Victimization and suicidality among adolescents in child and youth-serving systems in Spain

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Abstract

This study assessed the relationship between poly-victimization and suicidality in 227 adolescents involved in child and youth-serving systems (i.e., child welfare and juvenile justice systems) in Spain. The mean age of participants was 15.24 years (SD = 1.56 (range 12 to 17). The Juvenile Victimization Questionnaire (which includes conventional crime, caregiver victimization, victimization by peers and siblings, sexual victimization, witnessing and indirect victimization, and electronic victimization), and two items from the Youth Self-Report were used to assess victimization and suicidality respectively. Lifetime poly-victimization was reported by 61.7% of the overall sample, and suicidality by 39.6%. The logistic regression analysis indicated that the odds of presenting suicidality were twice as high in the poly-victims (OR = 2.13). Sexual victimization was a statistically significant predictor and was associated with the occurrence of suicidality (OR = 2.67). In view of the high prevalence of victimization and its association with suicidality in this sample, we propose that the assessment of victimization should be included in the design of policies for suicide prevention and intervention.

1. Introduction

Suicide is the second leading cause of death for the world's 15- to 29-year olds. Another cause for alarm is that, for every suicide, there are 10 to 20 suicide attempts in all age groups (WHO, 2014). Suicide is the second main cause of death in Spanish youth, after tumors (INE, 2016).

Suicidality (or suicidal behavior) ranges from thoughts or ideas of suicide (suicidal ideation) to death by suicide (Stanley, Winchel, Molcho, Simeon, & Stanley, 1992). Between these two extremes are suicide threats, self-harm, and suicide attempts. This terminology is based on the standard nomenclature proposed by Silverman, Berman, Sanddal, O'Carroll, and Joiner (2007).

Suicidality is more common among youth in the juvenile justice and child welfare systems than in the general population. Evans et al. (2017) meta-analysis estimated that the prevalence of suicidal ideation was 24.7% in children and adolescents in the child welfare system compared to 11.4% in community populations, while the figures for suicide attempts were 3.6% and 0.8% respectively. Similarly, a literature review by Stokes, McCoy, Abram, Byck, and Teplin (2015) among youth in juvenile justice systems found suicidal ideation and behavior to be more prevalent in these young people, who presented higher rates for past-year ideation (19%–32% vs. 15.8%) and past-year attempts (12%–15.5% vs. 7.8%) than the general population.

Other variables such as gender, race/ethnicity, or country of origin have also been related to suicidality. Female gender has been associated with ideation/attempts (Chavira, Accurso, Garland, & Hough, 2010; Wasserman & McReynolds, 2006). Although the results are not conclusive, a statistical significant relation of ideation/attempts in non-Hispanic whites has also been suggested (Stokes et al., 2015). One meta-analysis found that the country of origin has an important role in suicidal behavior: for example, in the United States the association between bullying and suicidal behavior was significantly higher than in other countries (Holt et al., 2015). Significant demographic predictors of suicidal behavior also included affiliation with the public sectors of care (Chavira et al., 2010), and young involved in the child welfare system present higher rates of suicidal behaviors than those in other sectors (e.g., juvenile justice).

2. Victimization and suicidality among adolescents

Recent research suggests that children and adolescents who

experience multiple types of victimization, also known as poly-victims, have more adverse consequences than those who experience only one form of victimization (Álvarez-Lister, Pereda, Abad, Guilera, & GReVIA, 2014; Finkelhor, Ormrod, & Turner, 2007, 2009).

Prior research also indicates that poly-victimization is prevalent among children and adolescents in child services, affecting more than half of the sample in child welfare (Cyr et al., 2012), and one-third in the juvenile justice systems (Ford, Elhai, Connor, & Frueh, 2010).

