JOURNAL OF COMMUNITY SYSTEMS FOR HEALTH
2024, VOL. 1
https://doi.org/10.36368/jcsh.v1i1.1035

ORIGINAL RESEARCH

Trends in mental health problems among young people and the presence of youth clinics in Sweden: An ecological controlled interrupted time series analysis using the Health on Equal Terms surveys (2004 to 2021)

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Received 26 April 2024; Accepted 20 August 2024

ABSTRACT

Introduction: In Sweden, youth clinics (YCs) address, among other things, issues related to the mental well-being among young people. However, YCs´ impact on their mental health have not been assessed. This study aimed to: i) analyse trends in mental health outcomes (stress, anxiety and psychological distress) among young people in Sweden according to the municipal availability of YCs; and ii) assess the impact on mental health outcomes of the presence of YCs with a first-line mental health (FLMH) assignment and YCs without this assignment, as compared to municipalities without YCs.

Methods: An ecological controlled interrupted time series design was applied. Annual data over 18 years (2004-2021) on self-reported stress, anxiety and psychological distress of individuals aged 16-25 were used. Thus, the mental health outcome trends in municipalities with YCs and those without YCs were compared. The prevalence ratio and their 95% confidence intervals were estimated.

Results: In total, 17,174 young people aged 16–25 participated in the study. A decrease in the reporting of stress, anxiety and psychological distress was observed from 2004 to 2010, followed by an increase in all three outcomes during the period 2011–2021. Trends were not statistically significant different in municipalities with or without YCs (even among YCs with the FLMH assignment).

Conclusion: The prevalence of mental ill-health has been increasing among young people in Sweden since 2011. While YCs play an important role in the prevention of mental illness, their impact on these trends could not be determined. We recommend that structural factors such as education and the labour market for youth, which are outside the scope of YCs, should be addressed to curb these trends.

Keywords: mental health, young people, youth clinics, Sweden

Abstract in Español at the end of the article

INTRODUCTION

There is concern about the deteriorating mental health of young people in different regions of the world [1]. At the same time, health systems appear to be faltering in their ability to adequately address the mental health needs of this population, particularly in the area of early intervention strategies [2].

In Sweden, the incidence of mental health problems among adolescents surged by approximately 70% during the years 2006 to 2016, marking the most significant rise within the Nordic countries. The predominant increase has been observed in depression, anxiety, and substance abuse [3, 4]. In response to these challenges, the Swedish health system initiated a strategic integration of youth mental health services into primary care frameworks beginning in 2009. This initiative, termed First-Line Mental Health Services (FLMHS), aims primarily to address disparities in mental health and social services available

to children and adolescents. It also seeks to mitigate the overwhelming demand for specialized child mental health services and to enhance cooperation among various public sectors, including primary healthcare centers, school health services, and youth clinics, the focus of this study [5-7].

Sweden has around 257 youth clinics (YCs) that have operated since the 1970s in response to the healthcare needs of young people (aged 13 to 24, although age limits vary among clinics) with a holistic approach to health [8]. Previous research has shown that YCs are highly trusted by young people [9], although certain groups are less included [10, 11]. Sweden has considerably more YCs and boasts greater coverage than other international examples (e.g. Australia's Headspace and Jigsaw clinics in Ireland) that dominate in the published literature, and they also have a longer history [12, 13]. However, in contrast to those services, the responsibility of YCs in terms of mental health is less clearly defined and differs extensively among clinics [14, 15].

In 2010 and 2012, three regions in Sweden (Umeå, Örebro and Gävle) integrated YCs as part of the First-Line Mental Health Care for Children and Adolescents (FLMH). FLMH services are those that first encounter a child or young person with signs of mental health problems and then make an initial assessment and provide interventions that do not require specialist-level resources [16–18]. It is important to note that while YCs with the FLMH assignment are responsible for providing mental health care for young people, this does not mean that YCs without the FLMH assignment do not provide it. YCs that do not have this formal assignment also provide mental health care, although the extent and responsibility vary a lot between regions and clinics – from clinics that offer psychologists and provide individual and group therapy to clinics that only have general social counsellors that focus on the promotion of mental health (8). In an effort to support the work of YCs with mental health and as a response to the increased reporting of mental illness symptoms among young people [19, 20], in 2016 the Swedish government assigned SEK130 million to strengthen the work of YCs on mental health (specifically to promote mental health and prevent mental illness among children and young people), with further funding provided on a yearly basis, at least until 2023 [21]).

