Treatment of mental disorders for adolescents in Mexico City

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Objective This study describes the prevalence, adequacy and correlates of 12-month mental health service use among participants in the Mexican Adolescent Mental Health Survey.

Methods The authors conducted face-to-face household surveys of a probability sample of 3005 adolescents aged 12–17 years residing in the Mexico City metropolitan area during 2005. The prevalence of mental health disorders and the use of services were assessed with the computer-assisted adolescent version of the World Mental Health Composite International Diagnostic Interview. Correlates of service use and adequate treatment were identified in logistic regression analyses that took into account the complex sample design and weighting process.

Findings Less than one in seven respondents with psychiatric disorders used any mental health services during the previous year. Respondents with substance-use disorders reported the highest prevalence of service use and those with anxiety disorders the lowest. Approximately one in every two respondents receiving any services obtained treatment that could be considered minimally adequate.

Conclusion We found large unmet needs for mental health services among adolescents with psychiatric disorders in Mexico City. Improvements in the mental health care of Mexican youth are urgently needed.

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Une traduction en français de ce résumé figure à la fin de l'article.   Al final del artículo se facilita una traducción al español.   الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

Introduction

In Mexico,[1] as elsewhere, only a minority of adults with psychiatric disorders receive some form of treatment.[2–5] However, it is unclear to what extent this situation is similar for Mexican adolescents. Some studies of adult populations have shown that younger adult cohorts are more likely to receive care than older cohorts.[6] However, other studies, mostly conducted in developed countries, have begun to shed light on important shortfalls in the mental health care received by adolescents.[7–12]

In 2001–2002, the National Institute of Psychiatry in Mexico conducted the Mexico National Comorbidity Survey,[1] which is part of WHO's World Mental Health Survey Initiative.[13,14] Results for the urban Mexican adult population showed that fewer than one in five respondents with a 12-month prevalence of a psychiatric disorder used any service during the previous year and only one in every two respondents who used services received care that met minimal standards for adequacy.[3] In

2005, the National Institute of Psychiatry in Mexico conducted the Mexican Adolescent Mental Health Survey employing similar methodology.[15] We report here the rate of mental health service use in the previous year among these adolescents, the adequacy of treatments, and potential determinants of service use and treatment adequacy.

Methods

Participants

The survey was designed to be representative of the 1 834 661 adolescents aged 12–17 years that are permanent residents of private housing units in the Mexico City metropolitan area. The final sample included 3005 adolescent respondents selected from a stratified multistage area probability sample. In all strata, the primary sampling units were census count areas cartographically defined and updated by the Instituto Nacional de Estadística, Geografía e Informática.[16] All households within these city block units with adolescents aged 12–17 years were selected. One

eligible member from each of these households was randomly selected. The response rate of eligible respondents was 71%.

Procedures

Fieldwork involving face-to-face interviews in the homes of the selected participants was carried out from March through August 2005 by interviewers who had received training in the Composite International Diagnostic Interview according to the WHO protocol stipulated for participating World Mental Health countries. A verbal and written explanation of the study was given to both parents and adolescents. Interviews were administered only to those participants for whom a signed informed consent from a parent and/or legal guardian and the adolescent was obtained. Although an adult had to be present in the home during the course of the interview, interviewers attempted to interview the adolescent privately, i.e. in another room. All study participants were given a mental health resources card with the contact information for

different institutions where they could seek services should they wish to do so. The Human Subjects Committee of the National Institute of Psychiatry approved the recruitment, consent and field procedures.

Measures

Psychiatric disorders, service use and potential correlates were assessed in the Mexican Adolescent Mental Health Survey using the computer-assisted adolescent version of the World Mental Health Composite International Diagnostic Interview (WMH-CIDI-A).[17] The WMH-CIDI-A was adapted from the adult version WMH-CIDI 3.0 used in the Mexico National Comorbidity Survey and validated in diverse countries and cultures.[18] The diagnostic sections are similar to the adult version except that the language has been simplified to be more easily understood by younger respondents, examples were made more age appropriate (e.g. references to school instead of work), and criteria were changed to accommodate caveats made for adolescents in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV).

