

Family and psychosocial characteristics of adolescents with suicide attempt: data from a clinical population study.

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ABSTRACT: *Introduction:* For various reasons, systematic study of suicidal behaviour among Greek adolescents remains limited.

Aim: To investigate the family and other psycho-social characteristics of adolescent suicide attempters within the rapidly changing socio-cultural context.

Population: Patients referred to our Unit after admission for attempted suicide. Up to date, 160 adolescents (16.3% males and 83.7% females), aged 12-19 (mean age 15.14) have been included in our study.

Method: As part of a larger continuing research on attempted suicide among adolescents, the present study focuses on family and psycho-social parameters. Through the use of a specifically designed protocol, recorded data are codified and stored in the SPSS for statistical treatment.

Results: By order of frequency of appearance, the recorded parameters are: severe dysfunction or impairment of family context (60.6%), school failure/drop (58.1%), adolescent-parent conflict (53.8%), residential changes (52.5%), family schemes other than “intact family” (39.4%), mental health problems among family members (38.1%), disappointment from peer relationships (35.6%), somatic illness among family members (32.5%), cultural particulars (27%), parents’ separation/divorce (25%), followed by other less frequent but not necessarily less important parameters.

Conclusions: While confirming some steadily present parameters, our study reveals newly emerging ones, reflecting changes in the family structure and in the wider socio-cultural context, which should be addressed and studied more systematically.

Key Words: Adolescent, Attempted suicide, Family and psychosocial factors.

INTRODUCTION

Suicide attempts appear as a problem specifically related to the developmental stage of adolescence, given their frequency in this age group. On the other hand, completed suicide, while reported among the first three causes of mortality among youths in various countries, is less frequent than in the adult population¹. Historically, the model which has prevailed since several decades in the study of suicidality is that of “risk factors”², and its major contribution consists in establishing the multi-factorial nature of this phenomenon. Apart from individual factors, those related to the family and social context play a crucial role both as

long standing adverse or pathogenic conditions, and as precipitating factors. As a matter of fact, one might say that this is self evident, if one takes into consideration that adolescence, as a developmental stage, is a socio-cultural product. In this perspective, there is a need for a permanent reassessment of these factors within the rapidly changing socio-cultural context in modern societies.

More specifically, overall family dysfunction, child-parent and sibling conflicts, parental psychopathology, history of completed or attempted suicide, parental discordance, separation/divorce, one-parent family, adoption, health problems, death of family

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members, history of physical or sexual abuse, residential mobility, low socioeconomic and educational status, are among the conditions usually reported in the numerous studies of adolescent suicidal behaviour³⁻¹⁵.

In contrast with the abundant international literature, the poor number of Greek published studies indicates that research in this field remains very limited in our country. A first explanation for this is that suicide does not constitute a major problem in Greece, where officially reported suicide rates are among the lowest in the world, and in particular, the lowest in Europe, according to WHO data^{16, 17}. Combined to this, the scanty development of specialised adolescent services and, in particular, the poor coverage of general hospitals by adolescent psychiatric services, constitute an unfavourable context for such research.

Very few, brief or more extended reports of studies conducted in paediatric, and child- or general psychiatric settings were the fruit of our search of the Greek literature. Despite their limitations, in some related to sample's size and age range, in others to methodology or non-specific clinical approach, their interest lies in that they provide us with the only data available on some of the environmental risk or causal factors of attempted suicide among Greek adolescents, as they could be observed during the last decades. The most frequently met parameter (over 50%) had to do with adolescent-parent conflicts over control or academic success, and was followed by difficulties or disappointment from friend or love relationships (up to 30%), parental conflicts and separation/divorce (up to 15%), and school difficulties or failure (up to 9%). On the other hand, factors such as drug/alcohol abuse and sexual abuse in the adolescents' history, and suicide or suicide attempts in the family were rarely or not at all detected¹⁸⁻²². The most systematic and well documented studies come from Pr Beratis' service at the University of Patras, including the only paper on adolescent completed suicide in Greece²³. Finally, a very recent study from the same psychiatric department confirms the independent association of both clinical and psychosocial factors with increased risk for serious suicide attempts²⁴.

