not statistically significant (Table 1). Family structure did influence the consumption of toxic substances: in the adolescent group with intense family dysfunction there was a

TABLE 1 Results of the Variables Studied According to the Family Structure of the Adolescents Surveyed*

	Family Structure			
	Nuclear	Single-Parent	Extended	Bi-Nuclear
Distribution, %	84±1.9	7±1.3	7±1.3	2±0.6
Age, y	14.4±0.4	14.0±0.3	14.5±0.3	14.8±0.7
Sex, male, %	51.7±2.8	51.7±9.3	2.8±9.4	50±20.4
Family function				
Apgar family test score	7.3±0.1	6.9±0.4	7.3±1.3	7.2±0.9
Social support (SSQ-6)				
Satisfaction	4.6±0.1	4.4±0.2	4.5±0.2	5.0±0.1
Support	3.2±0.1	2.9±0.3	3.2±0.4	2.3±0.5
Drugs and alcohol consumption				
Alcohol, %	44.5±2.8	41.4±9.1	42.8±9.3	66.7±19.3
SDU/week	6.8±0.4	7.5±1.5	6.3±0.9	5.0±0.4
Tobacco, %	23.8±2.4	27.6±8.3	28.6±8.5	16.7±15.2
Cigarettes/day	8.4±1.0	8.0±3.3	7.5±2.73	3 (sv)
Drug use, %	10.8±1.7	24.1±7.9	14.3±6.6	16.7±15.2
Anxiety-depression scale (GADS)				
Anxiety, %	91.3±1.3	96.6±3.4	96.4±3.5	83.3±15.2
Depression, %	74.3±2.4	65.5±8.8	82.1±7.3	66.7±19.3

*SDU indicates standard drink units; sv, single value.

Data is expressed as mean±standard error of the mean or the proportion.

TABLE 2 Results of the Variables Studied According to the Family Function of the Adolescents Surveyed*

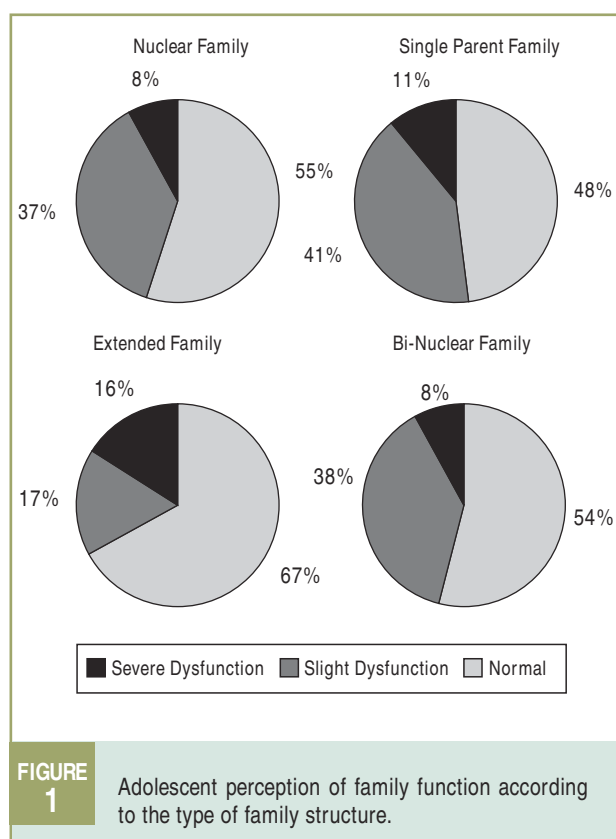
	Family Function		
	Normal	Slight Dysfunction	Severe Dysfunction
Distribution	34±2.5	38±2.5	8±1.3
Age, y	14.5±0.6	14.0±0.1	14.7±0.2
Sex, male	53±3.4	51±4.1	36±9.1
Social support(SSQ-6)			
Satisfaction†	4.9±0.1	4.4±0.1	3.4±0.3
Support‡	3.5±0.1	2.8±0.2	2.4±0.3
Drugs and alcohol consumption			
Alcohol§	39±3.4	47±4.1	71±8.5
SDU/week	2.7±0.3	2.8±0.3	7.0±1.5
Tobacco§	23±2.9	22±3.4	50±9.5
Cigarettes/day	1.8±0.3	1.6±0.4	6.0±2.3
Drugs¶	12±2.2	10±2.5	25±8.2
Anxiety-depression scale (GADS)			
Anxiety	91.3±1.3	96.6±3.4	96.4±3.5
Depression§	74.3±2.4	65.5±8.8	82.1±7.3

*SDU indicates standard drink unit.

