

Background

Suicide represents a major public and mental health concern. Suicides are the second leading cause of death among young women aged 15-29 in Czechia (WHO, 2017).

More than 90% of suicides occur among persons with mental health disorders (Moscicki, 1997). Epidemiological studies have demonstrated a correlation between number of risk factors, including substance use disorders and suicide behavior (Brown et al., 2017; Maniglio, 2011).

In this paper, we compare the prevalence of substance use and suicide attempts among the Czech adolescent girls living in institutional settings with those obtained from the recent ESPAD study (2015).

Methods

Objectives and Aims: To determine the prevalence of both substance use and suicide behavior among adolescent girls living in institutional settings. Comparison of the rates with those obtained from the sample of the Czech adolescent girls coming from an ordinary (i.e. a non-institutional) milieu.

Methods: We conducted a study using quantitative tools. We conducted a quantitative survey with questionnaires on both substance use and suicide behavior. The study group was surveyed among adolescent girls in institutional settings. As a reference group, a sample of the Czech adolescent girls surveyed within the recent 2015 European School Survey Project on Alcohol and Other Drugs (ESPAD, N=2 886) was used (ESPAD, 2016).

Target/study group: 122 adolescent girls living in institutional settings, aged 15-18. The target group is generally characterized by a high-risk behavior and a variety of mental health, education, and/or social problems.

Figure 1

Last year prevalence (%; 95% CI) of illicit substance use, study group vs. reference group