Without ignoring the interest of the information provided by these studies, we may say that most of their data are rather outdated if we consider the rap-

idly changing socio-cultural context in Greece in the last ten to fifteen years. With the exception of the most recent one²⁴, all the older studies seem to reproduce a similar pattern of risk factors, with the accent on classical adolescent-parent conflicts over control and restrictions within the "typical Greek family." Our own study, covering a period of rapid changes in our country, depicts in a more detailed way the actual situation, and at the same time gives us the possibility of detecting new trends by comparing our findings with data from pre-existing studies.

METHOD

In this paper we present part of the results from a continuing research on attempted suicide among adolescents, conducted within a clinical setting during the last fifteen years. Recruitment of cases is through the Consultation-Liaison service of our Child and Adolescent Unit, functioning within the 3rd Psychiatric Department of the AHEPA University General Hospital in Thessaloniki. Up to the moment of the preparation of this paper, 160 cases had been included in our study, and their family, socio-cultural, and psychosocial characteristics are presented and discussed in the following sections.

As a rule, all adolescents admitted to the hospital after a suicide attempt, are referred for psychiatric assessment before discharge. As referrals come both from paediatric and adult wards, the study population covers the whole age range of adolescence. A protocol, developed specifically for the purposes of this study by one of the authors (N.Z.), serves as a guide and a tool for both assessment and recording of all demographic, clinical, and psycho-social parameters. It is worth noticing that research work is integrated in our clinical practice which remains the priority. Data are collected during the initial assessment immediately after the referral (two to three interviews of 1 to 1½ hour), and, in many cases, additional material is obtained out of what is known as "therapeutic consultation" or a therapeutic follow-up proper, after the patients' discharge.

Both the number and nature of information and data obtained through this procedure make a comparison with a general population sample practically impossible, since the clinical setting conditions cannot be reproduced in general population surveys. On the

Table 1. Family situation.

	Frequency	Percentage %
Parents married	111	69.4
Parents divorced	40	25.0
Adopted child	4	2.5
Outside marriage	3	1.9
Institution	2	1.2
Total	160	100.0

Table 2. Number of children in the family compared to general population data.

	Our Sample	General Population		
	%	Married %	Unmarried %	Single mothers %
0	N/A	35.4	69.6	N/A
1	11.9	27.3	15.9	66.6
2	45.0	29.2	10.7	27.5
3	26.9	6.3	2.6	4.7
4	9.4	1.4	0.8	0.9
5+	6.9	0.4	0.4	0.3

other hand, the constitution of a general clinical comparison group (all diagnoses except attempted suicide) would be of great interest. However, since the investigation of all the risk factors specific to the adolescent suicidal behaviour is not part of routine clinical work with the other categories of patients, such a project would require human and material resources which at the time being are far from being available in our service, as this research has never received any support. For some demographic features, data from the

2001 national census²⁵ are used for comparison, while the rest are presented as descriptive of the population studied, and discussed comparatively with data from the other Greek studies.

While being aware that such a procedure may raise critical objections on methodological issues, we think that the findings provided are nevertheless significant in the sense of depicting the actual “landscape” in respect of steadily persisting and newly appearing parameters, though without supporting their role as risk factors in adolescent suicide attempts at this stage.

RESULTS

The study population consists of 160 adolescents (16.3% males and 83.7% females), aged 12-19, with a mean age of 15.14 (S.D. = 1.733). The sex ratio confirms the steady preponderance of girls (5:1), while the age distribution is characterised by peaks at ages 13-14 and 17 (Figure 1).

Family situation

Tables 1 to 3 show the family situation and composition, but also the adolescents' living context at the moment of the suicide attempt, which is of particular

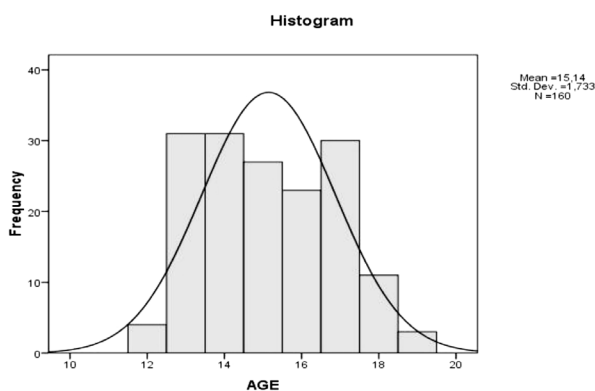
**Figure 1.** Age distribution.