YCs have several competitive advantages in relation to the provision of mental healthcare for young people – they are widespread, often located close to young people, many have professionals with expertise on mental health and, most importantly, they are trusted by young people, which enhances continuity of care [15]. Previous research shows that certain clinics' characteristics enhance accessibility for mental health, such as trust, and having multidisciplinary teams, easy access and professionals with mental health expertise [14]. The comprehensive approach of these YCs, where professionals address the diverse needs that the young user may have, and not only the primary reason for consultation, is also an important feature of YCs, e.g. midwives address not only contraceptive prescriptions and testing for sexually transmitted infections but also inquiries about relationships, violence and psychosocial well-being [9, 14, 22].

Previous research highlights how YCs' policies and practices align with the World Health Organization domains of youth-friendly services [8, 23], namely that they are accessible, acceptable, equitable, appropriate and effective for different youth subpopulations.

Earlier research has also indicated that while professionals working in YCs acknowledge that they have to strengthen their work with mental health in order to best respond to the changing health needs of their young users, taking more responsibilities with mental health is not always perceived positively [8]. Extra resources are needed to take on more responsibilities in this field, and such resources are not always available. Due to the perceived limitations of specialized services, YCs sometimes take on more responsibilities in relation to mental ill health than they are capable of. In addition, increasing the responsibility for mental health care is perceived with the suspicion that it may come at the expense of promotional work, which is seen as the core of YCs [24].

Stronger youth-centred mental healthcare services, such as those delivered by YCs, can have a positive impact on young people's mental health [25, 26]. While the quality of and accessibility to YCs have been previously examined [8-10, 14] to the best of our knowledge, the potential role of YCs in the promotion of mental health among Swedish young people has not been explored. This study aimed to: i) analyse trends in mental health outcomes among young people in Sweden according to the municipal availability of YCs; ii) assess the potential impact on mental health outcomes at municipal level of the presence of YCs with the FLMH assignment and YCs without the FLMH assignment, as compared to municipalities without YCs in Sweden.

METHODS

Study design

The study utilized an ecological controlled interrupted time series (ITS) design. ITS is a method of statistical analysis involving tracking a long-term period before and after a point of intervention to assess the intervention's effects. ITS is considered to be the strongest quasi-experimental research design, particularly suited to evaluate public health interventions introduced at a population level over a clearly defined time [27–29].

Data source

This study is based on the national Health on Equal Terms (HET) survey, a national public health survey conducted by the Public Health Agency of Sweden annually since 2004 and every second year from 2016. In 2021, an extra data collection was carried out due to the Covid-19

pandemic. In total, 16 cross-sectional surveys were used. While the HET study collects information from people aged 16–84, only the population aged 16–25 was used for the purpose of this study since this is the target group of the YCs.

The HET questionnaire mainly covers health behaviours, work, psychosocial and social circumstances, and self-reported health conditions. In addition, using the unique personal identification number assigned to all Swedish citizens, the sample data are linked to national registers administered by Statistics Sweden to obtain demographic and socio-economic information.

Exposure

Participants were classified into three groups according to the type of youth clinic present in the municipality of residence: i) municipalities with YCs and the FLMH assignment (thereafter FHML-YCs); ii) municipalities with YCs but not with the FLMH assignment; and iii) municipalities without YCs. Three municipalities (Umeå, Örebro and Gävle) were included as those with the FLMH assignment in YCs. A pre-intervention period was defined as 2004–2010 and a post-intervention period as 2011–2021; 2011 was chosen as the start of the intervention since in that year the youth clinics in Umeå and Örebro started with the FLMH assignment (though Gävle had started in 2010).

Municipalities with youth clinics were identified from the web page of the Swedish Association for Youth Clinics (FSUM in Swedish) (https://fsum.nu/medlemsmottagningar/), making a total of 192 municipalities (excluding the above three). Ninety-five municipalities did not have youth clinics.