As mentioned, poly-victimization has been associated with more pronounced adverse mental health outcomes (e.g., Finkelhor et al., 2007; Ford et al., 2010; Ford, Grasso, Hawke, & Chapman, 2013), including suicidal ideation and self-harm/suicidal behavior. Several studies have analyzed the effects of poly-victimization on suicidality in community adolescents from different countries (Chan, 2013; Soler, Segura, Kirchner, & Forns, 2013; Turner, Finkelhor, Shattuck, & Hamby, 2012), but this relationship is yet to be studied extensively in at-risk samples. One article focusing on youth from the juvenile justice system (Ford et al., 2013) found that poly-victims were more likely to report suicidal ideation than the moderate and low adversity groups. As little is known about poly-victimization as a risk factor for suicidality among adolescents in child services, the best available guidance comes from studies with the general youth population. For example, Turner et al. (2012) showed independent effects of peer victimization, sexual assault, and maltreatment on suicidal ideation in a community-based sample of adolescents. The findings showed substantial effects of poly-victimization (exposure to seven or more individual types of victimization) with poly-victims being almost six times more likely to report suicidal ideation. Another study found a significant relation between poly-victimization and suicidality in a community sample of Spanish adolescents (Soler et al., 2013).

Other studies have focused on the effects of a single form of victimization on suicidal behavior. For example, peer victimization has recently become a topic of public concern due to alarming media reports of death by suicide in youth (Geoffroy et al., 2016). An important meta-analysis on this topic found that peer victimization was associated with an increased risk of suicidal ideation and suicide attempts (Holt et al., 2015).

The findings suggest that physical and sexual abuse, as well as emotional maltreatment, are the types of victimization most strongly associated with suicidality (e.g., Bratta, Jefferis, Kavadas, Alemagno, & Shaffer-King, 2014; Chavira et al., 2010; Esposito & Clum, 2002; Rhodes, Bethell, & Tonmyr, 2014; Thompson et al., 2012). Characteristics of the victimization experience, including type, chronicity, and severity have also been associated with suicidality (Taussig, Harpin, & Maguire, 2014).

Other forms of victimization, such as being the victim of a crime, have been less studied in relation to suicidality among adolescents. However, witnessing or indirect victimization has been directly associated with suicidal ideation among adolescents in the juvenile justice system (Ford, Hartman, Hawke, & Chapman, 2008).

Taken together, prior research demonstrates an association between exposure to various types of childhood victimization and suicidal behaviors among adolescents. There are a number of possible explanations for the higher rates of suicidality in youth attended at child services, such as the high number of victimization experiences that they have to cope with (Cyr et al., 2012; Ford et al., 2010), but also the interpersonal theory of suicide, which proposes that people who are not socially integrated and do not have family and/or social support may be at a greater risk of suicide (Van Orden et al., 2010).

To date, studies of children and adolescents in child services are

3. Aim of the study

The aims of the present study were: first, to examine the relationship between lifetime victimization, poly-victimization, and suicidality among adolescents in child and youth-serving systems in Spain; second, to explore the association between social and personal characteristics and suicidality, since previous research has found these to be important variables that should be taken into account when studying suicidality in this population (Chavira et al., 2010). We hypothesized that (1) lifetime poly-victimization would be a better predictor of suicidality than specific victimization modules (e.g., sexual victimization, caregiver victimization). In addition, given the prior literature (e.g., Chavira et al., 2010; Holt et al., 2015; Rhodes et al., 2014), we hypothesized that (2) peer victimization, sexual victimization, and/or caregiver victimization would increase the risk of suicidality more than other types of victimization (e.g., conventional crime, witnessing victimization), and, (3) differences related to gender, child-service and country of origin would be found in the suicidality groups (e.g., Holt et al., 2015). Regarding suicidality, we expected to find a higher prevalence of suicidal ideation and self-harm behavior in our sample than in adolescents from a community sample (Soler et al., 2013) in the same cultural context and using a similar measurement instrument.

4. Method

4.1. Participants

The total sample comprised 227 adolescents (145 males and 82 females) recruited from two child and youth-serving systems (126 from the child welfare system and 101 from the juvenile justice system) in north-eastern Spain. All participants in the study were between 12 and 17 years of age ($M = 15.26$; $SD = 1.54$). The majority (58.6%) were born in Spain; 18.9% were born in Central or South America, 18.5% in Africa, 3.1% in other European countries, and 0.9% in Asia.

