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Encuesta Nacional de Epidemiología Psiquiátrica (adultos)

Encuesta Nacional de Epidemiología Psiquiátrica (adolescentes)

En México, los datos para la Encuesta Nacional de Epidemiología Psiquiátrica fueron recabados con el apoyo financiero del Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, proyecto No.4280, del Consejo Nacional de Ciencia y Tecnología, proyecto No. G30544-H, de la Organización Panamericana de la Salud y de Pfizer México. La Encuesta Nacional de Salud Mental en adolescentes contó con el apoyo financiero del Instituto nacional de Psiquiatría Ramón de la Fuente Muñiz, proyecto 4845, y del Consejo Nacional de Ciencia y Tecnología en conjunto con la Secretaría de Educación Pública proyecto No. CONACYT-SEP-SSEDF-2003-CO1-22) **Otros** participantes: Ing. Jerónimo Blanco, Dra. Clara Fleiz, Mtro. Joaquín Zambrano.

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Encuesta Nacional de Epidemiología Psiquiátrica en Adultos

México

El estudio forma parte de una iniciativa internacional coordinada por la Organización Mundial de la Salud 2000 que pretende evaluar la situación de la patología mental en países con diferente nivel de desarrollo, determinar las necesidades de atención a la salud y orientar la política en esta materia. Se trata de una encuesta de hogares llevada a cabo en población urbana entre 18 y 65 años. Las tres metas más importantes fueron: i) Estimar la prevalencia de los desordenes mentales incluyendo las adicciones y la discapacidad con la que se asocian en la población total y por regiones del país y por grupos sociales; ii) Estudiar la historia natural de los padecimientos mentales, iii) conocer el índice de uso de servicios y las barreras para la atención iv) Desarrollar y probar hipótesis acerca de los factores antecedentes y el curso de los trastornos. Se utilizó la versión computarizada de la entrevista psiquiátrica WHO CIDI 2 y el WHO-DAS II para medir discapacidad. La población objetivo fueron los residentes permanentes en hogares ubicados en las zonas urbanas del país (población de 2,500 habitantes y más), de 18 a 65 años. Las zonas urbanas se estratificaran en 6 estratos: a) Áreas metropolitanas auto representadas: Ciudad de México (AMCM), Guadalajara (AMG) y Monterrey (AMM). b) Noroeste. Incluye los estados de Baja California, Baja California Sur, Nayarit, Sinaloa y Sonora. c) Norte. Incluye los estados de Coahuila, Chihuahua, Durango, Nuevo León (excluyendo AMM), San Luis Potosí, Tamaulipas y Zacatecas. d) Oeste Centro. Aguascalientes, Jalisco (excluyendo AMG), Colima, Guanajuato y Michoacán. e) Centro Este Guerrero, Morelos, Estado de México (excluyendo los municipios conurbados parte de AMCM), Querétaro, Hidalgo, Tlaxcala y Puebla. f) Sureste. Veracruz, Oaxaca, Tabasco, Chiapas, Campeche, Yucatán y Quintana Roo. Se recolectaron un total de 5,826 entrevistas.

Dra. Maria Elena Medina-Mora I.
Responsable del proyecto por México
Otros Integrantes: Dr. Guilherme Borges, Dra. Corina Benjet, Dra. Carmen Lara

2003

1) **Medina-Mora ME, Borges G, Lara C, Benjet C, Blanco Jaimes J, Fleiz C**, et al. Mexican National Comorbidity Survey (NCS-Mexico): an overview of desing and field procedures. World Health Organization's (WHO) World Mental Health Surveys Initiative 2003:1-13. Available from: URL: http://www.hcp.med.harvard.edu/wmh/WMH%20Country%20Reports.htm

ABSTRACT: México cuenta con una larga tradición de investigación epidemiológica dentro del campo de las adicciones, sin embargo, el desarrollo de la epidemiología psiquiátrica ha sido más lento. Se presenta un reporte detallado de la metodología, el diseño y el trabajo de campo de la Encuesta Nacional de Comorbilidad Psiquiátrica. La descripción incluye información en cuanto a las fuentes de financiamiento, los diferentes grupos de expertos que participaron, el trabajo de logística para emprender el trabajo de campo, la preparación y adecuación de los instrumentos y todo el proceso de selección de la muestra

2) **Medina-Mora, M.-E., Borges, G., Lara, C., Benjet, C., Blanco, J., Fleiz, C., Villatoro, J., Rojas, E., Zambrano, J., Casanova, L.,** Aguilar-Gaxiola, S. (2003). Prevalence of mental disorders and use of services: Results from the Mexican National Survey of Psychiatric Epidemiology. Salud Mental, 26,(4) 1-16.

RESUMEN: Este estudio forma parte de la iniciativa 2000, de la Organización Mundial de la Salud en Salud Mental; describe la prevalencia de trastornos psiquiátricos, la comorbilidad, las variaciones en la distribución geográfica de los trastornos, los correlatos sociodemográficos y la utilización de servicios en la población urbana adulta. La Encuesta Nacional de Epidemiología Psiquiátrica (ENEP) se basa en un diseño probabilístico, multietápico y estratificado para seis regiones a nivel nacional, cuya población blanco fue la población no-institucionalizada, que tiene un hogar fijo, de 18 a 65 años de edad y que vive en áreas urbanas (población de más de 2,500 habitantes). La tasa de respuesta ponderada a nivel del hogar fue de 91.3%, y a nivel individual fue de 76.6%. El instrumento utilizado es la versión computarizada del CIDI (versión certificada 15) que proporciona diagnósticos de acuerdo con el DSM IV y la CIE-10. En este artículo se presentan los diagnósticos de acuerdo con la CIE-10. El CIDI contiene además módulos sobre las características sociodemográficas de los entrevistados, condiciones crónicas, fármaco epidemiología, discapacidad y uso de servicios. La confiabilidad y la validez han sido ampliamente documentadas. La traducción de la encuesta al español fue realizada conforme a las recomendaciones de la OMS. Los encuestadores fueron personas con previa experiencia en levantamiento de encuestas entrenados para este estudio. Alrededor del 54% de la muestra fueron mujeres, 40% tenían entre 18 y 29 años y 68% tuvo únicamente estudios primarios. El 28.6% de la población presentó algunos de los 23 trastornos de la CIE alguna vez en su vida, el 13.9% lo reportó en los últimos 12 meses y el 5.8% en los últimos 30 días. Por tipo de trastornos, los más frecuentes fueron los de ansiedad (14.3% alguna vez en la vida), seguidos por los trastornos de uso de sustancias (9.2%) y los trastornos afectivos (9.1%). Los hombres presentan prevalencias más altas de cualquier trastorno en comparación con las mujeres (30.4% y 27.1%, alguna vez en la vida, respectivamente). Sin embargo, las mujeres presentan prevalencias globales más elevadas para cualquier trastorno en los últimos 12 meses (14.8% y 12.9%). Al analizar los trastornos individuales, las fobias específicas fueron las más comunes (7.1% alguna vez en la vida), seguidas por los trastornos de conducta (6.1%), la dependencia al alcohol (5.9%), la fobia social (4.7%) y el episodio depresivo mayor (3.3%). Los tres principales trastornos para las mujeres fueron las fobias (específicas y sociales), seguidas del episodio depresivo mayor. Para los hombres, la dependencia al alcohol, los trastornos de conducta y el abuso de alcohol (sin dependencia)
La ansiedad de separación (mediana de inicio de 5 años) y el trastorno de atención (6 años) son los dos padecimientos más tempranos. La fobia específica (7 años), seguida por el trastorno oposicionista (8 años), aparecen después. Para los trastornos de la vida adulta, los trastornos de ansiedad se reportaron con edades de

inicio más tempranas, seguidos por los trastornos afectivos y por los trastornos por uso de sustancias. La región centro-oeste es la que presenta la prevalencia más elevada de trastornos en la vida (36.7%) explicada por el elevado índice de trastornos por uso de sustancias. Esta región también muestra la prevalencia más elevada de trastornos afectivos en los últimos 30 días (2.5%), la región conformada por las tres áreas metropolitanas muestra la prevalencia más elevada de trastornos de ansiedad (3.4%) y la región norte presenta mayores trastornos por uso de sustancias (1.7%). Solamente uno de cada 10 sujetos con un trastorno mental recibieron atención, sólo uno de cada cinco con dos o más trastornos recibieron atención, y sólo uno de cada 10 con tres o más trastornos obtuvieron atención.

2004

3) Benjet, C., Borges G., **Medina-Mora, M.-E**., Fleiz-Bautista, C., Zambrano-Ruiz, J. (2004). La depresión con inicio temprano: Prevalencia, curso natural y latencia para buscar tratamiento. Salud Pública de México, 46, 417-424. **.**

OBJETIVO. Conocer, en la población mexicana, la prevalencia de la depresión con inicio temprano, y comparar el curso natural, la comorbilidad y la latencia para buscar tratamiento entre los deprimidos con inicio temprano y aquellos con inicio en la edad adulta. **MATERIAL Y MÉTODOS.** La Encuesta Nacional de Epidemiología Psiquiátrica es representativa de la población nacional urbana, de entre 18 a 65 años de edad. Se realizó en México, entre 2001 y 2002, con el instrumento diagnóstico de la versión computarizada de la Entrevista Internacional Compuesta de Diagnóstico. Los análisis toman en cuenta el diseño complejo de la muestra multietápica, estratificada y ponderada utilizando análisis descriptivo y regresiones logísticas. **RESULTADOS**. El 2.0% de la población ha padecido depresión en la infancia o adolescencia con un promedio de siete episodios a lo largo de la vida (comparado con tres para los de inicio en la adultez), el primero persiste por unos 31 meses (comparado con 16 meses), durante los cuales generalmente no reciben tratamiento. **CONCLUSIONES.** La mayor duración del primer episodio y el mayor número de episodios en la vida de aquellos con depresión de inicio temprano se debe a la falta de detección y tratamiento oportuno en jóvenes.

4) **Borges, G.**, **Medina-Mora, M.-E**., López S (2004) El papel de la epidemiología en la investigación de los trastornos mentales (The role of epidemiology in mental disorders research) Salud Publica de México, 46(5), 451-463.

RESUMEN: Los trastornos mentales, incluyendo los trastornos del uso de sustancias, hacen ya parte del panorama epidemiológico de México y seguirán en el escenario nacional por las próximas décadas, incrementando incluso su presencia como causa de enfermedad, discapacidad y muerte en nuestro país. Por lo tanto, el manejo epidemiológico de estos problemas se hace urgente. Este trabajo busca plantear el campo de estudio de la epidemiología de los trastornos mentales y sus limitaciones, haciendo énfasis en los elementos comunes de ésta con otras áreas más tradicionales de la epidemiología y en las aportaciones particulares de este campo epidemiológico a la psiquiatría en general y a la epidemiología en particular. Planteamos a continuación los diseños y problemas más comunes en este campo de la epidemiología, su utilidad para acciones de prevención, y señalamos los retos que nos esperan en el futuro. Una característica distintiva de esta área es que los trastornos mentales se manifiestan en dos niveles, como conducta (por ejemplo, una conducta compulsiva de lavarse las manos) y como elemento de la vida mental del sujeto (por ejemplo, el pensamiento obsesivo sobre las bacterias que se encuentran presentes en todos lados y que son una fuente constante de amenaza para algunos sujetos). Debido a esto, mucho de lo que sabemos sobre estos fenómenos proviene del autorreporte que el sujeto es capaz de hacer sobre sus sentimientos (introspección), ya sea en una conversación con un clínico entrenado o expresándolos al endosar reactivos en un cuestionario estandarizado. Otro aspecto importante a resaltar es la necesidad de hablar en plural al referirnos a los trastornos mentales. Este campo de la epidemiología presenta

también un carácter particular, bifacético: por un lado, este es un problema en sí mismo, que produce sufrimiento y motiva la búsqueda de atención especializada, con manifestaciones clínicas particulares. Por otro lado, esta epidemiología también se orienta hacia un dominio particular de determinantes (como el uso, abuso o dependencia hacia las drogas) y cómo estas variables independientes afectan determinados procesos y enfermedades (como los accidentes, el homicidio, el suicidio, la cirrosis hepática, etc.) Por último, la epidemiología de los trastornos mentales se ha caracterizado también por su interés en una serie de procesos que no parecen constituir síndromes propiamente dichos, pero que son a todas luces de interés sanitario, siendo el ejemplo más claro de esto el problema de la violencia. La epidemiología de los trastornos mentales se enfrenta a enormes retos en el nuevo milenio. Debe hacer frente a un panorama epidemiológico complejo y cambiante. Los aspectos más importantes de su desarrollo futuro se vinculan con los siguientes puntos: medición de los trastornos mentales y de los factores de riesgo, el diseño y métodos de muestreo más eficientes, la relación entre la investigación biológica, la genética, las disciplinas sociales y la epidemiología, y la interfase entre la epidemiología y la evaluación de los tratamientos y los servicios.

5) Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., Lepine, J.-P., Angermeyer, M.C., Bernert, S., de Girolamo, G., Morosini, P., Polidori, G., Kikkawa, T., Kawakami, N., Ono, Y., Takeshima, T., Uda, H., Karam, E.G., Fayyad, J.A., Karam, A.N., Mneimneh, Z.N., **Medina-Mora, M.-E**., Borges, G., Lara, C., de Graaf, R., Ormel, J., Gureje, O., Shen, Y., Huang, Y., Zhang, M., Alonso, J., Haro, J.M., Vilagut, G., Bromet, E.J., Gluzman, S., Webb, C., Kessler, R.C., Merikangas, K.R., Anthony, J.C., Von Korff, M.R., Wang, P.S., Brugha, T.S., Aguilar-Gaxiola, S., Lee, S., Heeringa, S., Pennell, B.E., Zaslavsky, A.M., Chatterji, S., Ustun, T.B. (2004). Prevalence, severity and unmet need for treatment of mental disorders in the World Health Organization World Mental Health (WMH) Surveys. Journal of the American Medical Association, 291, 2581-2590.

CONTEXT Little is known about the extent or severity of untreated mental disorders, especially in less-developed countries. **OBJECTIVE** To estimate prevalence, severity, and treatment of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) mental disorders in 14 countries (6 less developed, 8 developed) in the World Health Organization (WHO) World Mental Health (WMH) Survey Initiative. **DESIGN, SETTING, AND PARTICIPANTS** Face-to-face household surveys of 60 463 community adults conducted from 2001-2003 in 14 countries in the Americas, Europe, the Middle East, Africa, and Asia. **MAIN OUTCOME MEASURES** The DSM-IV disorders, severity, and treatment were assessed with the WMH version of the WHO Composite International Diagnostic Interview (WMH-CIDI), a fully structured, lay-administered psychiatric diagnostic interview. **RESULTS** The prevalence of having any WMH-CIDI/DSM-IV disorder in the prior year varied widely, from 4.3% in Shanghai to 26.4% in the United States, with an interquartile range (IQR) of 9.1%-16.9%. Between 33.1% (Colombia) and 80.9% (Nigeria) of 12-month cases were mild (IQR, 40.2%-53.3%). Serious disorders were associated with substantial role disability. Although disorder severity was correlated with probability of treatment in almost all countries, 35.5% to 50.3% of serious cases in developed countries and 76.3% to 85.4% in less-developed countries received no treatment in the 12 months before the interview. Due to the high prevalence of mild and subthreshold cases, the number of those who received treatment far exceeds the number of untreated serious cases in every country. **CONCLUSIONS** Reallocation of treatment resources could substantially decrease the problem of unmet need for treatment of mental disorders among serious cases. Structural barriers exist to this reallocation. Careful consideration needs to be given to the value of treating some mild cases, especially those at risk for progressing to more serious disorders

2005

6) **Medina-Mora, ME, Borges G**, Fleiz, C., **Lara, C.,** Zambrano-Ruiz, J., Ramos, L. (2005) Prevalencia de sucesos violentos y trastorno por estrés postraumático en la población mexicana. Salud Publica de México, 47(1), 8-22. (in Spanish)

OBJETIVO. Reportar el índice de exposición a diferentes sucesos violentos, los correlatos demográficos, la prevalencia de trastorno por estrés postraumático y el impacto sobre la calidad de vida. **MATERIAL Y MÉTODOS**. La Encuesta Nacional de Epidemiología Psiquiátrica es representativa de la población mexicana urbana de 18 a 65 años de edad. Se realizó entre 2001 y 2002, con el instrumento diagnóstico de la versión computarizada de la Entrevista Internacional Compuesta de Diagnóstico (CIDI-15, por sus siglas en inglés). Los análisis toman en cuenta el diseño complejo de la muestra aleatoria, multietápica y estratificada. Se utilizaron el Método Kaplan-Meir y regresiones logísticas. **RESULTADOS.** El 68% de la población ha estado expuesta al menos a un suceso estresante en su vida. La exposición varía por sexo (violación, acoso y abuso sexual son más frecuentes en mujeres; los accidentes y robos, entre los hombres) y por edad (niños, adolescentes, mujeres adultas jóvenes y personas de la tercera edad). El 2.3% de las mujeres y 0.49% de los hombres presentaron un trastorno de estrés postraumático. La violación, el acoso, el secuestro y el abuso sexual son los sucesos con mayor manifestación de trastornos por estrés postraumático. **CONCLUSIONES.** Los resultados refuerzan la necesidad de ampliar la cobertura de tratamiento para atender las secuelas de la violencia, considerando las importantes variaciones de género y estadios de desarrollo.

7) **Medina-Mora, ME, Borges G**, **Lara, C., Benjet, C.**, Blanco, J., Fleiz, C., Villatoro, J., Rojas, E., Zambrano, J. (2005). Prevalence, service use, and demographic correlates of 12-month DSM-IV psychiatric disorders in Mexico: Results from the Mexican National Comorbidity Survey. Psychological Medicine, 35(12), 1773-1783.

BACKGROUND: This paper describes the 12-month prevalence, severity and demographic correlates of 16 DSM-IV psychiatric disorders and service utilization in the Mexican urban population aged 18-65 years of age. This is representative of 75% of the national adult population. **METHOD:** The sample design was a strict probability selection scheme. The response rate was 76.6%. The World Mental Health Survey version of the Composite International Diagnostic Interview was installed on laptops and administered by lay interviewers. An international WHO task force carried out its translation into Spanish. **RESULTS:** The 12-month prevalence of any disorder was 12.1%. The most common disorders were specific phobia (4.0%), major depressive disorder (3.7%) and alcohol abuse or dependence (2.2%). The 12-month prevalence of very severe disorders was 3.7% of which only 24% used any services. Age was the only variable associated with any 12-month disorder, with the younger more likely to report any disorder. Income was associated with severity, with low and low-average incomes more likely to report a 12-month disorder. Females were more likely to report a mood and anxiety disorder, but less likely to report a substance disorder. The group of separated/widowed/divorced was more likely to report a mood and an impulse-control disorder. **CONCLUSIONS:** The results show that while psychiatric disorders are common in the Mexican population, very severe mental disorders are less common and there is extreme under-utilization of mental health services.

8) **Borges G**, **Mondragón, L.**, **Medina-Mora, ME,** Orozco, R., Zambrano, J., Cherpitel, C. (2005). A case-control study of alcohol and substance use disorders as risk factors for non-fatal injury. Alcohol and Alcoholism, 40(4), 257-262. . .

AIMS: While alcohol use is thought to be a major risk factor for both fatal and non-fatal injuries, the association of substance use disorders (alcohol use disorders, AUD and substance use disorders, SUD) with occurrence of injury has not received the same attention. To report the association of AUD and SUD, according to diagnostic

and statistics manual of mental disorders-IV (DSM-IV) and international classification of diseases 10 (ICD-10) criteria, and the risk of non-fatal injuries. **METHODS:** A case–control study: Cases included 653 injured patients, 18–65-years-old, who attended one emergency department (ED). Controls included 1131 subjects from a representative sample of residents of Mexico City, of the same age group. Information on drug and alcohol use was obtained by interview using the world mental health version of the composite international diagnostic interview (WMH-CIDI). **RESULTS:** Among injured patients, the prevalence of substance abuse or dependence within the last 12 months was 12.3% for alcohol and 2.5% for other substances (marijuana, cocaine, tranquilizers, amphetamines, others). Among residents of Mexico City, these prevalences were 1.8 and 0.3%, respectively. Adjusted odds ratios (OR) of injury according to alcohol and substance use were 4.95 (95% confidence interval (CI): 2.87–8.52) for alcohol and 2.58 (0.73–9.17) for other substances. An important level of comorbid alcohol and substance use disorders was also found. **CONCLUSIONS:** Efforts in the ED should be carried out to treat and/or refer patients with alcohol and substance use disorders, and special care should be taken to address comorbid cases.

9) **Borges G**, Wilcox, H.C., **Medina-Mora, ME,** Zambrano-Ruiz, J., Blanco, J., Walters, E.E. (2005). Suicidal behavior in the Mexico National Comorbidity Survey (M-NCS): Lifetime and 12-month prevalence, psychiatric factors and service utilization. Salud Mental, 28(2), 40-47.

ANTECEDENTES: Se documentan datos representativos a nivel nacional en México sobre las prevalencias para inicio de ideación, plan e intento suicidas, así como trastornos psiquiátricos (de acuerdo con el DSM-IV) y uso de servicios asociados a estos comportamientos suicidas. **MÉTODOS:** Los datos fueron tomados de la Encuesta Nacional de Epidemiología Psiquiátrica de México (ENEP). La población fue tomada de una muestra de 5,782 entrevistados de 18 o más años de edad, durante el periodo 2001-2003. Se estimaron inicios para ideación, plan e intento suicida, así como factores psiquiátricos y de uso de servicios mediante el análisis de supervivencia. **RESULTADOS:** De los entrevistados, el comportamiento suicida alguna vez en la vida fue como sigue: el 8.3% reportó haber tenido ideación, el 3.2% reportó haber tenido un plan y el 2.8% reportó haber tenido intento(s) suicida(s). La prevalencia para los comportamientos suicidas los 12 meses previos a la entrevista fue de 2.3%, 1.0% y 0.6%, respectivamente. Dichos comportamientos prevalecieron en la adolescencia y adultez temprana y fueron menos comunes después de los 35 años de edad, con excepción de la ideación suicida que se mantuvo presente en edades más avanzadas. El presentar uno o más trastornos, evaluados en la encuesta de acuerdo con el DSM-IV, fue común entre las personas con ideación (60.9%), plan (75.6%) e intento (74.6%) suicidas y se encontró que este hecho es un factor de riesgo fuerte para el comportamiento suicida, incrementando en 4.8 veces el riesgo para ideación, 10.2 para plan y 9.6 para intento. Aproximadamente una de cada cuatro personas con intento suicida reportó haber consultado alguna vez un psiquiatra. **CONCLUSIONES:** Como en muchos otros países, en México los trastornos mentales tienen un impacto importante en los comportamientos suicidas. Se recomiendan ampliamente los esfuerzos de intervención enfocados a la identificación y al tratamiento de personas antes o durante el inicio de la ideación suicida.

10) Kessler, R.C., Berglund, P.A., **Borges G**, Nock, M., Wang, P.S. (2005). Trends in suicide ideation, plans, gestures, and attempts in the United States 1990-92 to 2001-03. Journal of the American Medical Association, 293(20), 2487-2495. **.**

CONTEXT: Little is known about trends in suicidal ideation, plans, gestures, or attempts or about their treatment. Such data are needed to guide and evaluate policies to reduce suicide-related behaviors.

OBJECTIVE: To analyze nationally representative trend data on suicidal ideation, plans, gestures, attempts, and their treatment. **DESIGN, SETTING, AND PARTICIPANTS:** Data came from the 1990-1992 National Comorbidity Survey and the 2001-2003 National Comorbidity Survey Replication. These surveys asked identical questions to 9708 people aged 18 to 54 years about the past year's occurrence of suicidal ideation, plans, gestures, attempts,

and treatment. Trends were evaluated by using pooled logistic regression analysis. Face-to-face interviews were administered in the homes of respondents, who were nationally representative samples of US English-speaking residents. **MAIN OUTCOME MEASURE:** Self-reports about suicide-related behaviors and treatment in the year before interview. **RESULTS:** No significant changes occurred between 1990-1992 and 2001-2003 in suicidal ideation (2.8% vs 3.3%; P = .43), plans (0.7% vs 1.0%; P = .15), gestures (0.3% vs 0.2%; P = .24), or attempts (0.4%-0.6%; P = .45), whereas conditional prevalence of plans among ideators increased significantly (from 19.6% to 28.6%; P = .04), and conditional prevalence of gestures among planners decreased significantly (from 21.4% to 6.4%; P = .003). Treatment increased dramatically among ideators who made a gesture (40.3% vs 92.8%) and among ideators who made an attempt (49.6% vs 79.0%). **CONCLUSIONS:** Despite a dramatic increase in treatment, no significant decrease occurred in suicidal thoughts, plans, gestures, or attempts in the United States during the 1990s. Continued efforts are needed to increase outreach to untreated individuals with suicidal ideation before the occurrence of attempts and to improve treatment effectiveness for such cases.

2006

11) Aguilar-Gaxiola, S., **Medina-Mora, ME,** Magana, C.G., Vega, W.A., Alejo-Garcia, C., Quintanar, T. R., Vazquez, L., Ballestros, P.D., Ibarra, J., Rosales, H. (2006). Illicit drug use in Latin America: Epidemiology, service use, and HIV. Drug and Alcohol Dependence, 84(suppl 1), S85-93. .

ABSTRACT

The purpose of this article is to review the research status of illicit drug use and its data sources in Latin America, with particular attention to the research that has been produced in the past 15 years in epidemiology of illicit drug use services utilization, and relationship between HIV and drug use. This article complements the series of articles that are published in this same volume which examine drug abuse research (epidemiology, prevention, and treatment) and HIV prevention in Latinos residing in the United States. This review resulted from extensive international and national searches using the following databases: Current Contents Connect, Social and Behavioral Sciences; EBSCO; EMBASE(R) Psychiatry; Evidence Based Medicine (through OVID); Medline, Neurosciences, PsychINFO, Pubmed, BIREME/PAHO/WHO--Virtual Health Library, and SciELO. Papers selected for further review included those published in Spanish, English, and Portuguese in peer-reviewed journals. From the evidence reviewed, it was found that the published research literature is heavily concentrated on descriptive epidemiologic surveys, providing primarily prevalence rates and general information on associated factors. Evidence on patterns of service delivery and HIV prevention and treatment is limited. The cumulative scope of this research clearly indicates variability in quantity and quality of research across Latin American nations and the need for greater uniformity in data collection elements, methodologies, and the creation of international collaborative research networks.