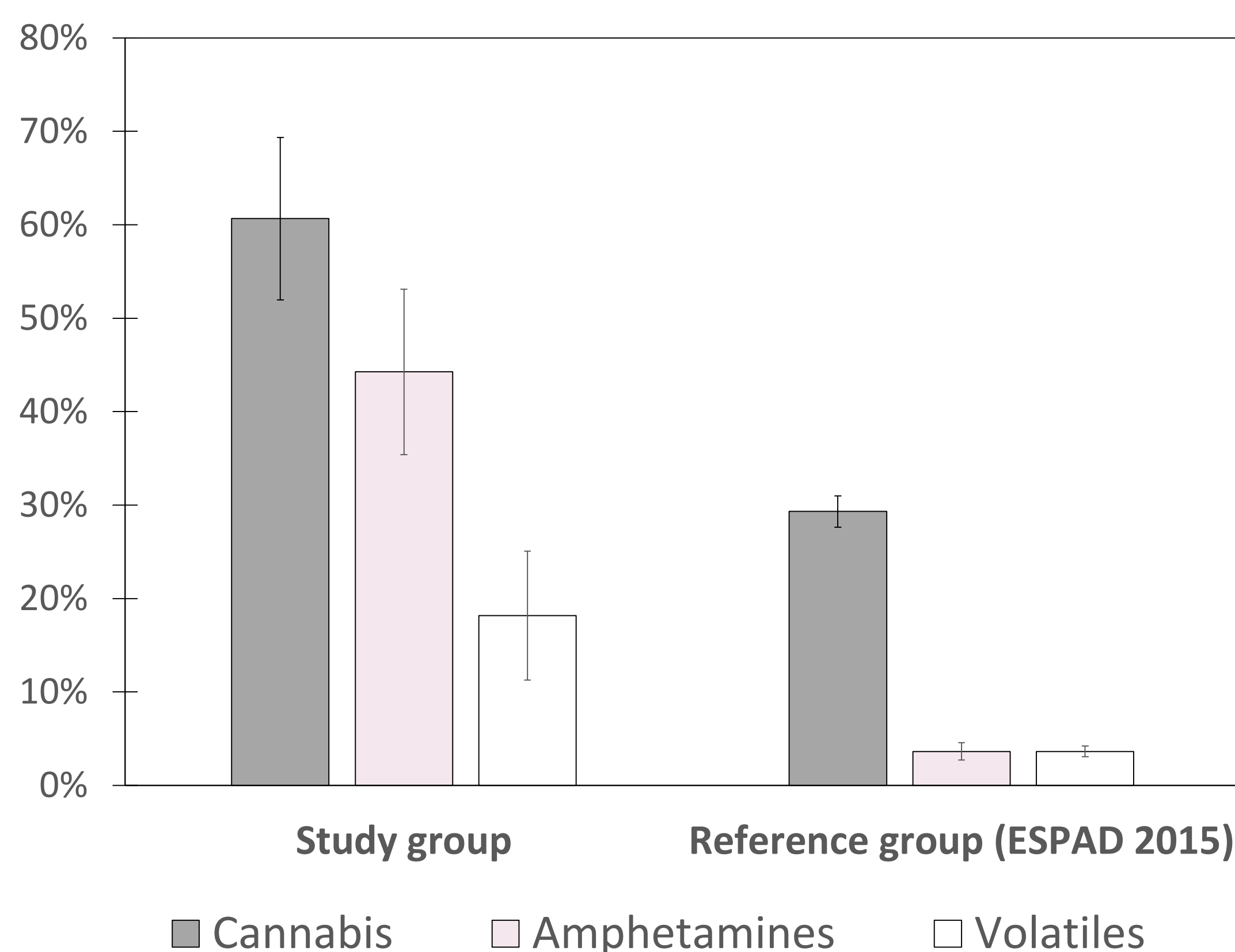


Figure 2

Last month prevalence (%; 95% CI) of licit substance use, study group vs. reference group