† $P<.001$ ANOVA test 1 way.‡ $P<.01$ ANOVA test 1 way.§ $P<.01$ χ^2 test.|| $P<.001$ ANOVA test 1 way.¶ $P=.087$ χ^2 test.

Data is expressed as mean ± standard error of the mean or the proportion.

significant increase in alcohol consumption, both qualitative (27%±6.4%; $P<.01$, χ^2 test) and quantitative (4.3±0.9 SDU more per week; $P<.001$, ANOVA test), as well as tobacco, qualitative 32%±5.9%; $P<.001$, χ^2 test) and quanti-

**FIGURE 1** Adolescent perception of family function according to the type of family structure.

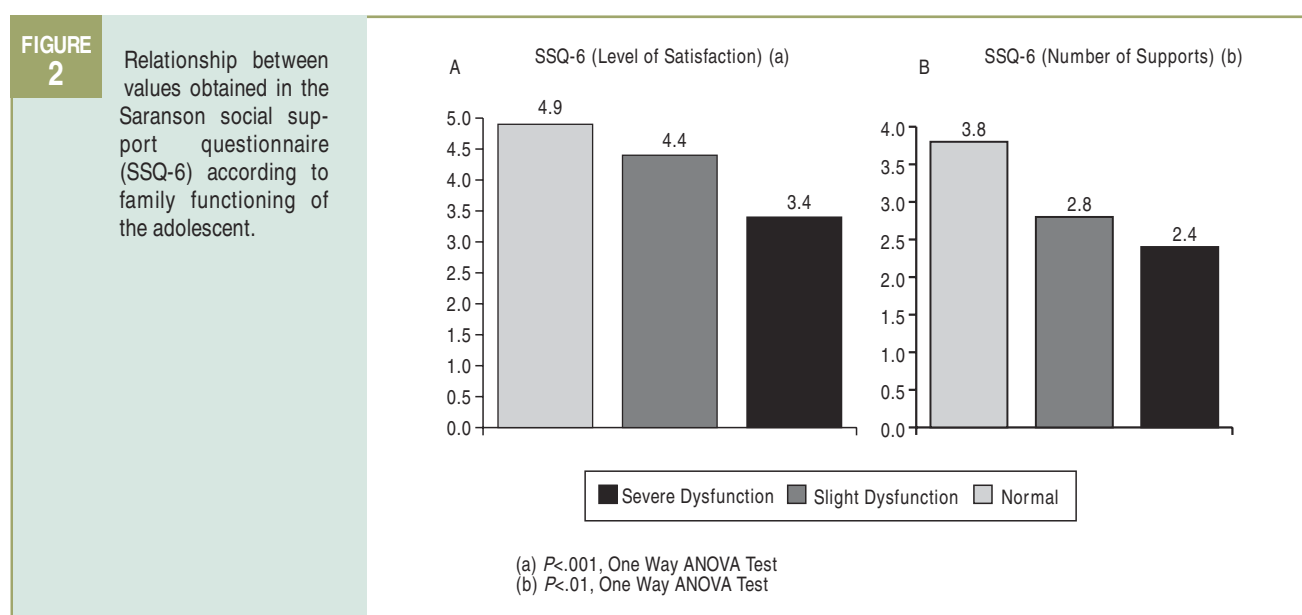
tative (a difference of 4.3±1.4 cigarettes/day; $P<.001$, ANOVA test) (Table 2).

It was observed that up to 92%±1.4% adolescents had symptoms indicative of anxiety on the Goldberg scale, which was more common among females (95%±1.6%) than among males (89%±2.2%; $P<.05$, χ^2 test). Three quarters of those surveyed showed depressive (74%±2.2%), which is more frequent in older adolescents (mean age with symptoms: 14.7±0.5 years; without symptoms 13.6±0.1 years; $P<.05$, Student t test) and among those who perceive a poorly functioning family ($P<.01$, χ^2 test) (Table 2).