4.2. Child welfare system

The initial sample in the child welfare system was composed of 129 adolescents. Three cases were excluded from the study due to the lack of information from any of the questionnaires. Finally, the sample comprised 126 (61 males and 65 females) recruited from 18 residential facilities (13 long-term and 5 short-term).

4.3. Juvenile justice system

One hundred and one adolescents were recruited from three detention centers and five open regime centers: 82 males and 19 females (81.2% and 18.8% respectively).

4.4. Procedure

A cross-sectional study was conducted and the participants were selected by convenience sampling. This study was carried out at the request of the Department of Social Welfare and Family Affairs and the Department of Justice with the aim of assessing victimization experiences, symptoms of psychopathology and resilience resources in chil-

limited and little is known about the impact of poly-victimization on suicidality in this population. To the best of our knowledge, no studies have been conducted in at-risk samples in Spain. Many studies focus only on suicide attempts or death by suicide as outcomes of interest even though

suicidal ideation and self-harm behavior are also im- portant outcomes to consider when identifying predictors for suicide.

dren and youth cared for at these departments. The Institutional Review Board of the University of Barcelona approved the study, which was carried out in accordance with the basic ethical principles of the Declaration of Helsinki (World Medical Association, 2008). No financial assistance or compensation was offered to participants.

Twenty-six centers were subsequently contacted by the child welfare systems. From these, 18 short- and long-term residential facilities were recruited. The short- and long- term centers look after children from 3 to 18 years old who have been removed from their homes due to precarious family situations. Due to the large number of protection

centers in the region, age and sex sampling criteria were used to pre-select the centers for participation in the study.

For the selection of the participants involved in the juvenile justice system, 5 open-media teams and 5 juvenile justice detention centers were selected. Only two detention centers declined to participate.

Prior to each interview, informed consent was requested from the adolescents and their parents and/or legal guardians. The interviews were conducted individually and were carried out in rooms provided by the centers. All interviews were conducted in 2013. Adolescents with cognitive or language problems were excluded from the study.

Each interview was conducted by a collaborator trained by the research group in development victimology, interviewing techniques, and protocol evaluation (UNICEF, 2012).

4.5. Measures

4.5.1. Victimization experiences

The Juvenile Victimization Questionnaire (JVQ; Finkelhor, Hamby, Ormrod, & Turner, 2005) evaluates 36 different types of victimization against children and youth (between 8 and 17 years old) grouped into six modules: conventional crime (nine items), caregiver victimization (four items), victimization by peers and siblings (six items), sexual victimization (six items), witnessing and indirect victimization (nine items), and electronic victimization (two items). For each item the presence or absence of this victimization experience was scored as 1 or 0 respectively. In the current study, the interview version of the JVQ was translated into Catalan and Spanish and was used to assess victimization over the lifetime. The original version of the JVQ has shown adequate psychometric properties (Finkelhor et al., 2005). Evidence of the validity of the Spanish/Catalan adaptation of the JVQ has also been reported (Pereda, Gallardo-Pujol, & Guilera, 2016).

4.5.2. Suicidality

Two items from the Youth Self-Report (YSR; Achenbach & Rescorla, 2001, translated by the Unit of Epidemiology and Diagnosis in Developmental Psychology at the Universitat Autónoma de Barcelona) were used to assess self-harm and suicide ideation respectively: item 18 ("I deliberately try to hurt or kill myself") and item 91 ("I think about killing myself"). The YSR is a self-report instrument that measures psychological distress in children and adolescents aged between 11 and 18 years. Participants were asked to indicate on a 3-point Likert scale ranging from 0 (not at all) to 2 (very often) how often each of the item statements had happened to them within the last six months. The instrument comprises a list of 119 items that represent emotional and behavioral problems experienced during the last six months, and has been shown to have adequate psychometric properties in different countries (Ivanova et al., 2007), including Spanish samples (Zubeidat, Fernández-Parra, Ortega1, Vallejo, & Sierra, 2009).