Outcomes

Three variables were used to capture different aspects of mental health:

- Stress was based on the answer to the question "Do you feel stressed at present? By stressed, we mean a condition where you feel tense, restless, nervous, uneasy or unable to concentrate". The answers "Not at all" and "To some extent" were coded as 0 and the answers "Quite a lot" and "Very much" as 1.

- Anxiety was measured through the question: "Do you have this problem or disease: anxiety or worry?" Answers included "No", "Yes, mild discomfort" and "Yes, severe discomfort", which were dichotomized into no (= 0) and yes (= 1).

- Psychological distress was measured using the 12-item version of the General Health Questionnaire (GHQ-12 from 2004 to 2015 and GHQ-5 in 2016 and 2018), which has been validated in the Swedish context [30]. We used the 0–0–1–1 scoring method recommended by the creators of the instrument (range 0–12/0–5), with psychological distress or "GHQ-caseness" defined as a score of 3 or higher and 2 or higher, respectively [31]. Information on this variable was only available until 2018.

Questions related to suicidal ideation and suicide attempts were not included since they had been asked differently in the surveys over the years, making it difficult to compare them.

Data analysis

To fulfil the first objective, we conducted a descriptive analysis calculating the prevalence of each one of the outcomes per year and according to the three groups of municipalities by youth clinic types (FLMH-YCs, YCs without FLMH and no YCs) and plotted them in a figure.

Subsequently, to compare the mental health outcome trends in the municipalities with YCs (intervention) and those without YCs (control), an interrupted time series analysis (ITS) was applied.

Two models were developed, one comparing the trends in municipalities with YCs vs municipalities without them, and a second one comparing municipalities with YCs that had the assignment of FLMH vs those without YCs. When one or more control groups are available for comparison, as in the present design, a regression model including seven terms can be fitted as shown in the following equation [32]:

$$Yt = \beta0 + \beta1Tt + \beta2Xt + \beta3XtTt + \beta4Z + \beta5ZTt + \beta6ZXt + \beta7ZXtTt + t,$$

where Yt is the aggregated outcome variable measured at each time point t, Tt is the time since the start of the study, and Xt is a dummy variable representing the intervention (pre-intervention period 0, post-intervention period 1). Z is a dummy variable indicating the cohort assignment (intervention or control; in this case, youth clinic vs no clinic and FLMH youth clinic vs no clinic), and ZTt, ZXt and ZXtTt are all interaction terms among the previously described variables.

Differences between the intervention and control group before, and therefore not attributable to, the intervention are captured by β4 and β5. Specifically, β4 represents the intercept difference at the beginning of the study of the outcome variable between intervention and control (initial mean-level difference), and β5 the difference in the slope of the outcome variable between intervention and control prior to the intervention (pre-trend difference). β6 indicates the mean-level difference between municipalities with YCs and the control group for the year immediately following the introduction of the intervention (2011). Lastly, β7 estimates the impact of the intervention: the difference between municipalities with YCs and those without in the slope of the outcome after initiation of the intervention, compared to the pre-intervention (pre-post trend difference) period.

Interaction terms were first constructed from the main effect variables intervention (1 = FLMH- YC or YC without FLMH; 0 = control – no YC), period (0 =< 2010; 1 > 2010) and time (continuous, survey years) representing all two-way (intervention × period; intervention × time;

period × time) and the three-way (intervention × period × time) interactions, as described by Linden (2015) [31].

The binary mental health outcomes were then regressed on all main and interaction terms. The intervention × period × time interaction term (ZXT) is the parameter of main interest for our research question, as it corresponds to the difference-in-difference in the outcome trends between the post-intervention period (after 2011) and the pre-intervention period.

Since the outcome was a prevalence, log-binomial models were used to estimate the prevalence ratio (PR) as measure of association and their 95% confidence intervals (95% CI) as measure of inference using the R software. Since the intervention was compared to a control group, PRs below one indicate higher decreases in the intervention group compared to its counterpart. All analyses were weighted following the recommendation of Statistics Sweden to incorporate non-response bias and sample representativity.

Given the different patterns of mental health and use of youth clinics between men and women, separate analyses were conducted for them. However, as the results were similar to those for the total sample, only the overall results are included.