Prevalence of mental disorders

The 12-month prevalence of the following categories of psychiatric disorders were recorded: affective disorders (major depressive disorder, bipolar I and II disorder and dysthymia with hierarchy); anxiety disorders (panic disorder, agoraphobia without panic disorder, social phobia, specific phobia, separation anxiety disorder, generalized anxiety disorder and posttraumatic stress disorder); impulse control disorders (intermittent explosive disorder, oppositional-defiant disorder, conduct disorder and attention-deficit/hyperactivity disorder); and substance use disorders (alcohol and drug abuse and dependence).

Mental health service use

Information was collected about the use of mental health services, including the type of professionals visited, use of self-help, support groups or hotlines, and school-based programmes. The number of treatment visits made was also assessed and respondents could endorse as many professionals and treatment options as they had used in the previous 12 months.

Care received in the 12 months before the survey was categorized into the following sectors: (i) any mental health specialty provider, including psychiatrists, psychologists, counsellors, psychotherapists, mental health nurses and social workers in a mental health specialty setting; (ii) general medical practitioners, including family physicians and paediatricians; (iii) human services, including outpatient treatment with a religious or spiritual adviser or a social worker or counsellor in any setting other than a specialty mental health setting; (iv) complementary-alternative medicine and internet use, including self-help groups, any other healer, such as a herbalist, a chiropractor, or a spiritualist and other alternative therapy; and (v) school-based programmes that consisted of any special schools, special classes within a school and school-based therapies.

Minimally adequate care

Available evidence-based treatment guidelines for primary care[19] and specialty mental health providers[20–24] were used to define minimally adequate treatment during the previous 12 months as receiving: (i) minimally adequate psychotherapy, consisting of four or more outpatient visits to any provider[25,26]; (ii) minimally adequate pharmacotherapy, consisting of two or more outpatient visits to any provider and treatment with any medication for any length of time;[27] or (iii) reporting still being "in treatment" at the time of the interview. Although this definition is broader than the one that we used previously,[28] it allowed us to obtain conservative estimates of minimally adequate treatment across sectors. In sensitivity analyses, a more stringent definition of minimally adequate treatment was also used in which we required: (i) eight or more visits to any service sector for psychotherapy, or (ii) four or more visits to any service sector and 30 or more days taking any medication for pharmacotherapy.

Assessment of sociodemographic correlates

Information was collected on sex, age and family grouping, i.e. whether participants lived with both parents. Participants were considered students if currently enrolled. Adolescents were asked whether they worked during the

school year, whether they were ever married and whether they had children. All three conditions represent an additional social burden not typical of most adolescents; therefore, participants answering affirmatively to any of the three were categorized as having social burdens. Adolescents were asked about the educational attainment of each of their parents. Parental education was then categorized as none/primary (≤ 6 years of education), secondary (7–9 years of education), high school (10–12 years of education) or college (≥ 13 years of education) and the score of the parent with the highest level of education was used. Parent-reported family income was categorized into low, average and high.

Analyses

The data were weighted to adjust for differential probabilities of selection and non-response. Post-stratification to the urban Mexican adolescent population according to the 2000 census in the target age and sex range was also performed. Standard errors for proportions were obtained by the Taylor series linearization method with SUDAAN software (RTI International, Research Triangle Park, NC, United States of America).[29] Logistic regression analysis[30] was performed to study demographic correlates. Two parallel analyses were performed, one for receiving any treatment among those with disorders and a second one for receiving minimally adequate treatment among those with disorders who received any treatment. Odds ratios and corresponding standard errors from logistic regression coefficients were also obtained with SUDAAN and 95% confidence intervals (CIs) were adjusted for design effects. Statistical significance was evaluated with two-sided design-based tests with the 0.05 level of significance.