12) **Borges G**, Angst, J., Nock, M.K., Ruscio, A.M., Walters, E.E., Kessler, R.C. (2006). Risk factors for twelve-month suicide attempts in the National Comorbidity Survey Replication (NCS-R). Psychological Medicine, 36(12), 1747-1758. .

BACKGROUND: Clinical judgments about the likelihood of suicide attempt would be aided by an index of risk factors that could be quickly assessed in diverse settings. We sought to develop such a risk index for 12-month suicide attempts among suicide ideators. **METHOD:** The National Comorbidity Survey Replication (NCS-R), a household survey of adults aged 18+, assessed the 12-month occurrence of suicide ideation, plans and attempts in a subsample of 5692 respondents. Retrospectively assessed correlates include history of prior suicidality, sociodemographics, parental psychopathology and 12-month DSM-IV disorders. **RESULTS:** Twelve-month prevalence estimates of suicide ideation, plans and attempts are 2.6, 0.7 and 0.4% respectively. Although ideators

with a plan are more likely to make an attempt (31.9%) than those without a plan (9.6%), 43% of attempts were described as unplanned. History of prior attempts is the strongest correlate of 12-month attempts. Other significant correlates include shorter duration of ideation, presence of a suicide plan, and several sociodemographic and parental psychopathology variables. Twelve-month disorders are not powerful correlates. A four-category summary index of correlates is strongly related to attempts among ideators [area under the receiver operator characteristic curve (AUC)=0.88]. The distribution (conditional probability of attempt) of the risk index is: 19.0% very low (0.0%), 51.1% low (3.5%), 16.2% intermediate (21.3%), and 13.7% high (78.1%). Two-thirds (67.1%) of attempts were made by ideators in the high-risk category. **CONCLUSIONS:** A short, preliminary risk index based on retrospectively reported responses to fully structured questions is strongly correlated with 12-month suicide attempts among ideators, with a high concentration of attempts among high-risk ideators

13) **Borges G**, **Medina-Mora, ME,** Wang, P.S., **Lara, C.,** Berglund, P., Walters, E. (2006) Treatment and adequacy of treatment for mental disorder among respondents to the Mexico National Comorbidity Survey. American Journal of Psychiatry 2006;163(8):1371-8. **. 808**

OBJECTIVE: This study described the rate and adequacy of mental health service use among participants in the Mexico National Comorbidity Survey and the correlates of any 12-month treatment and of adequate treatment.. **METHOD:** The authors conducted face-to-face household surveys of a probability sample of individuals ages 18 to 65 years in the noninstitutionalized population living in urban areas of Mexico from 2001 to 2002. The use of mental health services and 12-month DSM-IV disorders was assessed with the World Mental Health version of the World Health Organization Composite International Diagnostic Interview. The rates and correlates of any service use and the adequacy of treatment were identified in logistic regression analyses, taking into account the complex sample design and weighting process. **RESULTS:** The data reported here were based on 2,362 interviews. Fewer than one in five respondents with any psychiatric disorder during the last 12 months used any service during the prior year. The rates of service use by those with mood disorders were somewhat higher. About one in every two respondents who used services received minimally adequate care. **CONCLUSIONS:** The authors found large unmet needs for mental health services among those with psychiatric disorders. Those with mental illness and those who deliver or seek to improve mental health care in Mexico face enormous challenges.

14) **Medina-Mora, ME, Borges G**, Fleiz, C., **Benjet, C.**, Rojas, E., Zambrano, J., Villatoro, J., Aguilar-Gaxiola, S. (2006). Prevalence and correlates of drug use disorders in Mexico. The Pan American Journal of Public Health, 19(4), 265-276.

OBJETIVO. Describir la prevalencia de trastornos relacionados con el consumo de drogas, sus factores asociados, y la utilización de servicios terapéuticos especializados por usuarios de drogas en la población urbana de México entre los 18 y 65 años de edad. **MÉTODOS.** Los datos se reunieron en 2001 y 2002 mediante la Encuesta Nacional de Epidemiologia Psiquiátrica de México. El muestreo se llevó a cabo por estratificación probabilística de seis regiones geográficas del país en un proceso polietápico que comprendió, en orden sucesivo, áreas censuales, manzanas urbanas, grupos de domicilios, e individuos. Los datos se ponderaron teniendo en cuenta la probabilidad de selección y el porcentaje de respuesta. La información se recogió mediante una versión computadorizada de la edición de la Entrevista Diagnóstica Internacional Compuesta usada para la Encuesta Mundial de Salud Mental. El porcentaje de respuesta ponderado para individuos fue de 76,6. **RESULTADOS.** En general, 2,3% de la población declaró haber incurrido en el consumo ilícito de drogas durante los 12 meses anteriores a la encuesta; la marijuana y la cocaína fueron las sustancias consumidas con mayor frecuencia. La baja escolaridad mostró una asociación significativa con el consumo, el abuso y la dependencia de drogas. El consumo de cualquier tipo de droga tuvo una frecuencia significativamente mayor en personas pertenecientes al grupo de edad más joven (18–29 años), en varones, o en habitantes de la parte noroccidental

del país. De la muestra en general, 1,4% había abusado o dependido de las drogas en algún momento de la vida, y ello ocurrió con mucha más frecuencia en varones (2,9%) que en mujeres (0,2%). La prevalencia del abuso o de la dependencia de drogas en el transcurso de los 12 meses anteriores a la encuesta fue de 0,4% en general (0,9% en varones y 0,0% en mujeres). La tasa de tratamiento durante los 12 meses anteriores a la encuesta entre quienes cumplían los criterios de abuso o dependencia durante ese período fue de 17,1%; 14,8% fueron atendidos en centros de tratamiento especializados, y 2,8% dijeron haber asistido a grupos de autoayuda. **CONCLUSIONES.** Un número apreciable de mexicanos tienen un trastorno relacionado con el consumo de drogas, pero la demanda de un tratamiento es poca, en parte debido a temor al estigma. Según nuestros resultados, urge organizar los servicios especializados para personas con trastornos vinculados al abuso de sustancias en función de la prevalencia de la dependencia de las diversas sustancias y de la variación que muestra esta prevalencia en las distintas regiones del país.

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15) **Borges G**, Wang, P.S., **Medina-Mora, ME, Lara, C.,** Chiu, W.T. (2007). Delay of first treatment of mental and substance use disorders in Mexico. American Journal of Public Health, 97(9), 1638-43.

OBJECTIVES: We studied failure and delay in making initial treatment contact after the first onset of a mental or substance use disorder in Mexico as a first step to understanding barriers to providing effective treatment in Mexico. **METHODS:** Data were from the Mexican National Comorbidity Survey (2001-2002), a representative, face-to-face household survey of urban residents aged 18 to 65 years. The age of onset for disorders was compared with the age of first professional treatment contact for each lifetime disorder (as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition). **RESULTS:** Many people with lifetime disorders eventually made treatment contact, although the proportions varied for mood (69.9%), anxiety (53.2%), and substance use (22.1%) disorders. Delays were long: 10 years for substance use disorders, 14 years for mood disorders, and 30 years for anxiety disorders. Failure and delay in making initial treatment contact were associated with earlier ages of disorder onset and being in older cohorts. **CONCLUSIONS:** Failure to make prompt initial treatment contact is an important reason explaining why there are unmet needs for mental health care in Mexico. Meeting these needs will likely require expansion and optimal allocation of resources as well as other interventions

16) **Borges G**, Nock, M.K., **Medina-Mora, ME, Lara, C.,** Chiu, W.T., Kessler, R.C. (2007). The epidemiology of suicide-related outcomes in Mexico. Suicide and Life-Threatening Behavior, 37(6), 627-640. **.**

ABSTRACT: Nationally representative data from the Mexican National Comorbidity Survey are presented on the lifetime prevalence and age-of-onset (AOO) distributions of suicide ideation, plan and attempt and on temporally prior demographic and DSM-IV psychiatric risk factors. Lifetime ideation was reported by 8.1% of respondents, while 3.2% reported a lifetime plan and 2.7% a lifetime suicide attempt. Onset of all outcomes was highest in adolescence and early adulthood. The risk of transition from suicide ideation to plan and attempt was highest within the first year of onset of ideation. The presence of one or more temporally prior DSM-IV/CIDI (Composite International Diagnostic Instrument) disorder was strongly related to each suicide-related outcome. Suicidal outcomes are prevalent, have an early AOO, and are strongly related to temporally prior mental disorders in Mexico. Given the early AOO, intervention efforts need to focus more than currently on children and adolescents with mental disorders to be effective in prevention.

17) **Borges G**, **Medina-Mora, ME,** Breslau, J., Aguilar-Gaxiola, S. (2007). The effect of migration to the US on substance use disorders among return migrants and Mexican families of migrants. American Journal of Public Health, 97(10), 1847-1851.

OBJECTIVES: We examined the association between substance use disorders and migration to the United States in a nationally representative sample of the Mexican population. **METHODS:** We used the World Mental Health version of the Composite International Diagnostic Interview to conduct structured, computer-assisted, face-to-face interviews with a cross-sectional sample of household residents aged 18 to 65 years who lived in Mexico in cities with a population of at least 2500 people in 2001 and 2002. The response rate was 76.6%, with 5826 respondents interviewed. **RESULTS:** Respondents who had migrated to the United States and respondents who had family members who migrated in the United States were more likely to have used alcohol, marijuana, or cocaine at least once in their lifetime; to develop a substance use disorder; and to have a current (in the past 12 months) substance use disorder than were other Mexicans.
CONCLUSIONS: International migration appears to play a large role in transforming substance use norms and pathology in Mexico. Future studies should examine how networks extending over international boundaries influence substance use.

18) **Borges G**, **Medina-Mora, ME, Lara, C.,** Zambrano, J., **Benjet, C.**, Fleiz, C. (2007). Alcohol use and alcohol use disorders in Mexico. Contemporary Drug Problems, 34, 389-410.

ABSTRACT: We provide information on prevalence rates of alcohol use and alcohol use disorders, as well as service utilization among persons that present with alcohol abuse or dependence in Mexico. The data were collected in 2001 and 2002 in the Mexico National Comorbidity Survey. The sample design was stratified, using a computerized version of the Composite International Diagnostic Interview. The response rate was 76.6%, for a total of 5.826 interviews; 86.2% of the population had ever tried alcohol and 43.5% drank in the past 12 months. Lifetime abuse or dependence was reported by 7.6% of the population, and in the past 12 months by 2.0%. Only 30.9% of all respondents with an alcohol use disorder had ever used any treatment service use is a matter of great concern in Mexico. Extension of services, increasing the number of health professionals in this area and more diverse and appropriate treatment programs are urgently needed.
AUTHORS' NOTE: Funding for this study came from the Ramon de la Fuente National Institute of Psychiatry (grant 4280) and the National Council on Science and Technology of Mexico (grant G30544-H),with supplemental support from the Pan American Health Organization and the Pfizer Foundation, Mexico. The Mexican National Comorbidity Survey was carried out in conjunction with the World Health Organization's World Mental Health (WMH) Survey Initiative. We thank the WMH staff for assistance with instrumentation, fieldwork and data analysis. These activities were supported by the United States National Institute of Mental Health (grant ROIMH070884), the John D. and Catherine T. Macarthur Foundation, the Pfizer Foundation, the United States Public Health Service (grants RI3-MH069864 AND R01 DA016558), the Fogarty Internantinal Center (FIRCA grant R0ITW006481), the Pan American Health Organization. Eli Lilly and Company, Ortho-McNeil Pharmaceutical, GlaxoSmithKline and Bristol-Myers Squibb.

19) Breslau, J., Aguilar-Gaxiola, S., **Borges G**, Castilla-Puentes, R.C., Kendler, K.S., **Medina-Mora, ME,** Su, M., Kessler, R.C. (2007). Mental disorders among English-speaking Mexican immigrants to the US compared to a national sample of Mexicans. Psychiatry Research, 151(1-2), 115-122.

ABSTRACT: Our understanding of the relationship between immigration and mental health can be advanced by comparing immigrants pre- and post-immigration with residents of the immigrants' home countries. DSM-IV anxiety and mood disorders were assessed using identical methods in representative samples of English-speaking Mexican immigrants to the US, a subsample of the US National Comorbidity Survey Replication (NCSR), and Mexicans, the Mexican National Comorbidity Survey (MNCS). Retrospective reports of age of onset of disorders and, in the immigrant sample, age of immigration were analyzed to study the associations of pre-existing mental disorders with immigration and of immigration with the subsequent onset and persistence of mental disorders. Pre-

existing anxiety disorders predicted immigration (OR=3.0; 95% CI 1.2-7.4). Immigration predicted subsequent onset of anxiety (OR=1.9; 95% CI 0.9-3.9) and mood (OR=2.3; 95% CI 1.3-4.0) disorders and persistence of anxiety (OR=3.7 95% CI 1.2-11.2) disorders. The results are inconsistent with the "healthy immigrant" hypothesis (that mentally healthy people immigrate) and partly consistent with the "acculturation stress" hypothesis (i.e., that stresses of living in a foreign culture promote mental disorder). Replication and extension of these results in a larger bi-national sample using a single field staff are needed.