Table 3. Life context at the moment of the attempt.

	Frequency	Percentage %
Both parents	97	60.6
One parent	35	21.9
Other family members	10	6.2
Biological and step parent	10	6.2
Both adoptive	4	2.5
Institution	3	1.9
Rented accommodation alone	1	0.6
Total	160	100.0

Table 4. Health problems in the family.

	Somatic illness Percentage %	Psychiatric disorder Percentage %
Parents	17.5	25.6
More than one family member	9.4	10.0
Siblings	3.1	1.9
Grandparents	2.5	0.6

Table 5. Psychopathology in the family.

	Frequency				Total and %
	Father	Mother	Sibling	2 nd Degree	
Depression	4	12	1	1	18 (11.3)
Personality Disorder	9	3	5	-	17 (10.6)
Alcoholism	11	2	-	-	13 (8.1)
Drugs	3	2	4	-	9 (5.7)
Neuroses	3	4	-	-	7 (4.4)
Suicide Attempt	-	3	3	-	6 (3.8)
Psychoses	2	2	1	-	5 (3.1)
Other addictions	2	-	-	-	2 (1.2)
Organic Psychoses	1	1	-	-	2 (1.2)
Suicide	-	-	-	1	1 (0.6)
PDD	-	-	1	-	1 (0.6)
Somatoform Disorder	1	-	-	-	1 (0.6)

importance. While in 94.4% of cases both biological parents were in life, and in 69.4% of them were married couples, at the moment of the suicide attempt only 60.6% of the adolescents lived with both their parents. At the moment of the attempt, 63 (39.4%)

of the 160 adolescents were living in various family schemes, other than the typical "intact family": 35 in mono-parental family (21.9%), 10 with other family members, usually grandparents (6.2%), 3 with biological and step parent (1.9%). Additionally, four (2.5%)

Table 6. Family relations.

	Frequency	Percentage %
Malfunction/Inadequate family system	97	60.6
Conflict with parents	86	53.8
Conflict between parents	35	21.9
Conflict with siblings	24	15.0
Physical abuse/Violence	22	13.8
Sexual abuse	6	3.8

were adopted children, three (1.9%) lived in institution placement, and one (0.6%) lived independently. Parental separation/divorce was recorded in 25% of the cases, which is exactly the rate for year 2005 reported by the national statistics service for divorce in the general population.

Table 2 shows the number of children in our sample's families, comparatively with general population data, where a tendency towards a greater number of children can be observed in the study's sample.

Finally, we wish to mention something which was not included in the initial planning of this research as a parameter to be examined, and therefore does not appear in the tables: as an interesting "lateral" finding during the statistical treatment of our data, it came out that a statistically important proportion of our patients were offspring born to adolescent parents. This interesting issue, namely adolescent parenthood as risk factor for offspring suicide attempt in adolescence, is the object of a separate paper in preparation.

Family health

The rates of health problems, both physical and mental, among family members appear on Table 4. Somatic illness was found in 32.5% of the cases, while death in the family (recent or of psychological importance for the adolescent) was recorded in 21.9%. The rate for mental health problems was even higher (38.1%). More detailed information on psychopathology in the family is presented on Table 5, confirming what is known from the literature, namely, that

depression, personality disorders and drug/alcohol abuse represent the most important risk factors from the point of view of family psychopathology. Additionally, attempted suicide was recorded in 3 mothers and 3 siblings (3.75%) and only 1 (0.66%) suicide in a 2nd degree relative (aunt).

Although clinical issues regarding the adolescents' mental health are not addressed in this paper, it is worth noticing, since it is closely related to the above presented data, that psychopathology was found in 56.8% of the adolescent attempters: the most frequently recorded were affective (mainly depressive) disorders (30.9%), personality disorders characterised by acting out behaviour (18%), and drug/alcohol abuse (9.5%). These findings¹ are indicative of repetition of parental psychopathology in their offspring.