Findings

Table 1 shows that 9.1% of the adolescents used any service for emotional problems, with a higher use of services among those with a disorder (13.7%) compared to those with no disorder (6.1%). Respondents with a substance-use disorder reported the greatest use of services, and those with an anxiety disorder the lowest. For those with any disorder, the health-care sector was the most widely used for mental health

Table 1. **Proportion of respondents to the Mexican Adolescent Mental Health Survey being treated by health-care professionals over 12 months[a]**

Service provider/treatment		Disorder category						
		Any anxiety	Any mood	Any impulse control	Any substance use	Any disorder	No disorder	Total sample
Any mental health care provider	n	78	30	52	13	110	81	191
	% (SE)	8.4 (1.4)	12.5 (2.7)	11.3 (1.5)	13.3 (4.4)	9.0 (1.2)	4.2 (0.5)	6.1 (0.5)
General medical services	n	4	4	1	0	7	2	9
	% (SE)	0.5 (0.3)	1.7 (1.1)	0.2 (0.2)	0.0 (0.0)	0.6 (0.3)	0.1 (0.1)	0.3 (0.1)
Any health-care services	n	81	33	52	13	116	83	199
	% (SE)	8.7 (1.3)	13.7 (2.8)	11.3 (1.5)	13.3 (4.4)	9.5 (1.2)	4.3 (0.5)	6.3 (0.5)
Human services	n	13	3	2	2	13	8	21
	% (SE)	1.5 (0.4)	1.3 (0.9)	0.5 (0.1)	2.4 (1.7)	1.1 (0.3)	0.5 (0.2)	0.8 (0.2)
Complementary-alternative medicine	n	12	8	13	5	18	9	27
	% (SE)	1.7 (0.5)	4.6 (2.0)	3.4 (0.9)	7.1 (3.5)	1.8 (0.4)	0.5 (0.2)	1.0 (0.2)
Any non-health care service	n	25	11	15	7	31	15	46
	% (SE)	3.1 (0.7)	5.9 (2.1)	3.8 (0.9)	9.5 (4.3)	2.9 (0.6)	0.9 (0.3)	1.7 (0.3)
Special school/class	n	3	0	1	0	3	1	4
	% (SE)	0.3 (0.2)	0.0 (0.0)	0.2 (0.2)	0.0 (0.0)	0.2 (0.1)	0.0 (0.0)	0.1 (0.1)
Scholar therapy or counsellor	n	44	13	30	6	53	23	76
	% (SE)	4.7 (0.9)	5.6 (1.8)	6.2 (1.2)	5.6 (1.9)	4.3 (0.7)	1.2 (0.3)	2.4 (0.3)
Any school treatment	n	46	13	31	6	55	24	79
	% (SE)	4.9 (0.9)	5.6 (1.8)	6.5 (1.2)	5.6 (1.9)	4.4 (0.7)	1.3 (0.3)	2.5 (0.3)
Any treatment	n	122	43	77	20	165	115	280
	% (SE)	13.3 (1.5)	19.3 (3.1)	17.1 (1.6)	22.2 (5.6)	13.7 (1.2)	6.1 (0.7)	9.1 (0.7)

SE, standard error.
[a] N = 3005.

services (by 9.5%), with school-based treatments being next most frequent. Most services delivered by the health-care sector were provided by mental health specialists, with minimal participation of the general medical sector. The disorder with the highest level of treatment was drug abuse with dependence (38%, largely treated in the non-health care system), followed by conduct disorder (25%, largely treated in the health-care system; data not shown).

Among those with a psychiatric disorder, 80% used only one type of provider, 17% two types of providers, and 3% used three or more types of providers. Among those that used two providers, the most common combination was for health care and school-based providers. About 72% of those used both services simultaneously, while 18% used school services first and later reported the use of a health-care provider. In the health-care sector, the mean number of visits was 7.8 for those

with a psychiatric disorder and 6.2 for those without a disorder; for the non-health-care sector it was 19.1 and 16.5 visits respectively, and for school-based services it was 14.9 and 16.9 visits, respectively (results are not shown).