Discussion

Adolescence is a stage when the changes take place that are necessary for the young people to adapt to their body changes, to acquire their own identity and begin their socialisation process.⁹

A well functioning family unit helps to make adapting to these changes easier² and it has been associated with the structure of the family: the nuclear type family may be more prepared to face up to the changes in each phase of their life cycle,^{1,2,5} while other family patterns may be associated with several problems appearing during adolescence.⁵



Our data, on the other hand, show that the family structure does not influence the perception that the adolescence has on the functioning level of the family, or in the feeling of social support, consumption of toxic substances or in the presence of symptoms indicative of psychic discomfort. These results may require us to redefine traditional concepts: on the one hand, the nuclear family does not

seem to be essential to establish positive family relationships and a healthy psychological development in the adolescent.² On the other hand, family dynamics could be influenced by other demographic factors and available resources¹ more than by the family structure: non-nuclear families may have alternative life cycles that bestows normal functioning.¹⁰

In our study we see that the perception of family support by the adolescent is associated with social support.^{6,11} Friends are an object of reference as regards the rules and values for the adolescent, but if they feel that they are accepted and listened to within the home, their social network improves and their socialisation process can be completed more satisfactorily.^{3,12} Inadequate social support in adolescence has been associated with unsettling behaviour such as violence.¹³

Family function and social support are also associated with the consumption of toxic substances among adolescents^{14,15}; in our study there was a significant increase in alcohol and cigarette consumption in adolescents with severe family dysfunction. Lastly, although the majority of adolescents mention good physical health,^{16,17} there is a high presence of symptoms indicative of psychic discomfort¹⁸ and there is an association between family dysfunction and depressive symptoms. In the general population, psychic discomfort decreases the quality of life and has a negative influence on social support, contact with family, and coping with stressful life events.¹⁹ We could, therefore, establish a relationship between a poor functioning family, poor social support, low perception of health and major stress.^{7,20,21} Other studies carried out in the same area showed that adolescents who visit their doctor regularly are more likely to have a dysfunctional family, psychic discomfort and/or use toxic substances.¹⁷

What Is Known About the Subject

- Adolescence is a period of change in the family rules and roles and all members have to adapt.
- The family structure influences its functionality and the nuclear family is best prepared to face up to the changes.
- Friends of the adolescent fulfil a fundamental role in their socialisation.

What This Study Contributes

- Structure does not influence the family functionality as perceived by the adolescent.
- Family support is essential so that the adolescent obtains satisfactory social support.
- Severe family dysfunction in adolescence is associated with a higher number of depressive symptoms and a higher consumption of alcohol, tobacco, and possibly other drugs.

While family dysfunction in the general population varies between 16% and 35%,^{6,22,23} in our study almost 50% of adolescents were not content with how their family functioned. This fact is not shared by the parents in 90% of families, who believe that they have satisfactory communication with their adolescent children.²⁴ Adolescence is a life crisis period, but one that can be useful to achieve a better family cohesion.^{11,12} Given that family dysfunction and its association with other psychosocial factors, health and education professionals are in an exceptional position to offer individual assessment by means of participatory counselling^{3,10} and try to improve communication between family members, with the aim of achieving a significant "experiential appeal" with which the adolescent might adjust to a healthy environment.¹¹ In short, it is about promoting a healthy and balanced growing up in the adolescent, by means of a multidisciplinary intervention that is based on developing good family and social support, as well as improving communication with their parents.