Family functioning and relations

These crucial aspects of family life are among the main risk factors known from the literature. As it can be seen on Table 6, the parameters characterising these families are, by order of frequency: severe failure and dysfunction of the family context, adolescent-parent conflict, and to a lesser degree, parental discordance and conflict, sibling conflict, overtly expressed violence in the family. Sexual abuse was found in 3.8% of our study population.

Regional, ethnic, and cultural characteristics

Of the total population, 70.4% lived in the major urban complex of Thessaloniki, suburbs included. For the rest, 23.2% lived in semi-rural and 6.4% in rural

Updated results from the 160 cases were presented recently at the 6th Pan-Hellenic Congress of Child Psychiatry, Athens, May 15-17, 2009. A paper on the clinical parameters of the present study is under preparation.

Table 7. Cultural particulars.

	Frequency	Percentage %
Both parents Greek	117	73.1
Both parents from different culture	22	13.8
Parental couple of mixed culture	11	6.9
Gypsies	7	4.3
Second generation of Greek immigrants	3	1.9
Total	160	100.0

Table 8. Geographic mobility.

	Frequency	Percentage %
Internal movement	54	33.8
Immigrants	30	18.8
None	76	47.5
Total	160	100.00

Table 9. Relations with peers.

	Frequency	Percentage %
Disappointment with lover	37	23.1
Difficulties/Disappointment with peers	20	12.5
Death of close friend	3	1.9

areas. These numbers are only indicative of service utilisation and cannot be taken as epidemiological features. What is more interesting is that while 80% of the sample's adolescents were born in Greece, 20% came from other countries, mostly eastern European and Balkan. In addition, cultural particulars, other than the traditional Greek ones, were found in 27% of the families (Table 7). From a different point of view, if we add to the number of immigrants those families moving within Greece, we get a total 52.5% of the total 160 cases characterised by residential mobility (Table 8).

Relations with peers

Difficulties in relations with peers represent another important factor, usually expressed in terms of disappointment or deception. In our sample, 23.1% of the adolescents reported deception from love relation-

ships, and 12.5% disappointment from friends, both considered as causal or precipitating factors. On the total, 35.6% of adolescents reported loss of support from the peer group. On the other hand, death of a close friend was found in only 1.9% of the cases (Table 9).

School life

In our study population, only 42% of the adolescents had a normal integration in school life, with the majority of them (58%) presenting different degrees of problems: from difficulties to failure or even dropout, while three of them (1.9%) had never attended school (Table 10).

DISCUSSION

First, our findings confirm the classically known preponderance of females in attempted suicide among

Table 10. School life.

	Frequency	Percentage %
Normal	67	41.9
With difficulties	40	25.0
School failure	26	16.2
School drop out	23	14.4
Never went to school	3	1.9
Total	159	99.4

adolescents. Divergences between the sex ratio found in our sample (5:1) and in other Greek studies (7.6:1 by Vlachos et al.¹⁹; 9:1 by Simatis et al.²¹; 19:1 by Karagiannaki²²; 14.2:1 by Menti et al.²⁴) may be explained either by methodological differences or possible changes over time. On the other hand, contrary to the generally held statement that the frequency of attempted suicide increases with age, our findings show an interesting peak at early adolescence (13-14) which should deserve more attention.

Regarding family characteristics, our findings depict a configuration much closer to what is reported in the international than the existing Greek literature, reflecting thus a shift from the traditional pattern (conflicts over control within a typical Greek family structure) to a more “westernised” one. Thus, while other Greek studies focus more on parental discordance and conflicts, it was found that overall family functioning, in terms of severe failure to ensure a supportive environment, is an essential parameter to be addressed. In fact, our study reveals this parameter to be the most frequently met characteristic among these families (60.6%). Notwithstanding, adolescent-parent conflicts remain a constantly found characteristic: 53.8% in our sample, against 45% in Menti et al.²⁴, and 63.7% in Simatis et al.²¹. On the other hand, parental conflicts were less frequently found (21.9% in our sample, 11% in Vlachos et al.¹⁹), and, with a much lower frequency, conflicts among siblings (15% in our sample, and only 1% in Menti et al.²⁴). Finally, physical abuse and overtly expressed violence in the family was recorded in 13.8% of our sample, while only in 3.8% there had been sexual abuse. This is in accord with findings by Beratis²⁰, but in contrast to reports in the international literature.

