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# Family Dysfunction and Some Associated Factors among Adolescent Studentsof Three Municipalities of Antioquia - Colombia

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#### Abstract

Family dysfunction is a concern of the educational sector in Colombia, adolescents are affected by stressful situations into a family, this leads to having a poor school performance; this paper focuses to identify some mental health factors associated with family dysfunction in school teenagers in 2010. A cross-sectional association study was conducted with a random sample of 1411 high school students between 11 and 19 years old, were used as data collection instrumentsto measure risk suicide, psychoactive substance use, depression, vulnerability and family functioning. Using a logistic regression model, it was identified that the variables that best explain family dysfunction are: the presence of depression, risk in suicidal orientation, and vulnerability in family cohesion, family routines, adolescent's participation in problem solving, communication with mother and father, the feeling of happiness and support adolescents. The research shows that family adversities, the presence of risk of suicidal orientation and the presence of depression, affect the proper functioning of the family schooled teenager.

**Keywords**: Family dysfunction, depression, risk of suicide, adolescent

#### 1. Introduction

Adolescence is a relatively modern concept; was defined as a specific phase in the course of human life that are no longer totally friendly, but neither are adults; They are a kind of hybrid with features of adult and child remnants (Pineda &Aliño, 2014).

Addressing the problems of adolescence can test all who are affected in the vicinity of the adolescent. However, functional families often successfully help their children achieve the development goals of adolescence: reduce dependence on their parents while providing them values to be increasingly responsible and independent (American PsicologicalAsociation, 2014). The aim of this study was identify some mental health factors associated with family dysfunction in school teenagers in 2010; the findings shows that family adversities, the presence of risk of suicidal orientation and the presence of depression, affect the proper functioning of the family schooled teenage

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# Theoretical Framework

Families can be understood as a system (Perinat, 2003) because its operation is aimed at maintaining your organization. The adolescence of one of its members transforms the set of interactions in the group. Relationships also affect other systems in which the adolescent participates; may be the case of school, usually, the teenager spends school to college or other system and change of friends, but the family remains the same and some of the old rules are no longer useful; is periodically requires negotiating new patterns of relationship.

In adolescence family discussions seem to acquire a life (OrganizaciónPanamericana de la Salud, 2003). The teenager argues with her parents the values of these, about injustices and contradictions sees around him, feel the need to meet those identified models, usually someone outside the immediate family, it can be a teacher, the teenager look for autonomy and independence and to create their own space in which to experience new ideas, skills and desires. Family conflicts where a teenager are varied (Jimenez, 2003), according to how parents view their disciplinary action, and authority.

Positions of adults to the changes brought modernity produce conflict because some are reluctant to make new demands that young people regarding the management of their emotional and sexual life, his foray into the public world and their friends and tastes in clothing. This research aims to increase the knowledge on family functioning and mental health in adolescents in three municipalities of Antioquia.

# 2. Methods

A cross-sectional association study, retrospective was held, in which a secondary source of data provided by the research group was used. A survey was administered to students enrolled in secondary school in 2010 in the municipalities: Copacabana, Ebéjico and Medellin city - Northwest zone. The universe consisted of all adolescents who were enrolled at the time of the application instrument any degree of secondary school and middle level, were aged between 11 and 19 years old. The unit of observation was the teenager who was enrolled and studying in any of the public and private educative institutions. Random sample was designed with a 95% confidence to estimate the proportion of dysfunctional families and an error of 5% for Copacabana (n = 405) and Ebéjico (n = 400); to the north-west of Medellín city, the error was 3.5% (n = 605). Five mental health indicators were measured: Level of risk of suicidal orientation, level of depression, level of family functioning, use of psychoactive substances and family vulnerability, in order to contribute to the diagnosis of mental health situations of these adolescents. It took them consent to parents and adolescents according to the recommendations of the ethics committee of the National School of Public Health of the Universidadde Antioquia. Instruments used are validated in Colombia and abroad. The questionnaire was composed of five forms: risk of suicidal orientation (Inventory of Suicide Orientation ISO-30) King, D & Kowalchuck, B. (1994); Inventory of depression in children and adolescents (Children's Depression Inventory) - CDI Kovacs, M. (2004); household vulnerability (How is your family?) FundaciónKellogs (1996); psychoactive substances use (CIDI II) Organización Mundial de la Salud (1997); family functioning (Family Apgar) Smilkstein G. (1978).