Ethics

All participants in the HET survey have given their informed consent for the data to be used for research purposes. The use of the HET survey in the present study was reviewed and approved by the Swedish Ethical Review Authority (dn 2021-02398).

RESULTS

In total, 17,174 young people aged 16–25 (57.1% women) participated in the 18 years (2004–2021) of the study, with a mean of 1,073 (range 709–1,508) participants per year. The number of participants in all years by type of youth clinic is presented in Supplementary File 1. Most participants came from municipalities with YCs without FLMH (84.0%) with a similar distribution by sex.

Supplementary File 2 presents the overall prevalence and the range (minimum and maximum values) in the three outcomes (stress, anxiety and psychological distress) for the whole period. Overall, there was a lower prevalence of stress, anxiety and psychological distress in municipalities without YCs than in those with YCs.

Table 1. Results of the controlled interrupted time series analyses of the impact of having youth clinics vs no youth clinics on mental health outcomes among Swedish youth (16-25). Numbers are prevalence ratios (PR) with their 95% confidence intervals (95% CI).

	Stress		**Anxiety**		**Psychological distress**	
Predictors	PR	95% CI	PR	95% CI	PR	95% CI
(Intercept)	0.20	0.14 – 0.29	0.37	0.29 – 0.47	0.21	0.14 – 0.30
Pre-intervention slope inControl (T)	0.93	0.85 – 1.01	0.97	0.92 – 1.02	0.93	0.85 – 1.01
Level diff. in Control(X)	1.36	0.86 – 2.15	1.10	0.84 – 1.45	1.87	1.19 – 2.94
Pre-post-interventiondiff. in Control (XT)	1.15	1.05 – 1.27	1.10	1.03 – 1.16	1.06	0.96 – 1.18
Level diff. betweenTreatment and Control inpre-intervention (Z)	0.90	0.61 – 1.33	1.03	0.80 – 1.32	1.17	0.80 – 1.72
Slope diff. betweenTreatment and Control inpre-intervention (ZT)	1.06	0.97 – 1.16	1.02	0.96 – 1.07	1.05	0.96 – 1.15
Level diff. betweenTreatment and Control(ZX)	0.74	0.46 – 1.20	0.93	0.69 – 1.24	0.55	0.34 – 0.88
Pre-post-interventiondiff between Treatmentand Control. (ZXT)	0.94	0.85 – 1.04	0.98	0.92 – 1.04	0.99	0.88 – 1.10
Observations	16287		16241		13563	