4.5.3. Sociodemographic data

Sociodemographic information from participants and their parents (e.g., age, gender, country of birth, and educational level and occupation of parents) was obtained using a data sheet created for this study.

4.6. Data analysis

To identify the poly-victim group of adolescents, we applied the original criteria proposed by Finkelhor et al. (2005), who proposed dividing victims into two poly-victimization sub-groups: Low poly-victims (from four to six experiences of victimization) and High poly-victims (with seven or more victimizations). To do this, we used the threshold (8+ victimizations) established by Pereda, Guilera, and Abad (2014) in a Spanish community sample, in order to be able to compare the same culture, the same age group and the use of the same instrument.

Suicidality in the last six months was analyzed based on responses to

items 18 and 91 of the YSR, excluding adolescents with missing data on either of these items (1.3% of the sample). Thus, suicidal ideation (item 91) and self-harm behavior, (item 18) were recorded as present (score of 1, "somewhat or sometimes true," or 2, "very often or often true") or absent (score of 0, "not at all"). Additionally, two new variables were created: a) Suicidal ideation and self-harm behavior, identifying adolescents who presented both suicidal ideation and self-harm behavior and b) Suicidality, referred to as the presence of any kind of suicidality, either suicidal ideation or self-harm behavior.

The association between the four suicidality indicators and sociodemographic variables was analyzed using either the Chi-square test or Fisher's exact test, as appropriate. Subsequently, the extent to which poly-victimization might predict suicidality (any kind of suicidality) was examined by means of logistic regression, controlling for gender and age. In the first step, gender (0 = male, 1 = female), age, and poly-victimization (0 = no, 1 = yes) were entered into the model. In the second step, the six victimization modules (0 = no, 1 = yes) were added to establish whether any of them still contributed to the ex- planation of suicidality. The data were analyzed using IBM-SPSS 21.

5. Results

5.1. General characteristics of the sample

Table 1 shows descriptive statistics for victimization and suicidality. All interviewees had experienced at least one type of victimization in their lifetime. Witnessing/indirect victimization and conventional crimes were the most common forms of lifetime victimization (93.8% and 91.6% respectively).

As for suicidality, 39.6% (n = 90) of adolescents reported suicid- ality of some kind (suicidal ideation or self-harm behavior) in the last six months. Self-harm behavior (n = 76; 33.3%) was the most fre- quently reported type of suicidal behavior; 20.6% reported having thought about suicide (suicidal ideation), and 14.5% reported both phenomena during the last six months.

5.2. Sociodemographic characteristics by each type of suicidality

Table 2 presents sociodemographic characteristics of the sample according to each suicidal behavior (i.e., suicidal ideation, self-harm behavior, both of these simultaneously, and any kind of suicidality).

Suicidal ideation was more frequent among adolescents in child welfare (26.2%) than among those in juvenile justice (13.9%). The si- multaneous presence of suicidal ideation and self-harm behavior was associated with gender, being more frequent in females (23.2%) than in males (9.7%) and with the type of service, with higher rates observed in

Table 1

Descriptive statistics of study variables.

Variables	n	%
Victimization[a]		
Conventional crime	208	91.6
Caregiver victimization	162	71.4
Peer and sibling victimization	180	79.3
Sexual victimization	53	23.3
Witnessing/indirect victimization	213	93.8
Electronic victimization	83	36.6
Any victimization	227	100
Lifetime poly-victimization	140	61.7
Suicide behavior[a]		
Suicidal ideation	47	20.6
Self-harm behavior	76	33.3
Ideation + Self-harm behavior	33	14.5
Suicidality (any kind of suicidality)	90	39.6

[a] Percentages add up to more than 100 because these categories are not cumulative or mutually exclusive.

Table 2
Sociodemographic characteristics by each suicidality.