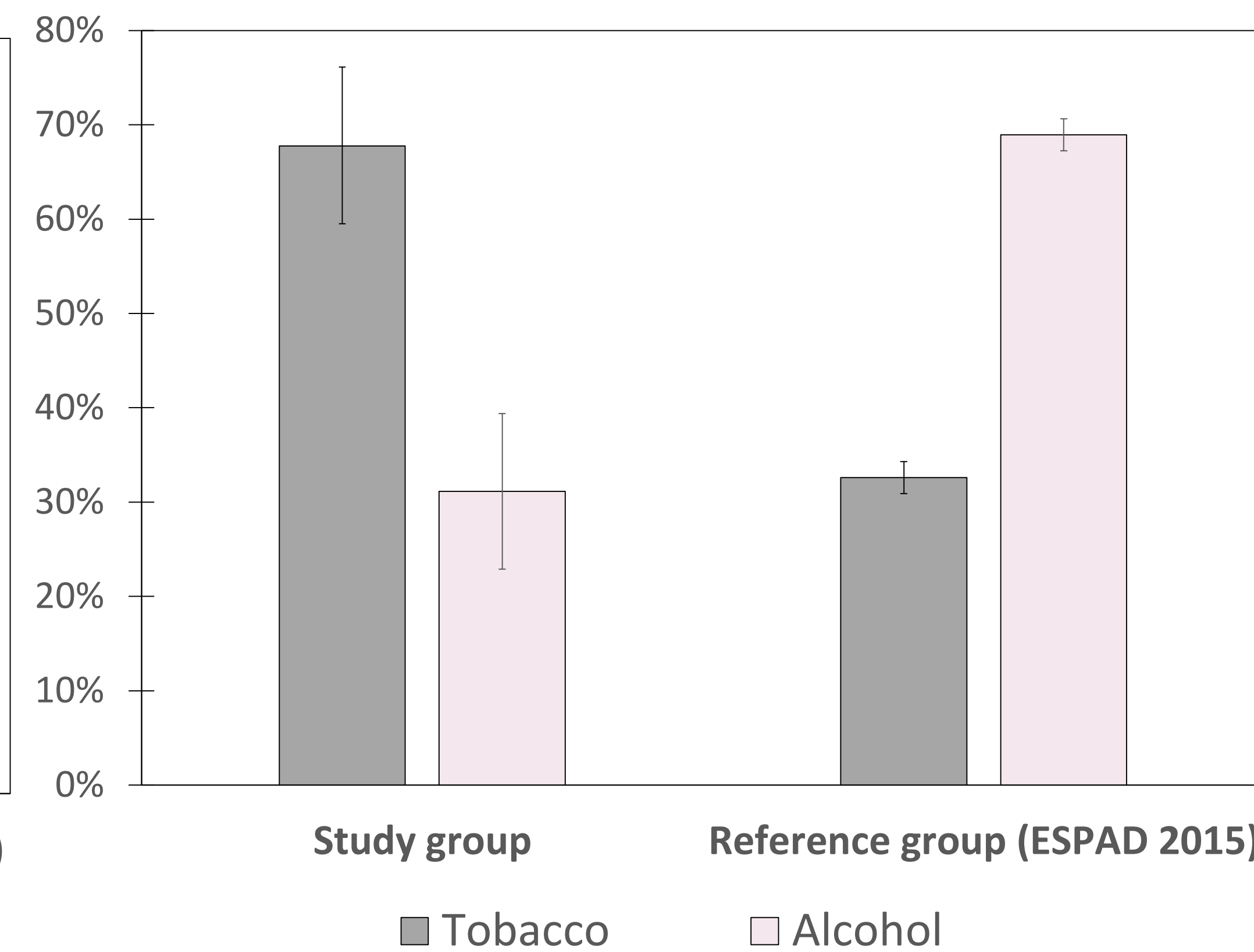
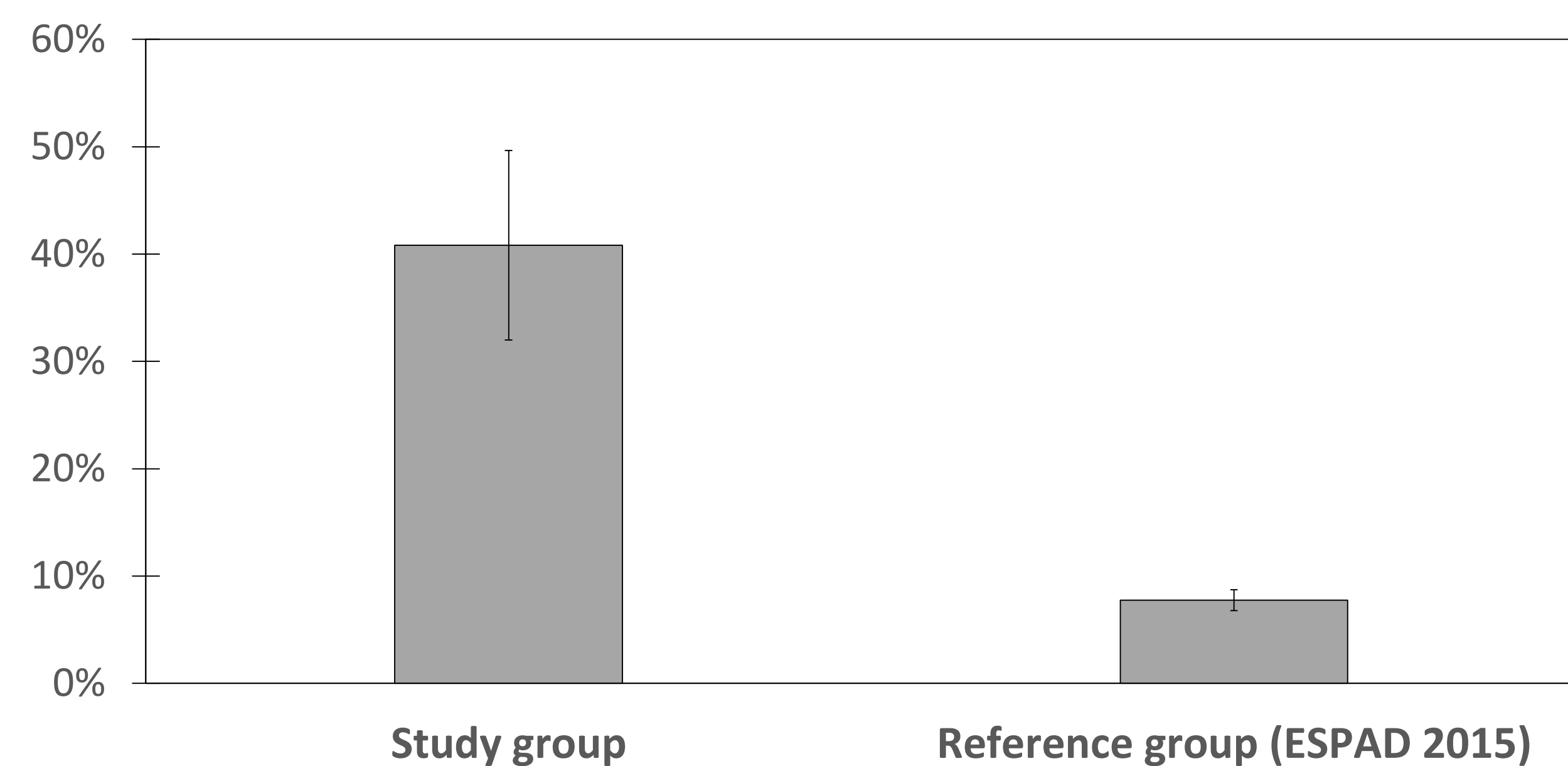