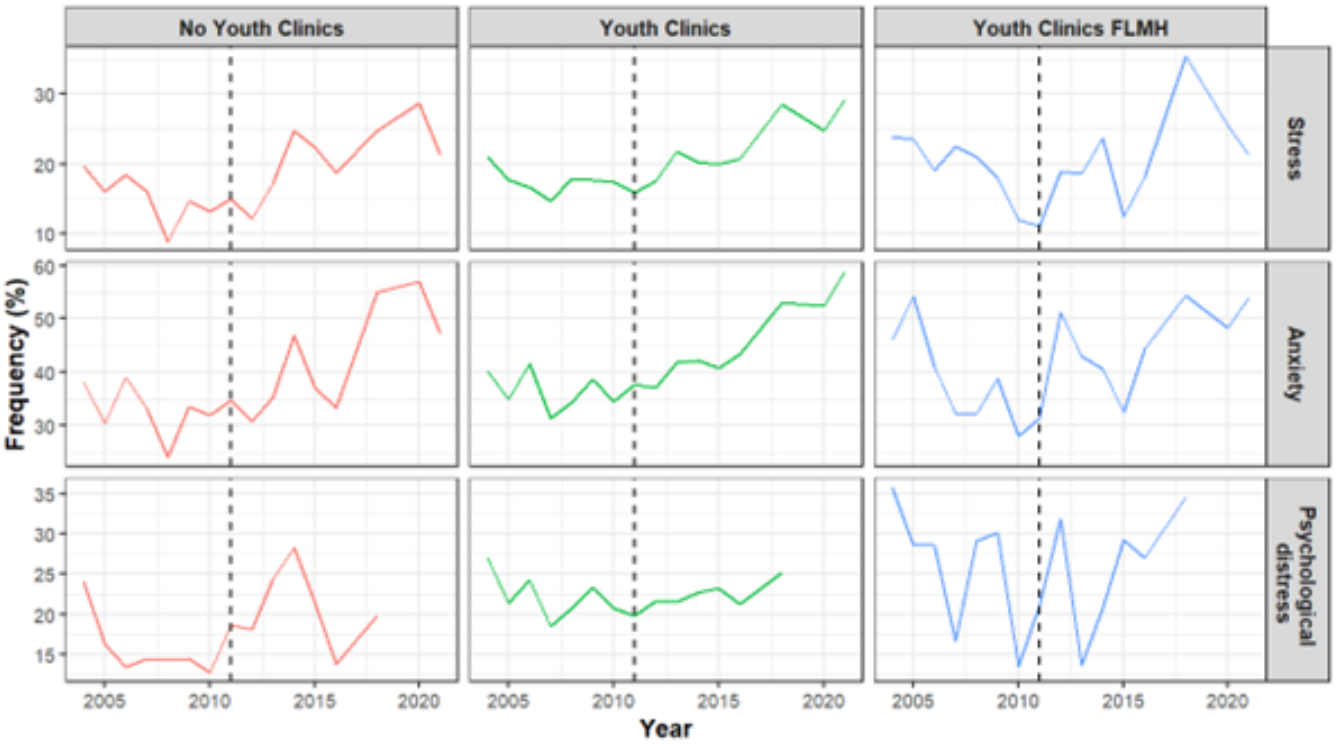

Figure 1. Trends in weighted prevalence of stress, anxiety and psychological distress according to the type of youth clinic municipality (with no youth clinic, with youth clinic, with FLMH youth clinic). The dotted vertical line indicates the beginning of the FLMH service in 2011.

All the different types of municipalities showed a similar pattern in the prevalence of stress, anxiety and psychological distress over the years: first, a constant decrease in prevalence from the start of the study in 2004 until the years 2010 and 2011 was followed by a continuous increase to levels similar to the baseline. The irregular pattern observed in municipalities with no YCs and in those with FLMH-YCs can be attributed to the low sample size of those municipalities (Figure 1).

When comparing the outcomes in municipalities with YCs vs municipalities without YCs, no statistically significant differences in most of the parameters were found for the three outcomes. A higher trend prevalence (XT parameter) was observed after 2010 in the municipalities without YC in the case of stress (PR = 1.15; 95% CI = 1.05–1.27) and anxiety (PR = 1.10; 95% CI = 1.03–1.16). However, no associations were found for any of the three outcomes in the post- compared to the pre-intervention period (ZXT parameter) in the municipalities with youth clinics compared to the control ones (Table 1). This can also be verified by looking at Figure 2.

Table 2 compares the outcomes in municipalities with FLMH-YCs vs municipalities without YCs. As previously mentioned, while a statistically significant increase was seen in the control municipalities in stress and anxiety over time, no pre-/post-intervention differences (ZXT parameter) were observed between the FLMH-YCs and the control (no YCs) in any of the three health outcomes (see also Figure 2).

DISCUSSION

A similar trend in all examined health outcomes was found, where a decrease was observed during the period 2004–2010 followed up by an increase in the period 2011–2021. No differences were found between municipalities with an FLMH-YC or a non-FLMH-YC compared to municipalities without YCs for any of the three mental health outcomes studied.

Several considerations should be taken into account when interpreting these results. Although it is well known that youth clinics are doing excellent work in taking care of young people's health, whether or not they have mental health problems [9, 14], it is impossible for them to intervene in those social factors (such as changes in school or working policies) that may generate mental illness. So, paradoxically, well-performing YCs might also have a high prevalence of mental ill health in their municipalities. In the case of FLMH-YCs, it could be that this assignment was introduced in municipalities where a greater need for mental health care was felt (for example, due to a higher prevalence), but its impact could not be captured by this study design.

Table 2. Results of the controlled interrupted time series analyses of the impact of having FLMH youth clinics vs no youth clinics on mental health outcomes among Swedish youth (16-25). Numbers are prevalence ratios (PR) with their 95% confidence intervals (95% CI).