Variables	Suicidal ideation		Self-harm behavior		Suicidal ideation and Self-harm behavior		Suicidality (Any kind of suicidality)	
Gender [b]	n (%)	Statistic	n (%)	Statistic	n (%)	Statistic	n (%)	Statistic
Male (n = 145)	24 (16.6)	$\chi^2(1) = 4.22$	44 (30.3)	$\chi^2(1) = 1.77$	14 (9.7)	$\chi^2(1) = 7.70^{**}$	54 (37.2)	$\chi^2(1) = 0.971$
Female (n = 82)	23 (28.0)		32 (39.0)		19 (23.2)		36 (43.9)	
Child Services [b]								
Child welfare (n = 126)	33 (26.2)	$\chi^2(1) = 5.19^*$	44 (34.9)	$\chi^2(1) = 0.264$	25 (19.8)	$\chi^2(1) = 6.41^{**}$	52 (41.3)	$\chi^2(1) = 0.311$
Juvenile justice (n = 101)	14 (13.9)		32 (31.7)		8 (7.9)		38 (37.6)	
Country of origin								
Spain (n = 133)	26 (19.5)	$\chi^2(1) = 0.261$	40 (30.1)	$\chi^2(1) = 1.67$	18 (13.5)	$\chi^2(1) =. 260$	48 (36.1)	$\chi^2(1) = 1.70$
Other countries (n = 94)	21 (22.3)		36 (38.3)		15 (16.0)		42 (44.7)	

Significance is shown by multiple asterisks *p < .05; **p < .01. [b] Corrected with the Fisher's exact test for squares 2 ✕ 2.

adolescents in child welfare (19.8%) than in those in the juvenile justice system (7.9%).

Analyzing this difference by gender and age, suicidal behavior in the juvenile justice system was significantly more frequent in males (64.8%), but in the child welfare system it was more frequent in females (91.7%). In terms of age, suicidal behavior appeared at significantly older ages in the juvenile justice system ($M = 16.08$; $SD = 1.07$) than in the child welfare system ($M = 14.77$; $SD = 1.07$).

5.3. Suicidality according to each type of victimization

Percentages of suicidal behaviors for each type of victimization experience are shown in Table 3. Regardless of the type of victimization suffered, adolescents reported high rates of suicidal ideation (ranging from 20.7% to 24.8%) and even higher rates of self-harm behavior (ranging from 35.2% to 58.5%), in all victimization modules. Sexual victimization presented the highest rates of all suicide behaviors (60.4% reported suicidal ideation or self-harm behavior, and 35.8% both of these simultaneously).

Almost half of the poly-victims reported some form of suicidality, either having deliberately attempted to harm or kill themselves (41.4%) or having thought about committing suicide (24.8%). However, victims of sexual victimization (60.4%) presented higher rates of some form of suicidality than poly-victims (46.4%).

5.4. Association between interpersonal victimization and suicidality

Table 4 shows the results of the regression analyses conducted to examine (1) the relationship between poly-victimization and suicidality, and (2) the relationship between each of the six modules of victimization (e.g., sexual victimization, peer victimization), and the probability of presenting suicidal behaviors. In the first step, results indicated that poly-victimization was a significant predictor (Wald = 6.408; p = .011) of suicidality, as poly-victims were twice as likely to present suicidality of some kind (OR = 2.13; [1.19, 3.83]; p < .01) as adolescents who suffered fewer than eight types of

Table 4
Logistic regression analysis of the relationship between poly-victimization and types of victimization with suicidality.

Suicidality				
	Wald	p	OR	95% CI
Step 1	Model $\chi^2(3) = 7.847$, $p < .05$ $R^2 = 0.046$			
Female gender	0.676	0.411	1.265	[0.722, 2.216]
Age	0.004	0.949	0.994	[0.828, 1.194]
Lifetime poly-victimization	6.408	0.011	**2.130**	**[1.186, 3.826]**
Step 2	Model χ^2 (9) = 18.511; $p < .05$ $\Delta R^2 = 0.106$			
Female gender	0.000	0.996	0.998	[0.516, 1.933]
Age	0.054	0.816	0.978	[0.809, 1.182]
Lifetime poly-victimization	0.209	0.648	1.201	[0.547, 2.640]
Conventional crime	2.326	0.127	2.846	[0.742, 10.918]
Caregiver victimization	0.003	0.958	1.019	[0.516, 2.012]
Peer and sibling victimization	0.228	0.633	1.224	[0.534, 2.807]
Sexual victimization	6.781	0.009	**2.671**	**[1.275, 5.597]**
Witnessing and indirect victimization	0.559	0.455	1.720	[0.415, 7.134]
Electronic victimization	0.002	0.961	0.985	[0.541, 1.793]