20) Breslau, J., Aguilar-Gaxiola, S., **Borges G**, Kendler, K.S., Su, M., Kessler, R.C. (2007). Risk for psychiatric disorder among immigrants and their US-born descendants: Evidence from the National Comorbidity Survey-Replication. Journal of Nervous and Mental Disease, 195(3), 189-195. .

ABSTRACT: Although previous research has consistently documented that immigrants to the United States have better mental health than US natives, little is known about why this difference occurs. DSM-IV anxiety, mood, impulse control, and substance use disorders were assessed in a nationally representative survey of the US household population, the National Comorbidity Survey Replication. Differences in risk for disorder between immigrants (N = 299) and 5124 natives (N = 5124) were examined using discrete time survival models. Differences were estimated by generation, age of immigration, and duration of residence in the United States. Immigrants had lower lifetime risk of disorder than natives (OR = 0.7; 95% CI, 0.5-0.9). Risk was equally large for natives who were children of immigrants as for natives of subsequent generations. For mood and impulse control disorders, risk equal to that of natives was also found among immigrants who arrived in the United States as children (12 years of age or younger). Immigrants had lower risk than natives prior to arrival in the United States, but there was a trend toward equalization of risk with longer duration of residence in the United States. Differences in risk for disorder emerge within a single generation following immigration, consistent with a strong effect of environmental factors on changes in risk among immigrant populations. This pattern is consistent with either of two causal processes, one involving early socialization in the United States and the other involving postmigration experiences among immigrants who arrive in the United States as adults.

21) Demyttenaere, K., Bruffaerts, R., Lee, S., Posada-Villa, J., Kovess, V., Angermeyer, M.C., Levinson, D., de Girolamo, G., Nakane, H., Mneimneh, Z., **Lara, C.,** de Graaf, R., Scott, K.M., Gureje, O., Stein, D.J., Haro, J.M., Bromet, E.J., Kessler, R.C., Alonso, J., Von Korff, M. (2007). Mental disorders among persons with chronic back or neck pain: Results from the World Mental Health Surveys. Pain, 129(3), 332-342. .

ABSTRACT: This paper reports cross-national data concerning back or neck pain comorbidity with mental disorders. We assessed (a) the prevalence of chronic back/neck pain, (b) the prevalence of mental disorders among people with chronic back/neck pain, (c) which mental disorder had strongest associations with chronic back/neck pain, and (d) whether these associations are consistent across countries. Population surveys of community-dwelling adults were carried out in 17 countries in Europe, the Americas, the Middle East, Africa, Asia, and the South Pacific (N=85,088). Mental disorders were assessed with the Composite International Diagnostic Interview, third version (CIDI 3.0): anxiety disorders (generalized anxiety disorder, panic disorder/agoraphobia, posttraumatic stress disorder, and social anxiety disorder), mood disorders (major depression and dysthymia), and alcohol abuse or dependence. Back/neck pain was ascertained by self-report. Between 10% and 42% reported chronic back/neck pain in the previous 12 months. After adjusting for age and sex, mental disorders were more common among persons with back/neck pain than among persons without. The pooled odds ratios were 2.3 [95% CI=2.1-2.5] for mood disorders, 2.2 [95% CI=2.1-2.4] for anxiety disorders, and 1.6 [95% CI=1.4-1.9] for alcohol abuse/dependence in people with versus without chronic back/neck pain. Although prevalence rates of back/neck pain were generally lower than in previous reports, mental disorders were associated with chronic back/neck pain. The strength of association was stronger for mood and anxiety disorders than for alcohol abuse/dependence. The

association of mental disorders with back/neck pain showed a consistent pattern across both developed and developing countries.

22) Fayyad, J., de Graaf, R., Kessler, R.C., Alonso, J., Angermeyer, M., Demyttenaere, K., de Girolamo, G., Haro, J.M., Jin, R., Karam, E.G., **Lara, C.,** Lepine, J.P., Ormel, J., Posada-Villa, J., Zaslavsky, A. (2007). The cross national prevalence and correlates of ADHD: Results from the WHO World Mental Health Surveys. The British Journal of Psychiatry, 190, 402-409. .

BACKGROUND: Little is known about the epidemiology of adult attention-deficit hyperactivity disorder (ADHD). **AIMS:** To estimate the prevalence and correlates of DSM-IV adult ADHD in the World Health Organization World Mental Health Survey Initiative. **METHOD:** An ADHD screen was administered to respondents aged 18-44 years in ten countries in the Americas, Europe and the Middle East (n=11422). Masked clinical reappraisal interviews were administered to 154 US respondents to calibrate the screen. Multiple imputation was used to estimate prevalence and correlates based on the assumption of cross-national calibration comparability. **RESULTS:** Estimates of ADHD prevalence averaged 3.4% (range 1.2-7.3%), with lower prevalence in lower-income countries (1.9%) compared with higher-income countries (4.2%). Adult ADHD often co-occurs with other DSM-IV disorders and is associated with considerable role disability. Few cases are treated for ADHD, but in many cases treatment is given for comorbid disorders. **CONCLUSIONS:** Adult ADHD should be considered more seriously in future epidemiological and clinical studies than is currently the case

23) Fleiz, C., **Borges G**, Rojas, E., **Benjet, C.**, **Medina-Mora, M.E.** (2007). Uso de alcohol, tabaco y drogas en población mexicana, un estudio de cohortes. Salud Mental, 30(5), 63-72. .

RESUMEN: El alcohol es la sustancia de mayor uso (86%). Le sigue el tabaco (60%), que alcanza los mayores niveles de consumo en la vida en el grupo de 45-54 años (63%). El uso extramédico de drogas, incluidas las drogas ilegales y las drogas médicas sin prescripción, asciende a un 10%. El uso de cualquier droga ilegal, incluido el consumo de drogas médicas fuera de prescripción y, en particular, el de mariguana y cocaína, afecta más a los más jóvenes y la prevalencia disminuye constantemente con la edad. Un modelo de sobrevida de tiempo discreto mostró variaciones en el uso de drogas por cohorte para todas las sustancias estudiadas, incluso para el consumo de alcohol. En todos los casos, las cohortes más jóvenes están en mayor riesgo de usar sustancias y los riesgos más elevados se concentran siempre en la cohorte más joven. Las diferencias en riesgo son especialmente marcadas para el uso de cocaína, con un incremento hasta cien veces mayor en el riesgo entre los sujetos de 18-29 años. Resultados de un modelo logístico múltiple sobre factores de riesgo para el uso de sustancias mostraron que la edad sigue siendo un factor de riesgo muy importante para el uso de sustancias fuera de prescripción, así como para la mariguana y la cocaína, aunque no así para el alcohol y el tabaco. En todas las sustancias, el consumo es mucho menor para las mujeres y para las amas de casa. Discusión Se documenta un incremento en los riesgos de problemas de abuso de sustancias en las generaciones que ahora son jóvenes; estos riesgos son mayores que los que presentaban otras generaciones cuando tenían su misma edad. El inicio es acelerado en la adolescencia y se estabiliza poco antes de llegar a los 30 años de edad. La mariguana ha mantenido una edad de inicio temprana a lo largo de las generaciones. Por su parte, la cocaína muestra mayor índice de casos con un inicio más tardío; aun así, el riesgo de consumo de esta sustancia es considerablemente mayor en las cohortes más jóvenes. El análisis de sobrevida confirmó que comparadas con la cohorte de mayor edad, las cohortes más jóvenes están en mayor riesgo de usar sustancias y las diferencias en riesgo son especialmente marcadas para el uso de cocaína. El índice de consumo de tabaco y alcohol es similar a lo largo de la vida, lo que señala que el problema es endémico en el país. Estos datos reflejan tendencias ya reportadas en otros estudios y muestran que la edad sigue siendo un factor de riesgo muy importante para el uso de sustancias ilegales o de drogas médicas consumidas sin receta médica. En todas las sustancias, el consumo es mucho menor para las mujeres, así como para las amas de casa, lo que indica que prevalecen los dobles

parámetros por género. Conclusiones. Los datos de este estudio prueban la hipótesis del mayor riesgo de consumo de sustancias a que está expuesta la población joven cuando se le compara con sus padres cuando eran jóvenes y apuntan a la necesidad de incrementar las acciones para contrarrestar el efecto negativo de este fenómeno sobre su salud y sobre la sociedad.

24) Kessler, R.C., Angermeyer, M., Anthony, J.C., de Graaf, R., Demyttenaere, K., Gasquet, I., de Girolamo, G., Gluzman, S., Gureje, O., Haro, J.M., Kawakami, N., Karam, A., Levinson, D., **Medina-Mora, ME,**, Oakley Browne, M.A., Posada-Villa, J., Stein, D.J., Tsang, C.H.A., Aguilar-Gaxiola, S., Alonso, J., Lee, S., Heeringa, S., Pennell, B-E., Berglund, P.A., Gruber, M., Petukhova, M., Chatterji, S., Ustun, T.B. (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the WHO World Mental Health (WMH) Surveys. World Psychiatry: 6; 168-176 **.**

ABSTRACT: Data are presented on the lifetime prevalence, projected lifetime risk, and age-of-onset distributions of mental disorders in the World Health Organization (WHO)'s World Mental Health (WMH) Surveys. Face-to-face community surveys were conducted in seventeen countries in Africa, Asia, the Americas, Europe, and the Middle East. The combined numbers of respondents were 85,052. Lifetime prevalence, projected lifetime risk, and age of onset of DSM-IV disorders were assessed with the WHO Composite International Diagnostic Interview (CIDI), a fully-structured lay administered diagnostic interview. Survival analysis was used to estimate lifetime risk. Median and inter-quartile range (IQR) of age of onset is very early for some anxiety disorders (7-14, IQR: 8-11) and impulse control disorders (7-15, IQR: 11-12). The age-of-onset distribution is later for mood disorders (29-43, IQR: 35-40), other anxiety disorders (24-50, IQR: 31-41), and substance use disorders (18-29, IQR: 21-26). Median and IQR lifetime prevalence estimates are: anxiety disorders 4.8-31.0% (IQR: 9.9-16.7%), mood disorders 3.3-21.4% (IQR: 9.8-15.8%), impulse control disorders 0.3-25.0% (IQR: 3.1-5.7%), substance use disorders 1.3-15.0% (IQR: 4.8-9.6%), and any disorder 12.0-47.4% (IQR: 18.1-36.1%). Projected lifetime risk is proportionally between 17% and 69% higher than estimated lifetime prevalence (IQR: 28-44%), with the highest ratios in countries exposed to sectarian violence (Israel, Nigeria, and South Africa), and a general tendency for projected risk to be highest in recent cohorts in all countries. These results document clearly that mental disorders are commonly occurring. As many mental disorders begin in childhood or adolescents, interventions aimed at early detection and treatment might help reduce the persistence or severity of primary disorders and prevent the subsequent onset of secondary disorders.

25) **Lara, C., Medina-Mora, ME, Borges G**, Zambrano, J. (2007). Social cost of mental disorders: disability and work days lost. results from the mexican Survey of Psychiatric Epidemiology. Salud Mental, 30 (5), 4-11.