	Stress		**Anxiety**		**Psychological distress**	
Predictors	PR	95% CI	PR	95% CI	PR	95% CI
(Intercept)	0.20	0.14 – 0.29	0.37	0.29 – 0.47	0.21	0.14 – 0.30
Pre-intervention slope inControl (T)	0.93	0.85 – 1.01	0.97	0.92 – 1.02	0.93	0.85 – 1.01
Level diff. in Control(X)	1.36	0.86 – 2.15	1.10	0.84 – 1.45	1.87	1.19 – 2.94
Pre-post-interventiondiff. in Control (XT)	1.15	1.05 – 1.27	1.10	1.03 – 1.16	1.06	0.96 – 1.18
Level diff. betweenTreatment and Control inpre-intervention (Z)	1.34	0.74 – 2.42	1.48	1.02 – 2.15	1.75	1.03 – 2.98
Slope diff. betweenTreatment and Control inpre-intervention (ZT)	0.99	0.87 – 1.14	0.94	0.86 – 1.03	0.99	0.87 – 1.12
Level diff. betweenTreatment and Control(ZX)	0.77	0.35 – 1.69	1.24	0.75 – 2.03	0.60	0.29 – 1.26
Pre-post-interventiondiff between Treatmentand Control (ZXT)	1.01	0.86 – 1.18	1.05	0.95 – 1.15	1.10	0.93 – 1.30
Observations	2748		2736		2303	

It is also important to point out that these trends may also reflect an increase in the reporting of mental health problems. Consequently, the higher prevalence of self-reported mental health problems among young people living in municipalities with YCs could also suggest an increased awareness of mental health issues among young people in these municipalities, which could be related to information and promotional activities offered by the YCs. For example, youth clinics engage in health promotion campaigns with schools, through visits to schools or students' visits to the clinics. During these visits, topics on mental health are discussed, together with issues related to sexual and reproductive health and rights.

The decrease and sudden increase in all the mental health outcomes in 2011 and 2012 seen in this study is remarkable and outside the control of the health-care system in general and the youth clinics in particular. This complex pattern has also been found in other studies using different ages and data sources [33]. A review examining the time trends for mental health problems in Nordic countries and the Netherlands during the period 1990–2010 found a marked rising trend in mental health problems among adolescents in Sweden, which the author hypothesized could be due to the low school achievement and high unemployment rates during that period [34].

In the same vein, a recent report by the Public Health Agency of Sweden, analysing trends from different sources in Sweden and a revision of the literature, indicated a relationship between low school performance and increased risk of mental ill health in the form of internalizing problems among children and young people. While other areas such as increased individualization, greater openness around mental illness, lower demands on children, medicalization of childhood and digitization were considered, the limited scientific basis made the extent to which these factors had influenced the observed development uncertain [35]. In addition, a recent study using 24 years of the Health Behaviour in School-aged Children (HBSC) survey (students aged 11–16) concluded that educational stressors had become more prevalent among Swedish adolescents, and simultaneously more harmful for their psychosomatic health, especially for girls. While this had made a modest contribution to the overall increased prevalence of psychosomatic symptoms, it had contributed to the increase among girls, thereby having a substantial role in the widening gender gap in symptoms [36]. Interestingly, the authors could not find any of the factors typically mentioned in discussions about troubling adolescent health trends – poor parent-child relationships, worries