OR = odds ratio; CI = confidence interval. In bold, the OR whose confidence intervals did not include the value of 1.

victimizations. In the second step, sexual victimization was a statistically significant predictor (Wald = 6.781; p = .009) indicating that it was associated with the occurrence of suicidality (OR = 2.67; [1.28, 5.60]). The final model explained 11% of the variance in suicidality (Nagelkerke $R^2 = 0.106$). The Hosmer–Lemeshow goodness of fit test did not show statistically significant results in either step; this is considered an indicator of good fit.

6. Discussion

The main purpose of this study was to assess the relationship between victimization, poly-victimization, and suicidality in adolescents in service systems for children and youth (i.e., child welfare or juvenile justice systems) in Spain. This is one of the few studies to explore

Table 3
Descriptive statistics (n %) for Suicidality for each JVQ victimization module.

Victimization modules	Suicidal ideation n (%)	Self-harm behavior n (%)	Suicidal ideation and Self-harm behavior n (%)	Suicidality (Any kind of suicidality) n (%)
Conventional crime (n = 208)	45 (21.6)	74 (35.6)	32 (15.4)	87 (41.8)
Caregiver victimization (n = 162)	38 (23.5)	58 (35.8)	29 (17.9)	67 (41.4)
Peer and sibling victimization (n = 180)	40 (22.2)	66 (36.7)	30 (16.7)	76 (42.2)
Sexual victimization (n = 53)	38 (23.5)	31 (58.5)	19 (35.8)	32 (60.4)
Witnessing/indirect victimization (n = 213)	44 (20.7)	75 (35.2)	32 (15)	87 (40.8)
Electronic victimization (n = 83)	20 (24.1)	31(37.3)	15 (18.1)	36 (43.4)
Lifetime poly-victimization [a] (n = 140)	35 (24.8)	58 (41.4)	28 (20.0)	65 (46.4)

[a] Based on the criterion of Pereda et al. (2014) for a community sample (8 + for lifetime) recruited in north-eastern Spain.

suicidality in samples of this kind.

In general, and in line with previous studies performed in juvenile

justice (Bratta et al., 2014; Stokes et al., 2015; Wasserman &

McReynolds, 2006) and child welfare system samples (Anderson, 2011; Evans et al., 2017; Taussig et al., 2014), our results show that adolescents in child and youth-serving systems present high percentages of suicidal ideation (20.6%) and self-harm behaviors (33.3%). Our rates are comparable to those obtained by Chavira et al. (2010) with a similar sample of adolescents in the US; they found that 28% of participants

had thoughts of suicidal ideation and that 20.1% had attempted suicide.

Our rates of suicidality were also higher than those recorded in a study with Spanish community adolescents (Soler et al., 2013); using the same instrument, those authors reported a prevalence of 12.5% for suicidal thoughts and one of 11.4% for self-injurious behaviors.

Interestingly, 14.5% of the adolescents in our study reported the presence of both phenomena simultaneously: that is, thinking about committing suicide and trying to self-injure in the last six months. From a clinical point of view, the high presence of suicidal ideation and self-harm behaviors in this study is a matter for concern, because researchers have identified this phenomenon as an escalating behavior in

which suicidal ideation and self-harm increase the risk of suicide at-

tempts and later suicide (Stanley et al., 1992).

The higher prevalence of suicidality in the current study may be attributable to higher rates of victimization. In accordance with previous research in samples from the juvenile justice and the child welfare systems (Ford et al., 2013; Segura, Pereda, Abad, & Guilera, 2015), the results of our study show that adolescents in these systems tend to experience poly-victimization during their lifetime, given that 61.7% of the sample presented eight or more different kinds of victimization.