Table 2 presents the adequacy of treatment. Overall, 58.4% of those receiving any services obtained any treatment that could be considered minimally adequate, with anxiety disorders showing the lowest percentage and substance use disorders the highest. Those with a disorder were more likely to receive adequate treatment than those without a disorder and the health-care sector showed the lowest level of adequacy.

In sensitivity analyses using our more stringent definition, the proportion of respondents obtaining minimally adequate treatment among those with disorders receiving any services decreased to 27.2%; this proportion varied between 22.2% among respondents

with substance disorders to 36.8% among those with affective disorders. (The results are not shown but are available upon request from G Borges.)

Table 3 presents sociodemographic correlates of receiving any services, as well as receiving minimally adequate treatment, among respondents with 12-month prevalence of these disorders. Females and those whose parents had higher levels of education were more likely to use services. Those attending school and adolescents without any "social burden" had increased, but not significantly, odds ratios of receiving treatment. The only significant correlate of receiving adequate treatment among those with a psychiatric disorder receiving any treatment was those currently attending school.

The greater likelihood of service use and adequacy of services for those attending school may be related to school-based programmes being exclusively available for this group only. For

Table 2. **Proportion of adolescents receiving minimally adequate treatment from professionals over 12 months[a]**

Service provider/treatment		Disorder category						
		Any anxiety	Any mood	Any impulse control	Any substance use	Any disorder	No disorder	Total sample
Any health care services	n	49	21	35	9	68	41	109
	% (SE)	61.5 (4.6)	62.6 (8.1)	68.6 (6.4)	70.8 (11.5)	59.4 (4.3)	44.9 (5.7)	53.5 (3.5)
Any non-health care service	n	19	10	13	5	24	13	37
	% (SE)	74.9 (9.8)	89.7 (9.9)	85.4 (10.4)	71.0 (15.8)	75.7 (8.7)	90.2 (6.6)	80.4 (7.2)
Any school-based treatment	n	33	12	24	6	41	18	59
	% (SE)	72.3 (6.8)	88.7 (9.7)	78.0 (8.6)	100.0 (0.0)	75.6 (6.0)	80.6 (8.9)	77.2 (5.3)
Any treatment	n	73	29	51	15	98	65	163
	% (SE)	60.4 (3.6)	67.1 (8.7)	67.6 (5.5)	77.0 (10.2)	60.1 (3.8)	56.0 (5.0)	58.4 (3.4)

SE, standard error.
[a] $N = 3005$.

this reason, we refitted our models to obtain results for health care and non-health care services separately. In these analyses, respondents attending school were no more likely to get health care or non-health care services than those not attending school. Nevertheless, those attending school still had a significantly increased likelihood (odds ratio: 11.6; 95% CI: 3.5–38.2) of receiving adequate health care compared to those not attending school (data not shown).

Discussion

Main findings

Less than one in seven adolescents with any psychiatric disorder in the last 12 months used any services. Although this is the first time that representative service use data are available for adolescents in Mexico, prior research among adults in Mexico also showed that the majority of people with a recent psychiatric disorder did not receive recent treatment.[3,31,32] Comparable data from other developed countries confirms the large unmet need that adolescents face.[8–12] A study of another Latino population in Puerto Rico[7] showed that only 26% of adolescents affected by mental disorders used services. Our results reveal the even larger gap that adolescents in Mexico face, with only 14% of those with a disorder using any service in the prior 12 months. Data for comparison on service use in other Latin American countries are lacking, although the situation of scarce resources, as well as few services and

personnel for treating children having a mental disorder, is commonplace in the region.[33] The lack of resources in Mexico City may be similar to other less-developed countries, although more research is needed before we can generalize our findings. Respondents without a disorder comprised about 40% of the population using services, raising concern that scarce resources for mental health care may be misallocated. However, some services may be used by respondents with lifetime histories of disorders; other respondents without apparent disorders may also be using services appropriately for primary prevention, subthreshold symptoms that do not qualify as full-blown disorders or for disorders not assessed by our survey.