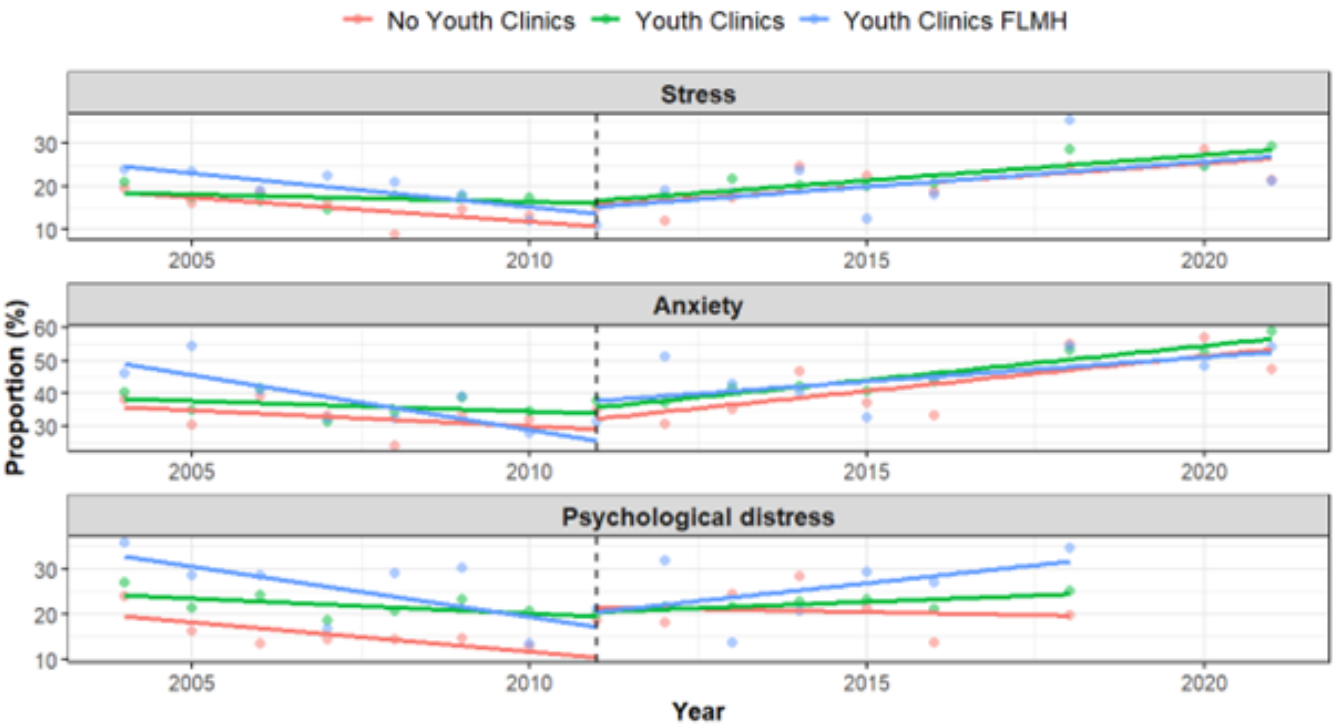

Figure 2. Trends in the prevalence of stress, anxiety and psychological distress by municipalities with FLMH youth clinics (blue), municipalities with youth clinics (green) and municipalities without youth clinics (red)

about appearance, economic distress – as explanations of the increase in psychosomatic symptoms in this age group.

Methodological considerations

The methodological strengths of the present study include the large population survey with 16 measurement points across almost three decades. The method used, an interrupted time series design, particularly when controlled as in the present study, is considered to be the best available means of assessing an intervention impact [28] since it makes full use of the longitudinal nature of the data and accounts for pre-intervention trends [37]. The study included seven years of observation before the intervention and a follow-up period of 11 years, which can be considered enough to capture decreases in morbidity [28], although the need for more time to observe certain impacts cannot be ruled out. Moreover, the analysis was based on aggregated data and therefore cannot be used to draw inferences about individual-level outcomes.

Some further issues should be considered. First, this research used data from the HET surveys. Given that, over the years, the response rate has ranged between 40 and 50%, we cannot exclude selection bias; that is, those with mental health problems might have participated differently in the municipalities. Second, there are further biases inherent to any population-based survey to bear in mind. All mental health outcomes were self-reported and had different time exposures (self-reported health, stress and anxiety currently, and psychological distress in the last two weeks), and therefore response and even recall bias could be present. There is also the question of whether the self-reported symptoms reflect trends in the actual symptom burden, and not merely changes in reporting behaviour. However, the extent of these biases and their impact on the results are difficult to assess.