Our first hypothesis was that lifetime poly-victimization would be a better predictor of suicidality than specific victimization modules. The results partially confirm this hypothesis, since sexual victimization was

also observed to be a significant predictor for suicidality. Finkelhor

et al. (2009) also stated that sexual victimization makes a substantial contribution to the prediction of symptoms, even after controlling for poly-victimization.

Nevertheless, poly-victimization emerged as a predictor of suicid-

ality, and poly-victims were almost twice as likely to have had thoughts of suicidal ideation and to have engaged in self-harm behavior in the last six months. Authors who have investigated the consequences of poly-victimization have often pointed out that the accumulation of victimizing experiences over the lifetime has a significant impact on mental health (Finkelhor et al., 2009), and may lead to suicidal beha- vior (Turner et al., 2012). These authors attribute the harmful effect of poly-victimization to the fact that the violence occurs in a variety of

contexts and is perpetrated by different people (in contrast to single

victimizations). According to Turner et al. (2012), cross-context victi-

mization may also generate deficits in the social and personal resources of adolescents which would normally help to moderate the negative effects of victimization experiences.

Our second hypothesis was that peer victimization, sexual victimization, and/or caregiver victimization would be associated with an increased risk of suicidality than other types of victimization. However, only sexual victimization was significant.

Our study shows that sexual abuse increases the risk of suicidality: that is, adolescents who had been sexually abused were twice as likely to present suicidal ideation or self-harm behavior as those who had endured other kinds of victimization. It is known that the experience of sexual abuse during childhood is one of the forms of interpersonal victimization most related to the presence of suicide, as rigorous review

suicidal behavior. It has been established that the risk of suicidal behavior clearly increases in cases of sexual abuse involving contact and

penetration, or in cases of intra-family sexual abuse, which has a more

unfavorable and long-term impact on the children and increases the risk of suicidal behavior. One explanation for this is that in this situation the child is abused by someone they trust entirely, their caregiver or a figure of attachment. It is thought that this can shake the basic sense of confidence that children have towards themselves and the world (Finkelhor & Browne, 1985), discouraging them from seeking help from

others and leading to suicidal behavior (Yang & Clum, 2000; You,

Talbot, He, & Conner, 2012). Another explanation for this association may be the psychosocial outcomes resulting from sexual abuse such as low self-worth and social isolation (Finkelhor & Browne, 1985), which may also make victims of sexual abuse more likely to engage in risky suicidal behaviors.

Although in this study we did not include variables such as the relationship with the perpetrator or chronicity, our findings suggest that sexual abuse, regardless of the type of contact, appears to increase the likelihood of suicidal behavior.

A second objective was to explore the association between social

and personal characteristics and suicidality. We expected to find dif-

ferences according to gender, service, and country of origin in the suicidality groups. The results partially confirm this hypothesis, since only country of origin was not relevant.

In terms of demographic characteristics, our study found a significant relationship between gender and the presence of both suicidal ideation and self-harm behavior simultaneously, with female participants reporting higher percentages than males. As frequently discussed, rates of attempted suicide may be higher in girls, while suicide completions are more frequent in boys (Bridge, Goldstein, & Brent, 2006). Future research should focus on determining the role of internal factors (i.e., personality, psychopathological conditions) or external ones (i.e.,

social support) linked to the increased presence of suicidality separated

by gender.

It has been consistently reported that certain ethnic groups exhibit higher levels of suicidality (Stokes et al., 2015). Some studies, however,

did not find any association between ethnic group and suicidality

(Chavira et al., 2010; Wasserman & McReynolds, 2006). Our study did not find any association between country of origin and overall rate of suicidal behavior. This may be due to the small sample size or to the fact that it was composed predominantly by Spanish participants.