Figure 3

Prevalence of lifetime suicide attempts (%; 95% CI), study group vs. reference group



Table

Differences in the prevalence of lifetime suicide attempts between the study group and reference group

Group	Study group (%)	40.8%
	Reference group (%)	7.7%
Study group (%) / Reference group (%) [Risk ratio]		5.3
Study group (%) vs. Reference group (%) [Odds ratio]		8.3
Test statistics	Pearson Chi-Square (df), p-Value (2-sided)	152.828 (1), p<0.001
	Likelihood Ratio (df), p-Value (2-sided)	92.828 (1), p<0.001
	Kendall's tau-b (SE), p-Value (2-sided)	0.227 (0.031), p<0.001
Symmetric measures	Spearman Correlation (SE), p-Value (2-sided)	0.227 (0.031), p<0.001
	Pearson's R (SE), p-Value (2-sided)	0.227 (0.031), p<0.001

Note: As a reference group, sample of Czech adolescent girls (15-17 years) surveyed within the 2015 ESPAD was used.

References

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- Maniglio, R. (2011). The Role of Child Sexual Abuse in the Etiology of Suicide and Non-suicidal Self-injury. Acta Psychiatrica Scandinavica, 124: 30–41.
- Moscicki, E. (1997). Identification of Suicide Risk Factors Using Epidemiologic Studies. Psychiatric Clinics of North America, 20: 499-517.
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Results

The prevalence of illicit drug use among adolescent girls living in institutional setting was found to be several times higher (2-11times) as compared to the reference group sampled from the Czech school-aged population.

The prevalence of suicide attempts was found to be 5times higher among the girls from institutional settings (41%) as compared to those sampled from a common school setting (8%).

The differences in both substance use and suicide behavior between the compared groups of adolescent girls were proved to be highly significant (p<0.001).

Conclusions - key points

- Adolescent girls in institutional settings are highly vulnerable individuals in terms of their mental health perspective.
- We emphasize the enhancement of a high quality of care of the girls living in institutional settings; e.g.:
- the implementation of screening for suicide risk could serve as a preventative measure; harm reduction services for drug abusers, and psychotherapy could moderate risks associated with this vulnerable group of girls.
- Focus on comprehensive approach and improved education of staff in topics on both suicide behavior and substance abuse.

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