A final aspect to consider relates to the heterogeneity of the YCs' role and function in relation to the mental health tasks they conduct. As mentioned in the introduction, there are variations in the number and type of staff as well as in their role in addressing mental health between FLMH-YCs and those without it. While YCs with FLMH are expected to develop more mental health activities than the "ordinary" YCs, the difference might not be so large, an aspect that could deserve further investigation. It should also be noted that the YCs' focus of their activities is on mental health promotion and mental well-being and not on the identification and treatment of symptoms; thus, indicators related to mental health problems such as the ones used in this study (stress, anxiety and psychological distress) may not be the most appropriate for measuring the impact that YCs have on young people's mental health. Linked to this, it was not possible to disentangle which YCs were functional or not over the years, since the exposure classification was based on the list of YCs available on the FSUM web page.

Conclusion

This study shows changing trends in the reporting of stress, anxiety and psychological distress among young people aged 16–25 living in Sweden. While during the period 2004–2010 a decrease in the reporting on these symptoms was observed, an increase occurred between 2011 and 2021 in all three outcomes. Trends were not significantly different in municipalities with or without YCs (and even among YCs with FLMH assignment). Given the excellent work that YCs are conducting in Sweden, it seems that the mental health trends observed in this study are mainly affected by societal structural changes, such as education and the labour market for youth, rather than by health systems' responses and it is in this direction that government interventions should mainly be focused.

DECLARATIONS

Publication Consent

Not applicable

Competing interests

None declared

Funding

This project was commissioned and supported by The Public Health Agency of Sweden.

Author contributions

MSS and IG conceptualized the research idea, OFR conducted the analysis and MSS drafted the manuscript with critical input from IG and OFR. All authors have read and approved the final manuscript

Data availability

Data are available from the Public Health Agency of Sweden after official request.

Acknowledgements

We thank the staff from the Public Health Agency of Sweden (Karin Liljeberg, Karin Guldbrandsson, Marjan Vaez and Anna-Karin Eriksson) for the fruitful discussions we had during the writing of this manuscript and the comments provided that contributed to its improvement.

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Tendencias en los problemas de salud mental entre los jóvenes y la presencia de clínicas juveniles en Suecia: Un análisis ecológico controlado de series temporales interrumpidas utilizando las encuestas Health on Equal Terms (2004 a 2021)

RESUMEN

Introducción: En Suecia, las clínicas para jóvenes se ocupan, entre otras cosas, de cuestiones relacionadas con el bienestar mental de los jóvenes. Sin embargo, no se han evaluado las repercusiones de dichos centros en su salud mental. El objetivo de este estudio fue: i) analizar las tendencias en salud mental (estrés, ansiedad y angustia psicológica) entre los jóvenes suecos en función de la disponibilidad municipal de las clínicas juveniles; y ii) evaluar el impacto en salud mental de la presencia de las clínicas juveniles con una asignación específica de salud mental de primera línea (First Line Mental Health en inglés) y aquellas clínicas sin esta asignación, en comparación con municipios que carecen de clínicas para jóvenes.
Métodos: Se aplicó un diseño ecológico controlado de series temporales interrumpidas. Se utilizaron datos anuales a lo largo de 18 años (2004-2021) sobre el estrés, la ansiedad y la angustia psicológica auto-percividas por personas de entre 16 y 25 años. Así, se compararon las tendencias de los resultados de salud mental en los municipios con clínicas juveniles con los que no las tenían. Se estimaron la ratio de prevalencia y sus intervalos de confianza del 95
Resultados: En total, 17.174 jóvenes de entre 16 y 25 años participaron en el estudio. Se observó una disminución en la notificación de estrés, ansiedad y angustia psicológica de 2004 a 2010, seguida de un aumento en las tres variables durante el período 2011-2021. Las tendencias no fueron diferentes estadísticamente en los municipios con o sin clínicas juveniles (incluso comparando con las clínicas con la asignación FLMH).
Conclusiones: La prevalencia de una peor salud mental ha ido en aumento entre los jóvenes en Suecia desde 2011. Aunque las clínicas juveniles desempeñan un papel importante en la prevención de las enfermedades mentales, no se ha podido determinar su impacto en estas tendencias. Recomendamos que se aborden factores estructurales como la educación y el mercado laboral de los jóvenes, que están fuera del alcance de las clínicas juveniles, para frenar estas tendencias.

Palabras clave: Salud mental, jóvenes, clínicas juveniles, Suecia

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