ABSTRACT: Introducción Hasta las últimas dos décadas del siglo pasado se subestimaba el impacto de los trastornos mentales. Semejante percepción cambió debido a dos factores: por un lado, el estudio de la carga global de la enfermedad y, por otro, la definición de los trastornos mentales según la Asociación Psiquiátrica Americana. En estos dos factores el elemento común es la inclusión del concepto de discapacidad. La discapacidad se refiere al deterioro en el funcionamiento que se espera de un sujeto de cierta edad y sexo en un contexto social, y forma parte del costo social de la enfermedad. En el estudio de la Carga Global de la Enfermedad, la depresión se consideró como la enfermedad más discapacitante y ocupó el cuarto lugar en ese estudio. Otros cuatro trastornos psiquiátricos se incluyeron también entre las 10 enfermedades más discapacitantes. En 1985, en la versión revisada de la tercera edición del Manual Diagnóstico y Estadístico de los Trastornos Mentales, la Asociación Psiquiátrica Americana incluyó el deterioro en diferentes áreas de funcionamiento como criterio diagnóstico de los trastornos mentales. En 1992, la Organización Mundial de la Salud incluyó también el deterioro de la actividad entre las pautas diagnósticas de algunos trastornos mentales. Así, el objetivo principal de este trabajo es reportar la discapacidad producida por los trastornos afectivos y los

trastornos de ansiedad identificados con mayor frecuencia en la Encuesta Nacional de Epidemiología Psiquiátrica a fin de compararla con la discapacidad producida por algunas enfermedades crónicas no psiquiátricas. Material y métodos**.** Los datos analizados en este trabajo se recabaron durante la Encuesta Nacional de Epidemiología Psiquiátrica. Los diagnósticos se basan en el DSM-IV. La entrevista se realizó con una versión computarizada de la Entrevista Internacional Compuesta de Diagnóstico (CAPI, versión 15 certificada del CIDI). También se evaluó la prevalencia en los últimos 12 meses de las siguientes enfermedades crónicas no psiquiátricas: diabetes, artritis, hipertensión, cefalea, dolor de espalda y cuello, y otras enfermedades dolorosas. Todas éstas se identifican globalmente como "enfermedades crónicas". En este trabajo se presenta la discapacidad producida por la depresión, manía, agorafobia sin pánico, fobia social, ansiedad generalizada, trastorno de pánico y estrés postraumático, y se compara con la discapacidad producida por las enfermedades crónicas. La discapacidad se evaluó con la Escala de Discapacidad de Sheehan y el número de días productivos perdidos. Esta escala es un instrumento de autorreporte que evalúa la discapacidad en diferentes áreas. Las subescalas se promedian y se obtiene así una puntuación total que va de 0, sin deterioro en el funcionamiento, hasta 10, que indica un funcionamiento totalmente deteriorado. También se preguntó a cada entrevistado sobre el número de días en que fue totalmente incapaz de trabajar debido a un trastorno presente en los últimos 12 meses. Se hicieron 5826 entrevistas completas y los resultados se sometieron a un complejo proceso de ponderación. Los datos que se reportan se basan en los pesos de la parte 2, que utiliza un total de 2362 entrevistas. Resultados. De las cuatro áreas evaluadas, las de las relaciones con personas cercanas y la vida social fueron las más afectadas. Los trastornos que producen los niveles más elevados de discapacidad fueron la depresión (4.63 y 4.8), la fobia social (5.37 y 5.8) y el trastorno por estrés postraumático (5.61 y 5.35). La depresión tuvo el mayor impacto en el área laboral (4.88). En la puntuación total de la escala, los trastornos que produjeron mayor nivel de discapacidad fueron el estrés postraumático (5.35) y la depresión (4.72).La pregunta sobre cuántos días fueron totalmente incapaces de trabajar los entrevistados en el último año, reveló que la depresión y el trastorno de pánico fueron los trastornos por los que, en promedio, se perdieron mas días de actividad. Los días perdidos por enfermedades crónicas (6.89) fueron menos que los que se perdieron por depresión (25.51), agorafobia (18.56), ansiedad generalizada (9.5), trastorno de pánico (20) y trastorno por estrés postraumático (14.21). Discusión Los resultados más sobresalientes son los siguientes. En primer lugar, el efecto de los trastornos del estado de ánimo y de ansiedad es mayor que el efecto de algunas enfermedades crónicas no psiquiátricas. En las cuatro áreas de funcionamiento evaluadas, los trastornos psiquiátricos obtuvieron en promedio puntuaciones más elevadas que las enfermedades crónicas. En segundo lugar, debe destacarse el efecto discapacitante de un trastorno aparentemente poco grave como la fobia social. Si se considera que existen tratamientos efectivos, sobre todo para pánico y depresión, puede decirse que es posible disminuir el costo social de los trastornos del estado de ánimo y los trastornos de ansiedad. Este es el primer artículo en América Latina en que se reporta el impacto de los trastornos mentales según la discapacidad y los días de actividad perdidos que generan.

26) **Medina-Mora, ME**, **Borges G**, **Benjet, C.**, **Lara, C.,** Berglund, P.A. (2007). Psychiatric disorders in Mexico: Lifetime prevalence in a nationally representative sample. British Journal of Psychiatry, 190, 521-528.

BACKGROUND: No national data on lifetime prevalence and risk factors for DSM-IV psychiatric disorders are available in Mexico. **AIMS:** To present data on lifetime prevalence and projected lifetime risk, age at onset and demographic correlates of DSM-IV psychiatric disorders assessed in the Mexican National Comorbidity Survey. **METHOD:** The survey was based on a multistage area probability sample of non-institutionalised people aged 18-65 years in urban Mexico. The World Mental Health Survey version of the Composite International Diagnostic Interview was administered by lay interviewers. **RESULTS:** Of those surveyed, 26.1% had experienced at least one psychiatric disorder in their life and 36.4% of Mexicans will eventually experience one of these disorders. Half of the population who present with a psychiatric disorder do so by the age of 21 and younger cohorts are at

greater risk for most disorders. **CONCLUSIONS:** Our results suggest an urgent need to re-evaluate the resources allocated for the detection and treatment of psychiatric illnesses in Mexico.

27) Ormel, J., Von Korff, M., Burger, H., Scott, K., Demyttenaere, K., Huang, Y.Q., Posada-Villa, J., Pierre Lepine, J., Angermeyer, M.C., Levinson, D., de Girolamo, G., Kawakami, N., Karam, E., **Medina-Mora, ME,** Gureje, O., Williams, D., Haro, J.M., Bromet, E.J., Alonso, J., Kessler, R. (2007). Mental disorders among persons with heart disease - results from World Mental Health surveys. General Hospital Psychiatry, 29(4), 325-334.

OBJECTIVES: While depression and heart disease often co-occur in Western countries, less is known about the association of anxiety and alcohol use disorders with heart disease and about the cross-cultural consistency of this association. Consistency across emotional disorders and cultures would suggest that relatively universal mechanisms underlie the association. **METHODS:** Surveys with 18 random population samples of household-residing adults in 17 countries in Europe, the Americas, the Middle East, Africa, Asia and the South Pacific were carried out. Medically recognized heart disease was ascertained by self-report. Mental disorders were assessed with the World Mental Health Composite International Diagnostic Interview, a fully structured diagnostic interview. **RESULTS:** Specific mood and anxiety disorders occurred among persons with heart disease at rates higher than those among persons without heart disease. Adjusted for sex and age, the pooled odds ratios (95% confidence interval) were 2.1 (1.9-2.5) for mood disorders, 2.2 (1.9-2.5) for anxiety disorders and 1.4 (1.0-1.9) for alcohol abuse/dependence among persons with versus those without heart disease. These patterns were similar across countries.**CONCLUSIONS:** An excess of anxiety disorders and that of mood disorders are found among persons with heart disease. These associations hold true across countries despite substantial between-country differences in culture and mental disorder prevalence rates. These results suggest that similar mechanisms underlie the association and that a broad spectrum of mood-anxiety disorders should be considered in research on the comorbidity of mental disorders and heart disease.

28) Scott, K.M., Bruffaerts, R., Tsang, A., Ormel, J., Alonso, J., Angermeyer, M.C., **Benjet, C.**, Bromet, E., de Girolamo, G., de Graaf, R., Gasquet, I., Gureje, O., Haro, J.M., He, Y., Kessler, R.C., Levinso,n D., Mneimneh, Z.N., Oakley, Browne, M.A., Posada-Villa, J., Stein, D.J., Takeshima, T., Von Korff, M. (2007). Depression-anxiety relationships with chronic physical conditions: results from the World Mental Health Surveys. Journal of Affective Disorders. 103: 113-120.

BACKGROUND: Prior research on the association between affective disorders and physical conditions has been carried out in developed countries, usually in clinical populations, on a limited range of mental disorders and physical conditions, and has seldom taken into account the comorbidity between depressive and anxiety disorders. **METHODS:** Eighteen general population surveys were carried out among adults in 17 countries as part of the World Mental Health Surveys initiative (N=42, 249). DSM-IV depressive and anxiety disorders were assessed using face-to-face interviews with the Composite International Diagnostic Interview (CIDI 3.0). Chronic physical conditions were ascertained via a standard checklist. The relationship between mental disorders and physical conditions was assessed by considering depressive and anxiety disorders independently (depression without anxiety; anxiety without depression) and conjointly (depression plus anxiety). **RESULTS:** All physical conditions were significantly associated with depressive and/or anxiety disorders but there was variation in the strength of association (ORs 1.2-4.5). Non-comorbid depressive and anxiety disorders were associated in equal degree with physical conditions. Comorbid depressive-anxiety disorder was more strongly associated with several physical conditions than were single mental disorders. **LIMITATIONS:** Physical conditions were ascertained via self report, though for a number of conditions this was self-report of diagnosis by a physician. **CONCLUSIONS:** Given the prevalence and clinical consequences of the co-occurrence of mental and physical disorders, attention to their comorbidity should remain a clinical and research priority.

29) Scott, K.M., Von Korff, M., Ormel, J., Zhang, M.Y., Bruffaerts, R., Alonso, J., Kessler, R.C., Tachimori, H., Karam, E., Levinson, D., Bromet, E.J., Posada-Villa, J., Gasquet, I., Angermeyer, M.C., **Borges G**, de Girolamo, G., Herman, A., Haro, J.M. (2007). Mental disorders among adults with asthma: Results from the World Mental Health Survey. General Hospital Psychiatry, 29(2), 123-133. .

OBJECTIVE: Our objectives were (a) to determine which common mental disorders are associated with asthma in the general population after controlling for age and sex, and (b) to assess whether the associations of mental disorders with asthma are consistent across diverse countries. **METHOD:** Eighteen population surveys of household-residing adults were carried out in 17 countries (N=85,088). Mental disorders were assessed with the Composite International Diagnostic Interview 3.0, a fully structured diagnostic interview. The disorders considered here are 12-month anxiety disorders (generalized anxiety disorder, panic disorder/agoraphobia, posttraumatic stress disorder and social phobia), depressive disorders (dysthymia and major depressive disorder) and alcohol use disorders (abuse and dependence). Asthma was ascertained by self-reports of lifetime diagnosis among a subsample (n=42,697). **RESULTS:** Pooled estimates of age-adjusted and sex-adjusted odds of mental disorders among persons with asthma relative to those without asthma were 1.6 [95% confidence interval (95% CI)=1.4, 1.8] for depressive disorders, 1.5 (95% CI=1.4, 1.7) for anxiety disorders and 1.7 (95% CI=1.4, 2.1) for alcohol use disorders. **CONCLUSION:** This first cross-national study of the relationship between asthma and mental disorders confirms that a range of common mental disorders occurs with greater frequency among persons with asthma. These results attest to the importance of clinicians in diverse settings being alert to the co-occurrence of these conditions.

30) Wang, P.S., Aguilar-Gaxiola, E., Alonso, J., Angermeyer, M.A., **Borges G**, Bromet, E.J., Bruffaerts, R., de Girolamo, G., de Graaf, R., Gureje, O., Haro, J.M., Karam, E.G., Kessler, R.C., Kovess, V., Lane, M.C., Lee, S., Levinson, D., Ono, Y., Petukhova, M., Posada-Villa, J., Seedat, S., Wells, J.E. (2007). Worldwide use of mental health services for anxiety, mood, and substance disorders: Results from 17 countries in the WHO World Mental Health (WMH) Surveys. The Lancet: 370(9590): 841-850. .

BACKGROUND: Mental disorders are major causes of disability worldwide, including in the low-income and middle-income countries least able to bear such burdens. We describe mental health care in 17 countries participating in the WHO world mental health (WMH) survey initiative and examine unmet needs for treatment.
METHODS: Face-to-face household surveys were undertaken with 84,850 community adult respondents in low-income or middle-income (Colombia, Lebanon, Mexico, Nigeria, China, South Africa, Ukraine) and high-income countries (Belgium, France, Germany, Israel, Italy, Japan, Netherlands, New Zealand, Spain, USA). Prevalence and severity of mental disorders over 12 months, and mental health service use, were assessed with the WMH composite international diagnostic interview. Logistic regression analysis was used to study sociodemographic predictors of receiving any 12-month services. **FINDINGS:** The number of respondents using any 12-month mental health services (57 [2%; Nigeria] to 1477 [18%; USA]) was generally lower in developing than in developed countries, and the proportion receiving services tended to correspond to countries' percentages of gross domestic product spent on health care. Although seriousness of disorder was related to service use, only five (11%; China) to 46 (61%; Belgium) of patients with severe disorders received any care in the previous year. General medical sectors were the largest sources of mental health services. For respondents initiating treatments, 152 (70%; Germany) to 129 (95%; Italy) received any follow-up care, and one (10%; Nigeria) to 113 (42%; France) received treatments meeting minimum standards for adequacy. Patients who were male, married, less-educated, and at the extremes of age or income were treated less.
INTERPRETATION: Unmet needs for mental health treatment are pervasive and especially concerning in less-developed countries. Alleviation of these unmet needs will require expansion and optimum allocation of treatment resources

31) Wang, P.S., Angermeyer, M., **Borges G**, Bruffaerts, R., Chiu, W.T., de Girolamo, G., Fayyad, J., Gureje, O., Haro, J.M., Huang, Y-Q., Kessler, R.C., Kovess, V., Levinson, D., Nakane, Y., Oakley Browne, M.A., Ormel, J., Posada-Villa, J., Aguilar-Gaxiola, S., Alonso, J., Lee, S., Heeringa, S., Pennell, B-E., Chatterji, S., Ustun, T.B. (2007). Delay and failure in treatment seeking after first onset of mental disorders in the WHO World Mental Health (WMH) Survey Initiative. World Psychiatry: 6; 177-185. .