Our results on the percentages receiving minimally adequate care (58%) as well as a more stringent definition (27%) are very low and similar to rates reported among adults in Mexico,[3] suggesting that the entire system of care for mental disorders is in need of reform. The system for child mental health care in Latin America has been described as excessively focused on serious and rare disorders.[33] A recent evaluation of psychiatric care in Mexico[34] concluded that it is still mainly provided by large public psychiatric hospitals. Even though this study did not focus specifically on adolescents, these conclusions could well apply to youth.

There are many potential reasons for failure to receive minimally adequate care. Individuals with mental

disorders, especially those with the most serious and impairing forms, may suffer from considerable stigmatization and discrimination associated with their mental disorder[32] and may lack the ability and resources to consistently access mental health treatments.[35] Patients may also find prescribed treatments intolerable.[36] Providers may lack the training to recognize and properly diagnose mental disorders or lack the knowledge concerning optimal treatment regimens.[37–39] These results may not be surprising, given the dearth of mental health resources in Mexico.[40] It is noteworthy that there is only one child psychiatric hospital in the entire country, located in Mexico City.

Two sociodemographic characteristics predicted the use of mental health services among subjects with psychiatric disorders, being female and having more educated parents. Some studies find adolescent males to be more likely to receive services than females,[41] but others have failed to do so.[8,10,11,42,43] It is not clear why in this Mexican sample, females with psychiatric disorders were more likely to get services, but it is possible that the Mexican culture, that emphasizes protection of young females more so than males, could play a role or that deviant behaviour is tolerated more in males than females. More educated parents may be more likely to recognize symptoms of distress and mental disorders in their child and be able to seek treatment.[44] It is possible that these adolescents have more supportive environments

or more assistance in promoting treatment adherence. Although Mexico is a country with low socioeconomic status and the lack of financial resources may help explain the low rate of service use, we did not find an association between income and receiving any treatment or minimally adequate treatment – a lack of association also reported from other studies in developed countries,[8] but not all.[42,43]

Limitations

The Mexican Adolescent Mental Health Survey is a household survey with a limited response rate (71%), representing adolescents living in one of the largest metropolitan areas in the world, where health services are more available and so these results may not be generalized to other urban or rural areas of Mexico. Furthermore, we did not interview institutionalized or homeless adolescents, we only assessed a limited subset of DSM-IV disorders, and those more affected by mental illness may be more likely to have been non-respondents. Although the WMH-CIDI-A was adapted from the adult version used in the Mexico National Comorbidity Survey and validated in another Spanish-speaking country,[18] the reliability and validity of the adolescent version used in this survey has not yet been established in Mexico. This set of limitations may have caused us to underestimate the unmet needs for mental health treatment and minimally adequate treatment.

In addition, we used a definition of minimally adequate treatment created for the adult population.[5,13] Although some investigators[45–50] have shown that treatments conforming to recommendations in evidence-based guidelines improve clinical outcomes, we are not aware of studies that validated our exact definition of minimally adequate treatment for this population.

Finally, we only examined relationships between a small number of patient or family factors[44] and service utilization, type and adequacy; we did not have the ability to investigate other potentially important variables, such as the characteristics of service providers. All variables assessed were subject to misclassification which, especially if differential, could have introduced bias.