Another relevant result was the significant association between the type of child service system and the presence of suicidality. Adolescents involved in the child welfare system presented higher rates of suicidality than those in the juvenile justice system. This is consistent with the

findings of Chavira et al. (2010), who reported that participants in-

volved in juvenile justice presented significantly lower rates of suicidal

behavior than those in other sectors (i.e., child welfare, alcohol, and drug services). Among the associated factors observed in our study were gender and age; coinciding with previous reports regarding gender, our adolescents who presented suicidal behavior and were involved in the child welfare system were typically female and young Other studies also indicate that younger people tend to have more suicidal behavior (e.g., more attempts), while those complete suicide are usually older (Bridge et al., 2006).

Other explanations for these differences include individual psychopathological profiles such as depression, substance abuse/dependence disorders or other mental health problems which may increase the risk of suicidality (Anderson, 2011; Garland, Hough, Yeh, Wood, & Aarons, 2001). An additional explanation may be the length of time

studies have confirmed. For example, the recent review by Maniglio (2011) found four relevant studies which indicate that sexually abused adolescents were significantly more likely to experience suicidal thoughts and behaviors than other adolescents. A previous review by Evans, Hawton, and Rodham (2005) also suggested that some specific characteristics of sexual abuse are particularly strongly associated with

spent in these systems, since longer periods have been correlated with increased suicidality (Taussig et al., 2014). Furthermore, studies carried out at child services in Spain (Pereda, Abad, & Guilera, 2015; Segura et al., 2015) suggest that these differences may be due to the fact that youth in the child welfare system suffer victimization (e.g., sexual abuse) at earlier ages than their peers in the juvenile justice system.

This suggests that children in child welfare systems are more vulnerable, which may account for the greater presence of suicidality.

6.1. Limitations

This study has several limitations that should be borne in mind when interpreting the results. In the first place, the cross-sectional de- sign does not allow us to establish causal relationships between poly-victimization and suicidality. Secondly, because our measure of suicidal ideation and self-harm/suicidal behavior was part of a larger diagnostic module (the YSR), our data are not as comprehensive and detailed as clinical measures of suicidality. Using only a few items from the questionnaire to assess suicidality may have underestimated its prevalence. However, this instrument has previously been used in a study in Spanish adolescents (Soler et al., 2013) and so we are able to compare our results with samples of youth from the general population and the same geographic area.

Despite these limitations, this is the first study to examine the relationship between poly-victimization and suicidality among adolescents in child and youth-serving systems in Spain, and so we believe that our findings may have significant repercussions for research.

6.2. Practical implications

The findings of the present study have some practical implications. Given the clear relationship between multiple experiences of victimization and adolescent suicide ideation and behavior, it is of the utmost importance that professionals assess current and past suicidal ideation and behavior in youth with a history of victimization. Conducting periodic evaluations is an important first step towards prevention, because it is well documented that early suicidal ideation or suicide attempts predict subsequent suicide, and it is essential to intervene as soon as possible (Stanley et al., 1992). More comprehensive prevention programs are also needed in which educators or caregivers are trained to recognize people at risk of suicide, and in which access to potentially lethal objects can be restricted. This preventive training should be provided not only to adults but to adolescents at the center, focusing especially on the ones with a history of poly-victimization. One example of this is the "gatekeeper training" program conducted with representatives of centers, professionals and nonprofessionals, administrative staff, adolescents or parents, which was designed to help adolescents at risk of suicide (Stuart, Wallen, & Haelstromm, 2003).

6.3. Research implications

Future research should consider measuring variables that might be involved in the association between experiences of victimization and suicidal behavior (e.g., psychopathology, existing social support, time spent by young people in centers and their modality, among others). It would also be interesting to identify subgroups of victims with different profiles or combinations of experiences of victimization in this risk group, applying a more sophisticated person-centered analytic approach such as latent class analysis.

6.4. Conclusions

The current study shows that adolescents in child and youth-serving systems present high percentages of victimization and suicidality. Particular attention should be paid to those who experience poly-victimization, and/or those who have suffered sexual victimization. Females and youths involved in child welfare systems seem to be at the highest risk. Consequently, identifying victimized adolescents among youth in care should be a priority goal of child welfare policies in general and of the efforts to prevent suicide in particular.

Declaration of conflicting interests

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We report no conflict of interest. We alone are responsible for the content and writing of the paper.

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