References

- de la Revilla L. La atención longitudinal: el ciclo vital familiar. In: de la Revilla L, editor. *Conceptos e instrumentos de la atención familiar*. Barcelona: Doyma; 1994. p. 37-42.
- García-Campayo J, Alda M. El ciclo vital familiar. In: García-Campayo J, editor. *La familia y el médico de familia: elementos básicos de intervención desde atención primaria*. Madrid: Mayo; 2004. p. 27-35.
- Marcos B. La adolescencia en el contexto familiar. In: de la Revilla L, editor. *Manual de atención familiar. (II): Bases para la práctica familiar en consulta*. Vol. II. Granada: Adhara; 1996; p. 659-94.
- Bras J. Prevención en la infancia y adolescencia. In: Brotons C, Ciurana R, Iglesias M, editors. *Manual de prevención en atención primaria*. Barcelona: Edide; 2003. p. 355-62.
- García-Campayo J, Alda M. Familias con características especiales. In: García-Campayo J, editor. *La familia y el médico de familia: elementos básicos de intervención desde atención primaria*. Madrid: Mayo; 2004. p. 37-44.
- Bellón JA, Delgado A, Luna JD, Lardelli P. Validez y fiabilidad del cuestionario de función familiar Apgar familiar. *Aten Primaria*. 1996;18:289-96.
- Saranson IG, Saranson BR, Sherain EN. A brief measure of social support: practical and theoretical implications. *J Soc Personal Relations*. 1987;4:497-510.
- Montero C, Pérez-Echevarría MJ, Campos R. Escalas de ansiedad y depresión de Goldberg: una guía de entrevista eficaz para la detección del malestar psíquico. *Aten Primaria*. 1993;12:345-9.
- de la Revilla L, Prados MA. Problemas específicos de las primeras etapas del ciclo vital familiar. In: de la Revilla L, editor. *Conceptos e instrumentos de la atención familiar*. Barcelona: Doyma; 1994. p. 43-52.
- Marcos B. El desarrollo familiar. Asesoramiento familiar. In: de la Revilla L, editor. *Manual de atención familiar. Bases para la práctica familiar en consulta*. Vol II. Granada: Adhara; 1999. p. 565-82.
- Dickinson MA, Ponce ME, Gómez FJ, González E, Fernández MA, Corzo MT, et al. Determinantes sociales en la cohesión y adaptabilidad familiar. *Aten Primaria*. 1998;21:275-82.
- Salazar D. El adolescente y la familia. Convivencia y comunicación. In: Castellano G, Hidalgo MI, Redondo AM, editors. *Medicina de la adolescencia*. Atención integral. Madrid: Ergon; 2004. p. 42-9.
- Hawkins-Rodgers Y, Cooper J, Page B. Non-violent offenders' and college students' attachment and social support behaviors: implications for counselling. *Int J Offender Ther Comp Criminol*. 2005;49:210-20.
- Pérez Milena A, Martínez ML, Pérez R, Leal FJ, Jiménez I, Martínez JL. Alcohol en adolescentes: estudio sobre dependencia y relación con aspectos psicológicos y sociofamiliares. *Medicina de Familia (Andalucía)*. 2005;6:28-33.
- Pérez Milena A, Leal FJ, Jiménez I, Martínez ML, Martínez JL, Pérez R. Consumo y contacto de tóxicos entre adolescentes: relación con la función familiar y malestar psíquico. *Aten Primaria*. 2001;28 Suppl 1:154.
- Dey AN, Bloom B. Summary health statistics for US children: National Health Interview Survey, 2003. *Vital Health Stat* 10. 2005;223:1-78.
- Pérez Milena A, Jiménez I, Leal FJ, Martínez JL, Pérez R, Martínez ML. ¿Acude el adolescente al médico? Estudio sobre frecuencia y factores asociados. *Aten Primaria*. 2001;28 Suppl 1:118.
- Pérez Milena A, Martínez ML, Pérez R, del Moral PJ, Milena JA, Picossi S. Malestar psíquico en adolescentes: relación con factores sociofamiliares y consumo de tóxicos. *Aten Primaria*. 2004;34 Suppl 1:128.
- Cramer V, Torgersen S, Kringlen E. Quality of life and anxiety disorders: a population study. *J Nerv Ment Dis*. 2005;193:196-202.
- Hale CJ, Hannum JW, Espelage DL. Social support and physical health: the importance of belonging. *J Am Coll Health*. 2005;53:276-84.
- Lahey B, Scoboria A. The relative contribution of trait and social influences to the links among perceived social support, effect, and self-esteem. *J Pers*. 2005;73:361-88.
- Smilkstein G. Family APGAR analysed. *Family Med*. 1993;25:293-4.
- de la Revilla L, de los Ríos AM. La utilización de los servicios de salud y los motivos de consulta como indicadores de disfunción familiar. *Aten Primaria*. 1994;13:73-6.
- Navarro L. Vivienda e integración familiar. Plan Integral de la Juventud Andaluza. Junta de Andalucía, Córdoba 2004 [acceded Mar 1, 2006]. Available from: <http://www.juntadeandalucia.es/institutodelajuventud/PlanIntegralJuventud/descargas/iesa/Vivienda-e-integracionfamiliar.pdf>