As for the number of children in the family, our findings, compared to the National Statistics Service data, are indicative of a tendency among the families with a suicidal adolescent offspring to have more children.

Parental separation/divorce has been reported in diverging frequencies in the other Greek studies: 31% by Vlachos et al.¹⁹, 14.3% by Simatis et al.²¹, only 8% by Menti et al.²⁴. The rate found in our sample (25%) is in accord with those reported in the international literature, but it also corresponds to official data from our National Statistics Service²⁵: divorces in Greece increased from 8 (1980) to 24 (2005) per 100 marriages. Interpreted in statistical terms, this finding means that divorce does not seem to play a role of risk factor *per se*. However, the conditions of separation and divorce and eventually severe conflicts, usually long lasting, should be taken into account.

On the other hand, health problems in family members seem to represent a crucial parameter. Our findings, show the presence of physical and mental illness respectively in 32.5% and 38.1% of our sample’s families, consistent with those from the international literature. Death of family members was recorded in 21.9% of our sample’s families, which differs significantly from the corresponding rate of 8% reported by Menti et al.²⁴.

In addition to all the above mentioned parameters, our findings revealed newly emerging socio-cultural characteristics, never examined before in Greek studies. These include the increasing number of immigrants (20% of our sample), of families with cultural features other than the traditional Greek ones (27%), and with the significant rates of residential mobility and changes (>50%). Such factors, steadily mentioned

in the international literature, had been examined and reported for the first time in Greece in a previous paper presenting preliminary results from our study²⁶. They should deserve more attention in future Greek studies, as, among others, they introduce the essential trans-cultural dimension in psychiatric work.

Finally, the two most important life sectors outside the family, namely, relations with peers and school life, have provided interesting findings. Love disappointment has been reported by 23.1% of our adolescents, which is more or less in accord with rates of other studies (Vlachos 20.3%¹⁹, Simatis 31.1%²¹). Disappointment from friends was less frequent (12.5%). But the most important finding was the frequency of difficulties in school life (57.1%), a rather underestimated parameter in other Greek studies, given the frequencies reported: 8% by Vlachos et al.¹⁹; 2.6% by Simatis et al.²¹ 7% by Menti et al.²⁴. Here again, our findings are in more accord with international data¹⁻¹⁵.

Strengths and limitations

A major strength of the present study is the size of the population investigated, which, to our knowledge, is the largest sample ever examined within a clinical context in Greece by a Child and Adolescent Psychiatric Service, addressing systematically most of the demographic, family, psychosocial and clinical parameters known to be associated with attempted suicide in adolescence. Furthermore, as a continuing research, it enables us to follow eventual changes in time of all these parameters, responding thus to the need for a permanent actualisation of our knowledge of the problem within a rapidly changing socio-cultural context. The present study has the additional advantage of covering the whole age range of adolescence, which is not the case in many other studies. Finally, our sample is a sequential one, constituted by successive referrals, with few dropouts, and with a continuously increasing number of cases included. For all these reasons, our study population may be considered as representative of the problem of adolescent suicide attempts, studied within a clinical context.

On the other hand, a limitation of this study involves the lack of comparative samples, constituted of either clinical or general populations, which would allow for a methodological step in this research work that would make it possible to conclude on the even-

tual role of all these parameters as risk factors. Therefore, at this stage, the findings of this study may be only considered as descriptive of the problem of suicide attempts among Greek adolescents.