Bivariate analysis between the dependent variable and each of the independent was made, and then proceeded to run the logistic regression model, including those independent variables that provided more information on the probability of family dysfunction. In this model was included as dependent variable family dysfunction, encoding the variable lower risk as 0: Good Family Functioning (Good + mild dysfunction), and increased risk of 1: Family Dysfunction (moderate + severe dysfunction). The criterion of Hosmer and Lemeshow (p < 0.25) was used to determine which variables enter the model candidates.

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SPSS version 21 for analyzing the information was used. Multicollinearity test was performed to verify that there is no redundancy between the explanatory variables, running models between the independent variables in calculating the tolerance (1-R2).

# 3. Findings

The frequency of good family functioning was 66.5% and that of family dysfunction, 33.1%. As independent variables candidates to enter the model were: age group, socio-economic status, educational level, family type, the risk of suicide, depression and family vulnerability in: family cohesion, participation in troubleshooting, communication with the mother, communication with the father, family routines, seeking social support, search for religious support, professional support, redefining problems, adolescent support, self help, life satisfaction, feeling of happiness, achievement.

It was found that the variables that explain the presence of family dysfunction are: presence of suicide risk (OR: 1.60-CI (1.16-2.21)), presence of depression (OR: 1.49-CI (1.06-2.08)), vulnerability on family cohesion (OR: 3.15-CI (1.55-6.41)) vulnerability in participation in solving problems (OR: 2.19-CI (1.55-3.08)), Vulnerability in communication with the mother (OR: 3.47-CI (2.54-4.74)) vulnerability in communication with the father (OR: 1.99-CI (1.43-2.78)) vulnerability in family routines (OR: 3.40- CI (2.02-5.70)), vulnerability in support of teenager (OR: 1.50-CI (1.10-2.05)) vulnerability in the feeling of happiness (OR: 2.11-CI (1.57-2.85)). The statistical significance of each OR, is corroborated by the confidence intervals of 95% (Table 1).

It is observed that controlling the effect of the variables included in the model, the risk of belonging to a dysfunctional family, is 1.6 times if risk of suicide; if you're a depressive teenager, this risk is 1.4 times; regarding the vulnerability in family cohesion, the risk of belonging to a dysfunctional family is 3 times compared to those without vulnerability; same happens with vulnerability in communication with the mother and vulnerability in family routines, the risk of having a dysfunctional family is 3 times compared to non-vulnerable. Who presented vulnerability in participation in problem solving, communication with the parent and feeling of happiness have 2 times the risk of belonging to a dysfunctional family, versus non-vulnerable. According omnibus test the Chi-square is 4.959 (p = 0.026) and the overall percentage correct for the prognosis of 66.9%, the model is adequate.

According to the explanatory power of the model with statistical Nagelkerke R2, it was found that the model explains 66% variability in the probability of occurrence of family dysfunction; remaining 34% is explained by other variables that were not included in the model. Tolerance in no case less than 10%, and therefore, no concern about the presence of multicollinearity in the general model.

Table 1: Logistic Regression for the Probability of Family Dysfunction among Adolescent Students Copacabana, Ebéjico and Medellin-Zone Northwest. 2010

Mental HealthIndicators		В	E.T.	Wald	gl	Sig.	Exp(B)	I.C. 95% to EXP(B)	
								Lower	Upper
Risk of suicide	Yes	,476	,164	8,415	1	,004	1,609	1,167	2,219
Symptoms of Depression	Yes	,401	,171	5,503	1	,019	1,493	1,068	2,087
HouseholdVulnerability	Familycohesion	1,150	,361	10,136	1	,001	3,159	1,556	6,414
	Participation in solvingproblems	,785	,174	20,261	1	,000	2,192	1,557	3,084
	Communicationwithmother	1,245	,159	61,371	1	,000	3,474	2,544	4,744
	Communicationwithfather	,692	,170	16,497	1	,000	1,997	1,430	2,788
	Familyroutines	1,224	,263	21,592	1	,000	3,401	2,029	5,700
	SupportTeenager	,409	,159	6,626	1	,010	1,505	1,102	2,055
	Feeling of happiness	,751	,153	24,227	1	,000	2,119	1,571	2,857
	Constant	-5,001	,481	107,991	1	,000	,007		