ABSTRACT: Data are presented on patterns of failure and delay in making initial treatment contact after first onset of a mental disorder in 15 countries in the World Health Organization (WHO)'s World Mental Health (WMH) Surveys. Representative face-to-face household surveys were conducted among 76,012 respondents aged 18 and older in Belgium, Colombia, France, Germany, Israel, Italy, Japan, Lebanon, Mexico, the Netherlands, New Zealand, Nigeria, People's Republic of China (Beijing and Shanghai), Spain, and the United States. The WHO Composite International Diagnostic Interview (CIDI) was used to assess lifetime DSM-IV anxiety, mood, and substance use disorders. Ages of onset for individual disorders and ages of first treatment contact for each disorder were used to calculate the extent of failure and delay in initial help seeking. The proportion of lifetime cases making treatment contact in the year of disorder onset ranged from 0.8 to 36.4% for anxiety disorders, from 6.0 to 52.1% for mood disorders, and from 0.9 to 18.6% for substance use disorders. By 50 years, the proportion of lifetime cases making treatment contact ranged from 15.2 to 95.0% for anxiety disorders, from 7.9 to 98.6% for mood disorders, and from 19.8 to 86.1% for substance use disorders. Median delays among cases eventually making contact ranged from 3.0 to 30.0 years for anxiety disorders, from 1.0 to 14.0 years for mood disorders, and from 6.0 to 18.0 years for substance use disorders. Failure and delays in treatment seeking were generally greater in developing countries, older cohorts, men, and cases with earlier ages of onset. These results show that failure and delays in initial help seeking are pervasive problems worldwide. Interventions to ensure prompt initial treatment contacts are needed to reduce the global burdens and hazards of untreated mental disorders

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32) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** (2008). DSM-IV Personality disorders in Mexico: results from a general population survey. Revista Brasileira de Psiquitria, 30(3), 227-34.

OBJETIVO: Este trabajo presenta las primeras estimaciones poblacionales de la prevalencia de los trastornos de personalidad y sus correlatos en la población mexicana. **MÉTODO**: Se aplicó un tamizaje con base en el International Personality Disorder Examination a una muestra representativa de la población adulta mexicana en áreas urbanas (n = 2362) como parte de la Encuesta Mexicana Nacional de Epidemiología Psiquiátrica, validada con evaluaciones clínicas realizadas en los Estados Unidos. **RESULTADOS**: Se implementó un método de imputación múltiple para estimar la prevalencia y los correlatos de los trastornos de personalidad en la muestra mexicana proporcionando una prevalencia de 4.6% Grupo A, 1.6% Grupo B, 2.4% Grupo C, y 6.1% cualquier trastorno de personalidad. Todos los grupos de trastornos de personalidad fueron significativamente comórbidos con los trastornos del Eje I del DSM-IV. Una de cada cinco personas con un trastorno de Eje-I en México presenta un trastorno de personalidad comórbido y casi la mitad de aquellos con un trastorno de personalidad presenta un trastorno del Eje I. **CONCLUSIONES**: Asociaciones modestas de trastornos de personalidad con discapacidad y asociaciones mayores con la utilización de servicios se debe a la comorbidad con el Eje-I. El impacto de los trastornos de personalidad en la salud pública reside en su comorbilidad con los trastornos del Eje-I y no en su impacto directo sobre el funcionamiento o la búsqueda de ayuda.

33) **Borges G**, Angst, J., Nock, M.K., Ruscio, A.M., Kessler, R.C. (2008). Risk factors for the incidence and persistence of suicide-related outcomes: A 10-year follow-up study using the National Comorbidity Surveys. Journal of Affective Disorders 105(1-3), 25-33. .

BACKGROUND: We report prospective associations of baseline risk factors with the first onset and persistence of suicide-related outcomes (SROs; ideation, plans, gestures, and attempts) over a 10-year interval among respondents who participated in both the 1990-02 National Comorbidity Survey (NCS) and the 2000-02 National Comorbidity Survey follow-up (NCS-2). **METHODS:** A total of 5001 NCS respondents were re-interviewed (87.6% of baseline sample) in the NCS-2. Three sets of baseline (NCS) risk factors were considered as predictors of the first onset and persistence of SROs: socio-demographics, lifetime DSM-III-R disorders, and SROs. **RESULTS:** New onsets included 6.2% suicide ideation, 2.3% plan, 0.7% gesture, and 0.9% attempts. More than one-third of respondents with a baseline history of suicide ideation continued to have suicide ideation at some time over the intervening decade. Persistence was lower for other SROs. The strongest predictors of later SROs were baseline SROs. Prospective associations of baseline mental disorders with later SROs were largely limited to the onset and persistence of ideation. **LIMITATIONS:** Although data were gathered prospectively, they were based on retrospective reports at both baseline and follow-up. **CONCLUSIONS:** Baseline history of SROs explained much of the association of mental disorders with later SROs. It is important clinically to note that many of the risk factors known to predict onset of SROs also predict persistence of SROs.

34) Breslau, J., Aguilar-Gaxiola, S., **Borges G**, Castilla-Puentes, R.C., Kendler, K.S., **Medina-Mora, ME,** Su, M., Kessler, R.C. (2008). Mental disorders among English-speaking Mexican immigrants to the US compared to a national sample of Mexicans. Psychiatry Research, 151(1-2), 115-22. **.**

ABSTRACT: Our understanding of the relationship between immigration and mental health can be advanced by comparing immigrants pre- and post-immigration with residents of the immigrants' home countries. DSM-IV anxiety and mood disorders were assessed using identical methods in representative samples of English-speaking Mexican immigrants to the US, a subsample of the US National Comorbidity Survey Replication (NCSR), and Mexicans, the Mexican National Comorbidity Survey (MNCS). Retrospective reports of age of onset of disorders and, in the immigrant sample, age of immigration were analyzed to study the associations of pre-existing mental disorders with immigration and of immigration with the subsequent onset and persistence of mental disorders. Pre-existing anxiety disorders predicted immigration (OR=3.0; 95% CI 1.2-7.4). Immigration predicted subsequent onset of anxiety (OR=1.9; 95% CI 0.9-3.9) and mood (OR=2.3; 95% CI 1.3-4.0) disorders and persistence of anxiety (OR=3.7 95% CI 1.2-11.2) disorders. The results are inconsistent with the "healthy immigrant" hypothesis (that mentally healthy people immigrate) and partly consistent with the "acculturation stress" hypothesis (i.e., that stresses of living in a foreign culture promote mental disorder). Replication and extension of these results in a larger bi-national sample using a single field staff are needed.

35) Degenhardt, L., Chiu, W.T., Sampson, N., Kessler, R.C., Anthony, J.C., Angermeyer, M., Bruffaerts, R., de Girolamo, G., Gureje, O., Huang, Y., Karam, A., Kostyuchenko, S., Lepine, J.P., **Medina-Mora, ME,** Neumark, Y., Ormel, J., Pinto-Meza, A., Posada-Villa, J., Stein, D.J., Takeshima, T., Wells, J..E (2008). Toward a global view of alcohol, tobacco, cannabis, and cocaine use: Findings from the WHO World Mental Health Surveys. PLoS Medicine, 5(7), e141.

BACKGROUND: Alcohol, tobacco, and illegal drug use cause considerable morbidity and mortality, but good cross-national epidemiological data are limited. This paper describes such data from the first 17 countries participating in the World Health Organization's (WHO's) World Mental Health (WMH) Survey Initiative. **METHODS AND FINDINGS:** Household surveys with a combined sample size of 85,052 were carried out in the Americas (Colombia, Mexico, United States), Europe (Belgium, France, Germany, Italy, Netherlands, Spain, Ukraine), Middle East and Africa (Israel, Lebanon, Nigeria, South Africa), Asia (Japan, People's Republic of China), and Oceania (New Zealand). The WHO Composite International Diagnostic Interview (CIDI) was used to assess the prevalence and correlates of a wide variety of mental and substance disorders. This paper focuses on lifetime use and age of initiation of tobacco, alcohol, cannabis, and cocaine. Alcohol had been used by most in the Americas,

Europe, Japan, and New Zealand, with smaller proportions in the Middle East, Africa, and China. Cannabis use in the US and New Zealand (both 42%) was far higher than in any other country. The US was also an outlier in cocaine use (16%). Males were more likely than females to have used drugs; and a sex–cohort interaction was observed, whereby not only were younger cohorts more likely to use all drugs, but the male–female gap was closing in more recent cohorts. The period of risk for drug initiation also appears to be lengthening longer into adulthood among more recent cohorts. Associations with sociodemographic variables were consistent across countries, as were the curves of incidence of lifetime use.
CONCLUSIONS: Globally, drug use is not distributed evenly and is not simply related to drug policy, since countries with stringent user-level illegal drug policies did not have lower levels of use than countries with liberal ones. Sex differences were consistently documented, but are decreasing in more recent cohorts, who also have higher levels of illegal drug use and extensions in the period of risk for initiation.

36) De Graaf, R., Kessler, R.C., Fayyad, J., ten Have, M., Alonso, J., Angermeyer, M., **Borges G**, Demyttenaere, K., Gasquet, I., de Girolamo, G., Haro, J.M., Jin, R., Karam, E.G., Ormel, J., Posada-Villa, J. (2008). The prevalence and effects of Adult Attention-Deficit/hyperactivity Disorder (ADHD) on the performance of workers: Results from the WHO World Mental Health Survey Initiative. Occupational and Environmental Medicine, 65(12), 835-842.

OBJECTIVES: To estimate the prevalence and workplace consequences of adult attention-deficit/hyperactivity disorder (ADHD). **METHODS:** An ADHD screen was administered to 18-44-year-old respondents in 10 national surveys in the WHO World Mental Health (WMH) Survey Initiative (n = 7075 in paid or self-employment; response rate 45.9-87.7% across countries). Blinded clinical reappraisal interviews were administered in the USA to calibrate the screen. Days out of role were measured using the WHO Disability Assessment Schedule (WHO-DAS). Questions were also asked about ADHD treatment. **RESULTS:** An average of 3.5% of workers in the 10 countries were estimated to meet DSM-IV criteria for adult ADHD (inter-quartile range: 1.3-4.9%). ADHD was more common among males than females and less common among professionals than other workers. ADHD was associated with a statistically significant 22.1 annual days of excess lost role performance compared to otherwise similar respondents without ADHD. No difference in the magnitude of this effect was found by occupation, education, age, gender or partner status. This effect was most pronounced in Colombia, Italy, Lebanon and the USA. Although only a small minority of workers with ADHD ever received treatment for this condition, higher proportions were treated for comorbid mental/substance disorders. **CONCLUSIONS:** ADHD is a relatively common condition among working people in the countries studied and is associated with high work impairment in these countries. This impairment, in conjunction with the low treatment rate and the availability of cost-effective therapies, suggests that ADHD would be a good candidate for targeted workplace screening and treatment programs.

37) Gureje, O., Von Korff, M., Kola, L., Demyttenaere, K., He, Y., Posada-Villa, J., Lepine, J.-P., Angermeyer, M., Levinson, D., de Girolamo, G., Iwata, N., Karam, A., **Borges G**, de Graaf, R., Oakley Browne, M., Stein, D., Bromet, E., Kessler, R.C., Alonso, J. (2008). The relation between multiple pains and mental disorders: Results from the World Mental Health Surveys. Pain, 135, 82-91.

ABSTRACT: It is unclear whether differences exist in the prevalence of mood, anxiety and alcohol use disorders among persons with multiple pain conditions compared with those with single pain problems. We conducted population surveys in 17 countries in Europe, the Americas, the Middle East, Africa, Asia, and the South Pacific. Participants were community-dwelling adults (N=85,088). Mental disorders were assessed with the Composite International Diagnostic Interview. Pain was assessed by self-report. Both multiple and single site pain problems were associated with mood and anxiety disorders, but not with alcohol abuse or dependence. In general, the prevalence of specific mood and anxiety disorders followed a linear pattern with the lowest rates found among

persons with no pain, intermediate rates among those with one pain, and highest rates among those with multi-site pain problems. Relative to persons not reporting pain, the pooled estimates of the age-sex adjusted odds ratios were 1.8 (1.7-2.0) for mood disorders and 1.9 (1.8-2.1) for anxiety disorders for persons with single site pain; 3.7 (3.3-4.1) for mood disorders and 3.6 (3.3-4.0) for anxiety disorders among those with multi-site pain. Our results indicate that the presence of multiple pain conditions was strongly and comparably associated with mood and anxiety disorders in diverse cultures. This consistent pattern of associations suggests that diffuse pain and psychiatric disorders are generally associated, rather than diffuse pain representing an idiom for expressing distress that is specific to particular cultural settings or diffuse pain solely representing a form of masked depression.

38) He, Y., Zhang, M., Lin, E. H. B., Bruffaerts, R., Posada-Villa, J., Angermeyer, M.C., Levinson, D., de Girolamo, G., Uda, H., Mneimneh, Z., **Benjet, C.**, de Graaf, R., Scott, K. M.,Gureje, O., Seedat, S., Haro, J.M., Bromet, E.J., Alonso, J., von Korff, M., Kessler, R.C. (2008) Mental disorders among persons with arthritis: results from the World Mental Health Surveys. Psychological Medicine, 38(11), 1639–50. .