CONCLUSIONS

In this paper, we presented findings regarding some of the main family and psycho-social characteristics of adolescent suicide attempters, as part of a larger, continuing research on attempted suicide among Greek adolescents, conducted by our service. The parameters examined are among those established as risk factors of this phenomenon in the international literature, but at this stage they are presented as descriptive of the studied population. These findings confirm, on one hand, the presence of classically known “constants”, while, on the other hand, reveal some newly appearing dimensions, never reported before in the existing Greek literature. In particular, new family schemes, family functional characteristics and psychopathology, an increasing representation of families with ethnic and cultural features other than the traditional Greek ones, as well as a considerable increase of school life problems, are indicative of a shift from the classically reported pattern in pre-existing Greek studies to one which is closer to what characterises other developed western countries. The need for a permanent actualisation of our knowledge and understanding of the phenomenon of suicidal behaviour among adolescents is obvious, in order to ensure a more adapted clinical and psycho-social approach, and, consequently, better prevention and care. However, a well organised and systematic study of the problem on a national level, cannot rely on mere initiatives, but requires adequate support by the responsible authorities, ensuring both material and human resources.

Οικογενειακά και ψυχοκοινωνικά χαρακτηριστικά εφήβων με απόπειρα αυτοκτονίας: δεδομένα από μια μελέτη σε κλινικό πληθυσμό.

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ΠΕΡΙΛΗΨΗ: *Εισαγωγή:* Για διάφορους λόγους, η συστηματική μελέτη της αυτοκτονικής συμπεριφοράς των εφήβων στην Ελλάδα παραμένει περιορισμένη.

Σκοπός: Η μελέτη των οικογενειακών και ψυχο-κοινωνικών χαρακτηριστικών των εφήβων με απόπειρα αυτοκτονίας, μέσα σε ένα ταχέως μεταβαλλόμενο περιβάλλον.

Πληθυσμός: Έφηβοι που παραπέμπονται στη Μονάδα μας λόγω νοσηλείας μετά από απόπειρα αυτοκτονίας. Μέχρι στιγμής, στη μελέτη έχουν συμπεριληφθεί 160 έφηβοι (16,3% αγόρια και 83,7% κορίτσια), ηλικίας 12-19 ετών (Μ.Ο. 15,14 έτη).

Μέθοδος: Η παρούσα εργασία αποτελεί μέρος ευρύτερης έρευνας του προβλήματος της απόπειρας αυτοκτονίας εφήβων και εστιάζει στις οικογενειακές και ψυχο-κοινωνικές παραμέτρους. Με την χρήση ειδικά καταρτισμένου πρωτοκόλλου, τα δεδομένα κωδικοποιούνται και αποθηκεύονται στο πρόγραμμα SPSS για στατιστική επεξεργασία.

Αποτελέσματα: Με σειρά συχνότητας εμφάνισης, οι καταγραφείσες παράμετροι είναι: σοβαρή δυσλειτουργία ή ανεπάρκεια οικογενειακού πλαισίου (60,6%), σχολικές δυσκολίες/αποτυχία (58,1%), συγκρούσεις εφήβων-γονέων (53,8%), αλλαγές τόπου κατοικίας (52,5%), μορφές οικογένειας πέραν της τυπικής (39,4%), προβλήματα ψυχικής υγείας στην οικογένεια (38,1%), απογοήτευση από σχέσεις με συνομηλίκους (35,6%), σωματικά νοσήματα στην οικογένεια (32,5%), πολιτισμικές ιδιαιτερότητες (27%), χωρισμός/διαζύγιο γονέων (25%), ακολουθούμενες από λιγότερο συχνές αλλά όχι μικρότερης σημασίας παραμέτρους.

Συμπεράσματα: Η μελέτη μας επιβεβαιώνει κλασικά γνωστές «σταθερές» του προβλήματος, αναδεικνύοντας ταυτόχρονα νεοεμφανιζόμενες παραμέτρους που αντανακλούν αλλαγές στη δομή της οικογένειας και στο ευρύτερο κοινωνικό και πολιτισμικό πλαίσιο και που πρέπει να αποτελέσουν αντικείμενο περισσότερης προσοχής και συστηματικής μελέτης.

Λέξεις κλειδιά: Έφηβοι, Απόπειρα αυτοκτονίας, Οικογενειακοί και ψυχο-κοινωνικοί παράγοντες.

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