Table 3. **Sociodemographic predictors of treatment over 12 months[a,b]**

Variable	Any treatment among any disorder		Any minimally adequate treatment among those with a disorder and receiving treatment	
	OR	(95% CI)	OR	(95% CI)
Sex				
Male	1.00		1.00	
Female	1.65	(1.06–2.57)	0.79	(0.39–1.60)
Age group in years				
15–17	1.00		1.00	
12–14	0.93	(0.68–1.28)	0.80	(0.21–3.08)
Attending school				
No	1.00		1.00	
Yes	1.26	(0.86–1.85)	2.68	(1.08–6.65)
Living with both parents				
No	1.00		1.00	
Yes	0.91	(0.63–1.31)	0.77	(0.36–1.66)
Adolescent social burden[c]				
No	1.75	(0.97–3.15)	0.31	(0.02–3.94)
Yes	1.00		1.00	
Parental education				
None/primary (≤ 6 years)	1.00		1.00	
Secondary (7–9 years)	1.78	(1.05–3.01)	1.20	(0.40–3.59)
High school (10–12 years)	1.83	(1.06–3.15)	0.54	(0.23–1.25)
College (≥ 13 years)	2.20	(1.04–4.67)	1.03	(0.28–3.75)
Income				
Low	1.00		1.00	
Average	0.81	(0.55–1.20)	1.42	(0.75–2.70)
High	0.74	(0.51–1.07)	0.96	(0.18–5.21)

CI, confidence interval; OR, odds ratio.
[a] $N = 3005$.
[b] All models were adjusted by any mood, anxiety, impulse and substance disorder over 12 months.
[c] Adolescents social burden were those participants answering affirmatively to any of the three conditions: worked during the school year, ever married and had children.

Finally, we cannot conclude that factors associated with receiving any treatment, or minimally adequate treatment, are related causally because of the study's cross-sectional nature.

Conclusions

Improvement in the mental health care of Mexican youth is urgently needed and should not depend only on additional services and resources. Our results shed light on an enormous public health problem facing Mexico. The large majority of those with needs received no treatment from any sector. The negative public health consequences of such unmet needs for treatment in adolescents are likely to be large. In this context, the development of additional mental health resources is sorely needed and an essential first step. However, reallocation of services and providers will be needed to take advantage of the resources that are made available. Active outreach, school-based programmes employing brief screens may be needed for the accurate identification of children with mental disorders. Interventions to train non-health care professionals to recognize children with mental health conditions and make referrals for health care may also be useful. Finally, even among Mexican youth with mental disorders from families with financial means, addressing out-of-pocket costs and other economic barriers may also be

critical for increasing the generally low intensity and widespread inadequacy of mental health treatments. ■

Résumé

Traitement des troubles mentaux chez les adolescentes de Mexico

Objectif La présente étude décrit la prévalence, l'adéquation aux besoins et les corrélats du recours aux services de santé mentale sur 12 mois chez les sujets de l'Enquête sur la santé mentale des adolescents de Mexico.

Méthodes Les auteurs ont mené une enquête en face-à-face dans les ménages sur un échantillon probabiliste de 3005 adolescents de 12 à 17 ans, résidant dans la zone métropolitaine de Mexico en 2005. Ils ont évalué la prévalence des troubles mentaux et le recours aux services de santé mentale à l'aide de la version Adolescents et assistée par ordinateur du World Mental Health Composite International Diagnostic Interview. Des corrélations entre le recours aux services de santé mentale et l'adéquation du traitement ont été identifiées à l'aide d'analyses par régression logistique prenant en compte le mode de constitution de l'échantillon complexe et les processus de pondération.

Résultats Parmi les adolescents interrogés souffrant de troubles psychiatriques, moins d'un sur sept avaient fait appel aux services de santé mentale au cours de l'année précédente. Ce sont les adolescents interrogés présentant des troubles toxicomaniaques qui ont mentionné la plus forte prévalence du recours à ces services et dont les troubles anxieux étaient les plus faibles. Parmi les adolescents interrogés ayant bénéficié de services de santé mentale, environ un sur deux avait reçu un traitement pouvant être considéré comme très peu adapté.