BACKGROUND: Prior studies in the USA have reported higher rates of mental disorders among persons with arthritis but no cross-national studies have been conducted. In this study the prevalence of specific mental disorders among persons with arthritis was estimated and their association with arthritis across diverse countries assessed. **METHOD:** The study was a series of cross-sectional population sample surveys. Eighteen population surveys of household-residing adults were carried out in 17 countries in different regions of the world. Most were carried out between 2001 and 2002, but others were completed as late as 2007. Mental disorders were assessed with the World Health Organization (WHO) World Mental Health-Composite International Diagnostic Interview (WMH-CIDI). Arthritis was ascertained by self-report. The association of anxiety disorders, mood disorders and alcohol use disorders with arthritis was assessed, controlling for age and sex. Prevalence rates for specific mental disorders among persons with and without arthritis were calculated and odds ratios (ORs) with 95% confidence intervals were used to estimate the association. **RESULTS:** After adjusting for age and sex, specific mood and anxiety disorders occurred among persons with arthritis at higher rates than among persons without arthritis. Alcohol abuse/dependence showed a weaker and less consistent association with arthritis. The pooled estimates of the age- and sex-adjusted ORs were about 1.9 for mood disorders and for anxiety disorders and about 1.5 for alcohol abuse/dependence among persons with versus without arthritis. The pattern of association between specific mood and anxiety disorders and arthritis was similar across countries. **CONCLUSIONS:** Mood and anxiety disorders occur with greater frequency among persons with arthritis than those without arthritis across diverse countries. The strength of association of specific mood and anxiety disorders with arthritis was generally consistent across disorders and across countries.

39) Kessler, R.C., **Borges G**, Sampson, N., Miller, M., Nock, M.K. (2008). The association between smoking and subsequent suicide-related outcomes in the National Comorbidity Survey panel sample. Molecular Psychiatry. 14(12): 1132–1142. .

ABSTRACT: Controversy exists about whether the repeatedly documented associations between smoking and subsequent suicide-related outcomes (SROs; ideation, plans, gestures and attempts) are due to unmeasured common causes or to causal effects of smoking on SROs. We address this issue by examining associations of smoking with subsequent SROs with and without controls for potential explanatory variables in the National Comorbidity Survey (NCS) panel. The latter consists of 5001 people who participated in both the 1990-2002 NCS and the 2001-2003 NCS follow-up survey. Explanatory variables include sociodemographics, potential common causes (parental history of mental-substance disorders; other respondent childhood adversities) and potential mediators (respondent history of Diagnostic and Statistical Manual of Mental Disorders, 3rd edn, revised mental-substance disorders). Small gross (that is, without controls) prospective associations are found between history of

early-onset nicotine dependence and both subsequent suicide ideation and, among ideators, subsequent suicide plans. None of the baseline smoking measures, though, predicts subsequent suicide gestures or attempts among ideators. The smoking-ideation association largely disappear, but the association of early-onset nicotine dependence with subsequent suicide plans persists (odds ratio=3.0), after adjustment for control variables. However, the latter association is as strong with remitted as active nicotine dependence, arguing against a direct causal effect of nicotine dependence on suicide plans. Decomposition of the control variable effects, furthermore, suggests that these effects are due to common causes more than to mediators. These results refine our understanding of the ways in which smoking is associated with later SROs and for the most part argue against the view that these associations are due to causal effects of smoking

40) Lee, S., Tsang, A., Ruscio, A.M., Haro, J.M., Stein, D., Alonso, J., Angermeyer, M., Bromet, E., Demyttenaere, K., de Girolamo, G., de Graaf, R., Gureje, O., Iwata, N., Karam, E.G., Lepine, J-P., Levinson, D., **Medina-Mora, ME,** Oakley Browne, M.A., Posada-Villa, J., Kessler, R.C. (2008). Implications of modifying the duration requirement of generalized anxiety disorder in developed and developing countries. Psychological Medicine. 39(7): 1163–1176. **.**

BACKGROUND—A number of western studies have suggested that the 6-month duration requirement of generalized anxiety disorder (GAD) does not represent a critical threshold in terms of onset, course, or risk factors of the disorder. No study has examined the consequences of modifying the duration requirement across a wide range of correlates in both developed and developing countries. **METHODS** Population surveys were carried out in 7 developing and 10 developed countries using the WHO Composite International Diagnostic Interview (total sample size = 85,052). Prevalence of GAD was estimated using different minimum duration criteria. Age of onset, symptom persistence, subsequent mental disorders, impairment, and recovery were compared across GAD subgroups defined by different duration criteria. **RESULTS—**Lifetime prevalence estimates for GAD lasting 1 month, 3 months, 6 months, and 12 months were 7.5%, 5.24%, 4.11%, and 2.95% for developed countries and 2.65%, 1.78%, 1.47%, and 1.17% for developing countries, respectively. There was little difference between GAD of 6 months duration and GAD of shorter durations (1–2 months, 3–5 months) in symptom severity, age of onset, persistence, impairment, or comorbidity. Those with GAD lasting 12 months or more were the most severe, chronic, and impaired of the four duration subgroups.

CONCLUSION—In both developed and developing countries, the clinical profile of GAD is similar regardless of duration. The DSM-IV 6-month duration criterion is not an optimal marker of severity, impairment, or need for early treatment. Future iterations of the DSM and ICD should consider shortening the duration requirement of GAD.

41) Nock, M.K., **Borges G**, Bromet, E.J., Alonso, J., Angermeyer, M., Beautrais, A., Bruffaerts, R., Chiu, W.T., de Girolamo, G., Gluzman, S., de Graaf, R., Gureje, O., Haro, J.M., Huang, Y., Karam, E., Kessler, R.C., Lepine, J.P., Levinson, D., **Medina-Mora, ME,** Ono, Y., Posada-Villa, J., Williams, D. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. British Journal of Psychiatry, 192: 98-105. **.**

BACKGROUND: Suicide is a leading cause of death worldwide; however, the prevalence and risk factors for the immediate precursors to suicide - suicidal ideation, plans and attempts - are not wellknown, especially in low- and middle-income countries. **AIMS:** To report on the prevalence and risk factors for suicidal behaviours across 17 countries. **METHOD:** A total of 84 850 adults were interviewed regarding suicidal behaviours and socio-demographic and psychiatric risk factors. **RESULTS:** The cross-national lifetime prevalence of suicidal ideation, plans, and attempts is 9.2% (s.e.=0.1), 3.1% (s.e.=0.1), and 2.7% (s.e.=0.1). Across all countries, 60% of transitions from ideation to plan and attempt occur within the first year after ideation onset. Consistent cross-national risk factors included being female, younger, less educated, unmarried and having a mental disorder. Interestingly, the strongest diagnostic risk factors were mood disorders in high-income countries but impulse control disorders in low- and middle-income countries. **CONCLUSION:** There is cross-national variability in the

prevalence of suicidal behaviours, but strong consistency in the characteristics and risk factors for these behaviours. These findings have significant implications for the prediction and prevention of suicidal behaviours.

42) Nock, MK, **Borges, G,** Bromet, EJ, Cha, CB, Kessler, RC, Lee, S (2008). Suicide and suicidal behavior. Epidemiologic Reviews, 30, 133-154. .

ABSTRACT: Suicidal behavior is a leading cause of injury and death worldwide. Information about the epidemiology of such behavior is important for policy-making and prevention. The authors reviewed government data on suicide and suicidal behavior and conducted a systematic review of studies on the epidemiology of suicide published from 1997 to 2007. The authors' aims were to examine the prevalence of, trends in, and risk and protective factors for suicidal behavior in the United States and cross-nationally. The data revealed significant cross-national variability in the prevalence of suicidal behavior but consistency in age of onset, transition probabilities, and key risk factors. Suicide is more prevalent among men, whereas nonfatal suicidal behaviors are more prevalent among women and persons who are young, are unmarried, or have a psychiatric disorder. Despite an increase in the treatment of suicidal persons over the past decade, incidence rates of suicidal behavior have remained largely unchanged. Most epidemiologic research on suicidal behavior has focused on patterns and correlates of prevalence. The next generation of studies must examine synergistic effects among modifiable risk and protective factors. New studies must incorporate recent advances in survey methods and clinical assessment. Results should be used in ongoing efforts to decrease the significant loss of life caused by suicidal behavior.

43) Ormel, J, Petukhova, M, Chatterji, S, Aguilar-Gaxiola, S, Alonso, J, Angermeyer, MC, Bromet, EJ, Burger, H, Demyttenaere, K, de Girolamo, G, Haro, JM, Hwang, I, Karam, EG, Kawakami, N, Lepine, JP, **Medina-Mora, ME,** Posada-Villa, J, Sampson, N, Scott, K, Ustun, TB, Von Korff, M, Williams, D, Zhang, M, Kessler, RC (2008). Disability and treatment of specific mental and physical disorders across the world: Results from the WHO World Mental Health Surveys. British Journal of Psychiatry, 192, 368-375. .

BACKGROUND: Advocates of expanded mental health treatment assert that mental disorders are as disabling as physical disorders, but little evidence supports this assertion. **AIMS:** To establish the disability and treatment of specific mental and physical disorders in high-income and low- and middle-income countries. **METHOD:** Community epidemiological surveys were administered in 15 countries through the World Health Organization World Mental Health (WMH) Survey Initiative. **RESULTS:** Respondents in both high-income and low- and middle-income countries attributed higher disability to mental disorders than to the commonly occurring physical disorders included in the surveys. This pattern held for all disorders and also for treated disorders. Disaggregation showed that the higher disability of mental than physical disorders was limited to disability in social and personal role functioning, whereas disability in productive role functioning was generally comparable for mental and physical disorders. **CONCLUSIONS:** Despite often higher disability, mental disorders are under-treated compared with physical disorders in both high-income and in low- and middle-income countries

44) Scott KM; Von Korff M; Alonso J; Angermeyer MC; Bromet E; Bruffaerts R; de Girolamo G; de Graaf R; Fernandez A; Gureje O; He Y; Kessler RC; Kovess V; Levinson D; **Medina-Mora ME**, Mneimneh Z; Oakley Browne MA; Posada-Villa J; Tachimori H; Williams D. (2008). Age patterns in the prevalence of depressive/anxiety disorders with and without physical comorbidity. Psychological Medicine, 38(11), 1659-1669. .

BACKGROUND: Physical morbidity is a potent risk factor for depression onset and clearly increases with age, yet prior research has often found depressive disorders to decrease with age. This study tests the possibility that the relationship between age and mental disorders differs as a function of physical co-morbidity. **METHOD:** Eighteen general population surveys were carried out among household-residing adults as part of the World Mental Health (WMH) surveys initiative (n=42 697). DSM-IV disorders were assessed using face-to-face interviews with the Composite International Diagnostic Interview (CIDI 3.0). The effect of age was estimated for 12-month depressive and/or anxiety disorders with and without physical or pain co-morbidity, and for physical and/or pain conditions

without mental co-morbidity. **RESULTS:** Depressive and anxiety disorders decreased with age, a result that cannot be explained by organic exclusion criteria. No significant difference was found in the relationship between mental disorders and age as a function of physical/pain co-morbidity. The majority of older persons have chronic physical or pain conditions without co-morbid mental disorders; by contrast, the majority of those with mental disorders have physical/pain co-morbidity, particularly among the older age groups. **CONCLUSIONS:** CIDI-diagnosed depressive and anxiety disorders in the general population decrease with age, despite greatly increasing physical morbidity with age. Physical morbidity among persons with mental disorder is the norm, particularly in older populations. Health professionals, including mental health professionals, need to address barriers to the management of physical co-morbidity among those with mental disorders.

45) Scott, KM, Von Korff, M, Alonso, J, Angermeyer, MC, **Benjet, C,** Bruffaerts, R, de Girolamo, G, Haro, JM, Kessler, RC, Kovess, V, Ono, Y, Ormel, J, Posada-Villa, J (2008). Childhood adversity, early-onset depressive/anxiety disorders and adult-onset asthma. Psychosomatic Medicine, 70, 1035-1043. .

OBJECTIVES: To investigate a) whether childhood adversity predicts adult-onset asthma; b) whether early-onset depressive/anxiety disorders predict adult-onset asthma; and c) whether childhood adversity and early-onset depressive/anxiety disorders predict adult-onset asthma independently of each other. Previous research has suggested, but not established, that childhood adversity may predict adult-onset asthma and, moreover, that the association between mental disorders and asthma may be a function of shared risk factors, such as childhood adversity. **METHODS:** Ten cross-sectional population surveys of household-residing adults (>18 years, n = 18,303) assessed mental disorders with the Composite International Diagnostic Interview (CIDI 3.0) as part of the World Mental Health surveys. Assessment of a range of childhood family adversities was included. Asthma was ascertained by self-report of lifetime diagnosis and age of diagnosis. Survival analyses calculated hazard ratios (HRs) for risk of adult-onset (>age 20 years) asthma as a function of number and type of childhood adversities and early-onset (<age 21 years) depressive and anxiety disorders, adjusting for current age, sex, country, education, and current smoking. **RESULTS:** Childhood adversities predicted adult-onset asthma with risk increasing with the number of adversities experienced (HRs = 1.49-1.71). Early-onset depressive and anxiety disorders also predicted adult-onset asthma (HRs = 1.67-2.11). Childhood adversities and early-onset depressive and anxiety disorders both predicted adult-onset asthma after mutual adjustment (HRs = 1.43-1.91). **CONCLUSIONS:** Childhood adversities and early-onset depressive/anxiety disorders independently predict adult-onset asthma, suggesting that the mental disorder-asthma relationship is not a function of a shared background of childhood adversity.