# 4. Discussion

According to the research results, the prevalence of family dysfunction was 33.3% which means that 3 out of 10 teenagers living in a dysfunctional family date that approaches the mental health screening Antioquia department conducted between November 2009 and April 2010 study in which it is stated that 42.0% of respondents have some degree of family dysfunction (Gobernación de Antioquia, 2014), Additionally this ratio is also close to a study in the research group of statistical applications and public health at the National School of Public Health in northeast Medellín in the year 2006 (Paniagua, R., González, C., Rueda, S., 2012), in which 43.1% of adolescents reported school belonging to a family with familial dysfunction.

These proportions we disclosed that a high number of adolescents in their families a breach of family functions, either by the absence of authority, lack of communication, emotional instability, absence or confusion of roles, therefore, identify an item or a system called family relationship is not working the right way. The prevalence of moderate family dysfunction among adolescent students in the Municipality of Ebéjico, the Northwest area of Medellin and Copacabana, was 24.8%, 24.3% and 8.9% respectively. These results are close to a study by the Universidad Autónoma de Bucaramanga (Colombia), in which 16.5% of teens surveyed reported having a family with moderate dysfunction.

About several family dysfunction, the ratio founded in Ebéjico, Northwest Area of Medellín and Copacabana municipalities, was 16.5%, 16.3% and 5.4% respectively, and in that study in Bucaramanga prevalence was 19.8%, which is also similar to the findings of this study (Forero, L., Avendaño, M., Duarte, Z., & Campo, A., 2006).

The general distribution of family dysfunction by gender (women: 51.4% Male 48.6%) showed no significant differences possibly because family dynamics depends largely on the degree of communication you have, control and support they give you the fathers to the children for their emotional autonomy. For the amount of changes that the teenager has to face and under the reactions that men and women have in particular, may predispose the family to have more or fewer conflicts depending on the position that parents assume; therefore, if parents do not comply and understand these changes to try to punish but to guide and tolerate little desire for autonomy of their children, regardless of gender are to show problems in family functioningand are not necessarily caused by the children, as it was presented in a study conducted in adolescents by the Universidad Nacional de SanMarcos in Lima, Peru, in 2009 (Arenas, S., 2009).

Respect to the association shown by the model between family dysfunction and the presence of suicide risk (p = 0.004), It is likewise confirmed by other studies such as that conducted in the city of Manizales between 2007 and 2008, in which they wanted to study suicide risk and related factors in students from 6 to 11 degree of schools in the same city, and significant relationship between suicide risk and familiar functionality is found, the prevalence of moderate and severe family dysfunction among adolescents was observed with suicide risk,while among young people who did not have suicidal risk predominated good family function (Fuentes, M., González, A., Castaño, J., et al., 2009). Another study that confirms this association, was held in Mexico by the Mexican Institute of Social Security, which found that patients from families with impaired family dynamics,had high risk for suicide (Villa, A., Robles, M., Gutiérrez, E., Martínez, M., Valadez, F., Cabrera, C., 2009).

In terms of family cohesion, McKeown et al, conducted a prospective study with one year follow up in adolescents from six public schools in South Carolina, the results show that increased family cohesion was a protector for the suicidal attempts factor, and not living with both parents was not associated with any suicidal behavior, suggesting that no family structure per se, but the quality of relationships family could be a risk factor in suicidal behavior of the child and adolescent early(McKeown, R,, Garrison,C., Cuffe, S., Waller, J., Jackson,K. &Addy, C., 1998).

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At present, there have been profound changes in the families; you get to say that families are in crisis, the absence of authority in them, no defined roles, lack of communication among other factors that is affecting the operation thereof. Worryingly for adolescents seen immersed in a world of change and conflict, looking for that place to meet their physical, emotional security, health and wellness called family, which is not complying with that rationale.

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