Conclusion Nous avons relevé d'importants besoins non satisfaits en matière de santé mentale chez les adolescents de Mexico souffrant de troubles psychiatriques. Il est urgent d'améliorer les soins de santé mentale dispensés aux jeunes de cette ville.

Resumen

Tratamiento de los adolescentes con trastornos mentales en México D.F.

Objetivo Se describen aquí la prevalencia, la idoneidad y los factores correlacionados del uso de servicios de salud mental a lo largo de 12 meses entre los participantes en la Encuesta de Salud Mental de Adolescentes de México.

Métodos Los autores llevaron a cabo encuestas de hogares personales con una muestra probabilística de 3005 adolescentes de 12 a 17 años residentes en el área metropolitana de México D.F. durante 2005. La prevalencia de trastornos de salud mental y el uso de los servicios correspondientes se evaluaron con la versión computadorizada para adolescentes de la Entrevista CIDI (Composite International Diagnostic Interview) sobre Salud Mental Mundial. Los factores correlacionados con la utilización de los servicios y el tratamiento adecuado se determinaron mediante análisis de regresión logística adaptados al complejo proceso de diseño y ponderación de muestras.

Resultados Menos de uno de cada siete encuestados con trastornos psiquiátricos habían usado algún tipo de servicio de salud mental durante el año precedente. Los encuestados con trastornos de consumo de sustancias son los que declararon la máxima prevalencia de uso de servicios, y la prevalencia más baja correspondió a los afectados por trastornos de ansiedad. Entre quienes usaron algún tipo de servicio, alrededor de uno de cada dos encuestados recibieron un tratamiento mínimamente adecuado.

Conclusión Se han detectado importantes necesidades no atendidas de servicios de salud mental entre los adolescentes con trastornos psiquiátricos de México D.F. Es preciso mejorar urgentemente la atención de salud mental de los jóvenes mexicanos.

ملخص

معالجة الاضطرابات النفسية التي تصيب المراهقين في مكسيكو سيتي

الغرض: توضح هذه الدراسة معدَّل انتشار، وكفاية، وارتباط استخدام المشاركين في المسح الخاص بالصحة النفسية للمراهقين في المكسيك، لخدمات الصحة النفسية على مدى 12 شهراً.

الطريقة: أجرى الباحثون مسوحات وجهاً لوجه مع الأسر لعينة احتمالية لـ 3005 مراهقين تـتـراوح أعمارهم بين سن 12 و17 عاماً، كانوا يقيمون في المنطقة المتروبولية لمكسيكو سيتي في عام 2005. وتم تقييم معدَّل انتشار اضطرابات الصحة النفسية، والانتفاع بالخدمات باستخدام الإصدارة المحوسبة لكيفية إجراء اللقاء التشخيصي الدولي للمجمع العالمي للصحة النفسية. وتم تحديد الاقتران بين استخدام الخدمات وكفاية المعالجة من واقع تحليلات التحوف اللوجستية، والتي أخذت بعين الاعتبار التصميم المعقد للعينة، وعملية الترجيح.

الموجودات: وجد أن أقل من واحد من بين 7 مجيبين يعانون من اضطرابات نفسية، استخدم أياً من خدمات الصحة النفسية أثناء العام المنصرم. وسجّل المجيبون الذين يعانون من اضطرابات تعاطي مواد الإدمان أعلى معدَّل انتشار لاستخدام الخدمات، في حين سجّل من يعانون من اضطرابات القلق أدنى معدَّلات. ومن بين كل مجيبين اثنين يتلقون خدمات، حصل نحو مجيب واحد على معالجة قد تعتبر كافية كحد أدنى.

الاستنتاج: ثبت وجود عدد كبير من الاحتياجات غير الملبّاة لخدمات الصحة النفسية المقدمة للمراهقين المصابين باضطرابات نفسية في مكسيكو سيتي. ومن ثَمَّ تمس الحاجة إلى تحسين رعاية الصحة النفسية للشباب المكسيكي.

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