46) Scott, K.M., Bruffaerts, R., Simon, G.E., Alonso, J., Angermeyer, M., de Girolamo, G., Demyttenaere, K., Gasquet, I., Haro, J.M., Karam, E.G., Kessler, R.C., Levinson, D., **Medina-Mora, ME,** Oakley Browne, M.A., Ormel, J., Villa, J.P., Uda, H., Von Korff, M. (2008). Obesity and mental disorders in the general population: Results from the World Mental Health Surveys. International Journal of Obesity, 32(1), 192-200. .

OBJECTIVES: (1) To investigate whether there is an association between obesity and mental disorders in the general populations of diverse countries, and (2) to establish whether demographic variables (sex, age, education) moderate any associations observed. **DESIGN:** Thirteen cross-sectional, general population surveys conducted as part of the World Mental Health Surveys initiative. **SUBJECTS:** Household residing adults, 18 years and over (n=62 277). **MEASUREMENTS:** DSM-IV mental disorders (anxiety disorders, depressive disorders, alcohol use disorders) were assessed with the Composite International Diagnostic Interview (CIDI 3.0), a fully structured diagnostic interview. Obesity was defined as a body mass index (BMI) of 30 kg/m(2) or greater; severe obesity as BMI 35+. Persons with BMI less than 18.5 were excluded from analysis. Height and weight were self-reported. **RESULTS:** Statistically significant, albeit modest associations (odds ratios generally in the range of 1.2-1.5) were observed between obesity and depressive disorders, and between obesity and anxiety disorders, in pooled data across countries. These associations were concentrated among those with severe obesity, and among females.

Age and education had variable effects across depressive and anxiety disorders. **CONCLUSIONS:** The findings are suggestive of a modest relationship between obesity (particularly severe obesity) and emotional disorders among women in the general population. The study is limited by the self-report of BMI and cannot clarify the direction or nature of the relationship observed, but it may indicate a need for a research and clinical focus on the psychological heterogeneity of the obese population.

47) Tsang, A., Von Korff, M., Lee, S., Alonso, J., Karam, E., Angermeyer, M.C., **Borges GL.G**., Bromet, E.J., de Girolamo, G., de Graaf, R., Gureje, O., Lepine, J-P., Haro, J.M., Levinson, D., Oakley Browne, M.A., Posada-Villa, J., Seedat, S., Watanabe, M. (2008). Common chronic pain conditions in developed and developing countries: Gender and age differences, and comorbidity with depression-anxiety disorders. Journal of Pain, 9(10), 883-891.

ABSTRACT: Although there is a growing body of research concerning the prevalence and correlates of chronic pain conditions and their association with mental disorders, cross-national research on age and gender differences is limited. The present study reports the prevalence by age and gender of common chronic pain conditions (headache, back or neck pain, arthritis or joint pain, and other chronic pain) in 10 developed and 7 developing countries and their association with the spectrum of both depressive and anxiety disorders. It draws on data from 18 general adult population surveys using a common survey questionnaire (N = 42,249). Results show that age-standardized prevalence of chronic pain conditions in the previous 12 months was 37.3% in developed countries and 41.1% in developing countries, with back pain and headache being somewhat more common in developing than developed countries. After controlling for comorbid chronic physical diseases, several findings were consistent across developing and developed countries. There was a higher prevalence of chronic pain conditions among females and older persons; and chronic pain was similarly associated with depression-anxiety spectrum disorders in developed and developing countries. However, the large majority of persons reporting chronic pain did not meet criteria for depression or anxiety disorder. We conclude that common pain conditions affect a large percentage of persons in both developed and developing countries. PERSPECTIVE: Chronic pain conditions are common in both developed and developing countries. Overall, the prevalence of pain is greater among females and among older persons. Although most persons reporting pain do not meet criteria for a depressive or anxiety disorder, depression/anxiety spectrum disorders are associated with pain in both developed and developing countries.

48) Von Korff, M., Crane, P.K., Alonso, J., Vilagut, G., Angermeyer, M.A., Bruffaerts, R., de Girolamo, G., Gureje, O., de Graaf, R., Huang, Y., Iwata, N., Karam, E.G., Kovess, V., **Lara, C.,** Levinson, D., Posada-Villa, J., Scott, K.M., Ormel, J. (2008 epub ahead of print). Modified WHODAS-II provides valid measure of global disability but filter items increased skewness. Journal of Clinical Epidemiology, 61(11), 1132-1143. .

OBJECTIVE: The WHODAS-II was substantially modified for use in the World Mental Health Surveys. This article considers psychometric properties and implications of filter items used to reduce respondent burden of the modified WHODAS-II. **STUDY DESIGN AND SETTING:** Seventeen surveys in 16 countries administered a modified WHODAS-II to population samples (N=38,934 adults). Modifications included introducing filter questions for four subscales and substituting questions on the number of days activity was limited for the Life Activities domain. We evaluated distributional properties, reliability, and validity of the modified WHODAS-II.
RESULTS: Most respondents (77%-99%) had zero scores on filtered subscales. Lower bound estimates of internal consistency (alpha) for the filtered subscales were typically in the 0.70s, but were higher for the Global scale. Loadings of subscale scores on a Global Disability factor were moderate to high. Correlations with the Sheehan Disability Scale were modest but consistently positive, while correlations with SF-12 Physical Component Summary were considerably higher. Cross-national variability in disability scores was observed, but

was not readily explainable. **CONCLUSIONS:** Internal consistency and validity of the modified WHODAS-II was generally supported, but use of filter questions impaired measurement properties. Group differences in modified WHODAS-II disability scores may be compared within, but not necessarily across, countries.

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49) **Lara, C**, Fayyad, J, de Graaf, R., Kessler, R.C., Aguilar-Gaxiola, S., Angermeyer, M., Demyttenaere, K., de Girolamo, G., Haro, J.M., Jin, R., Karam, E.G., Lepine, J.P., **Medina-Mora, ME,** Ormel, J., Posada-Villa, J., Sampson, N. (2009). Childhood predictors of adult ADHD: results from the WHO World Mental Health (WMH) Survey Initiative. Biological Psychiatry, 65, 46-54.

BACKGROUND: Although it is known that childhood attention-deficit/hyperactivity disorder (ADHD) often persists into adulthood, childhood predictors of this persistence have not been widely studied. **METHODS:** Childhood history of ADHD and adult ADHD were assessed in 10 countries in the World Health Organization World Mental Health Surveys. Logistic regression analysis was used to study associations of retrospectively reported childhood risk factors with adult persistence among the 629 adult respondents with childhood ADHD. Risk factors included age; sex; childhood ADHD symptom profiles, severity, and treatment; comorbid child/adolescent DSM-IV disorders; childhood family adversities; and child/adolescent exposure to traumatic events. **RESULTS:** An average of 50% of children with ADHD (range: 32.8%-84.1% across countries) continued to meet DSM-IV criteria for ADHD as adults. Persistence was strongly related to childhood ADHD symptom profile (highest persistence associated with the attentional plus impulsive-hyperactive type, odds ratio [OR]=12.4, compared with the lowest associated with the impulsive-hyperactive type), symptom severity (OR=2.0), comorbid major depressive disorder (MDD; OR=2.2), high comorbidity (>or=3 child/adolescent disorders in addition to ADHD; OR=1.7), paternal (but not maternal) anxiety mood disorder (OR=2.4), and parental antisocial personality disorder (OR=2.2). A multivariate risk profile of these variables significantly predicts persistence of ADHD into adulthood (area under the receiving operator characteristic curve=.76). **CONCLUSIONS:** A substantial proportion of children with ADHD continue to meet full criteria for ADHD as adults. A multivariate risk index comprising variables that can be assessed in adolescence predicts persistence with good accuracy.

50) Lee, S., Tsang, A., Ruscio, A.M., Haro, J.M., Stein, D., Alonso, J., Angermeyer, M., Bromet, E., Demyttenaere, K., de Girolamo, G., de Graaf, R., Gureje, O., Iwata, N., Karam, E.G., Lepine, J.P., Levinson, D., **Medina-Mora, ME,** Browne, M.O., Posada-Villa, J., and Kessler, R.C. (2009). Implications of modifying the duration requirement of generalized anxiety disorder in developed and developing countries. Psychological Medicine 39(7), 1163-1176.

BACKGROUND: A number of western studies have suggested that the 6-month duration requirement of generalized anxiety disorder (GAD) does not represent a critical threshold in terms of onset, course, or risk factors of the disorder. No study has examined the consequences of modifying the duration requirement across a wide range of correlates in both developed and developing countries. **METHOD:** Population surveys were carried out in seven developing and 10 developed countries using the WHO Composite International Diagnostic Interview (total sample=85,052). Prevalence and correlates of GAD were compared across mutually exclusive GAD subgroups defined by different minimum duration criteria.

RESULTS: Lifetime prevalence estimates for GAD lasting 1 month, 3 months, 6 months and 12 months were 7.5%, 5.2%, 4.1% and 3.0% for developed countries and 2.7%, 1.8%, 1.5% and 1.2% for developing countries, respectively. There was little difference between GAD of 6 months' duration and GAD of shorter durations (1-2 months, 3-5 months) in age of onset, symptom severity or persistence, co-morbidity or impairment. GAD lasting >or=12 months was the most severe, persistently symptomatic and impaired subgroup. **CONCLUSIONS:** In both

developed and developing countries, the clinical profile of GAD is similar regardless of duration. The DSM-IV 6-month duration criterion excludes a large number of individuals who present with shorter generalized anxiety episodes which may be recurrent, impairing and contributory to treatment-seeking. Future iterations of the DSM and ICD should consider modifying the 6-month duration criterion so as to better capture the diversity of clinically salient anxiety presentations.

51) Lee, S., Tsang, A., Breslau, J., Aguilar-Gaxiola, S., Angermeyer, M., **Borges G**, Bromet, E.,Bruffaerts, R., de Girolamo, G., Fayyad, J., Gureje, O., Haro, J.M., Kawakami, N., Levinson, D., Oakley Browne, M.A., Ormel, J., Posada-Villa, J., Williams, D.R., Kessler, R.C. (2009). Mental disorders and termination of education in high-income and middle-income countries: epidemiological study. British Journal of Psychiatry, 194, 411-417. .

BACKGROUND: Studies of the impact of mental disorders on educational attainment are rare in both high-income and low- and middle-income (LAMI) countries. **AIMS:** To examine the association between early-onset mental disorder and subsequent termination of education. **METHOD:** Sixteen countries taking part in the World Health Organization World Mental Health Survey Initiative were surveyed with the Composite International Diagnostic Interview (n=41 688). Survival models were used to estimate associations between DSM-IV mental disorders and subsequent non-attainment of educational milestones. **RESULTS:** In high-income countries, prior substance use disorders were associated with non-completion at all stages of education (OR 1.4-15.2). Anxiety disorders (OR=1.3), mood disorders (OR=1.4) and impulse control disorders (OR=2.2) were associated with early termination of secondary education. In LAMI countries, impulse control disorders (OR=1.3) and substance use disorders (OR=1.5) were associated with early termination of secondary education. **CONCLUSIONS:** Onset of mental disorder and subsequent non-completion of education are consistently associated in both high-income and LAMI countries.

52) Lee, S., Tsang, A., Von Korff, M., de Graaf, R., **Benjet, C.**, Haro, J.M., Angermeyer, M., Demyttenaere, K., de Girolamo, G., Gasquet, I., Merikangas, K., Posada-Villa, J., Takeshima, T. & Kessler, R.C. (2009) Association of headache with childhood adversity and mental disorder: cross-national study. British Journal of Psychiatry, 194, 111-116. .

BACKGROUND: Community studies about the association of headache with both childhood family adversities and depression/anxiety disorders are limited. **AIMS:** To assess the independent and joint associations of childhood family adversities and early-onset depression and anxiety disorders with risks of adult-onset headache. **METHOD:** Data were pooled from cross-sectional community surveys conducted in ten Latin and North American, European and Asian countries (n=18 303) by using standardised instruments. Headache and a range of childhood family adversities were assessed by self-report. **RESULTS:** The number of childhood family adversities was associated with adult-onset headache after adjusting for gender, age, country and early-onset depression/anxiety disorder status (for one adversity, hazard ratio (HR)=1.22-1.6; for two adversities, HR=1.19-1.67; for three or more adversities, HR=1.37-1.95). Early and current onset of depression/anxiety disorders were independently associated (HR=1.42-1.89) with adult-onset headache after controlling for number of childhood family adversities. **CONCLUSIONS:** The findings call for a broad developmental perspective concerning risk factors for development of headache.

53) Nock, M.K., Hwang, I., Sampson, N., Kessler, R.C., Angermeyer, M., Beautrais, A., **Borges G**, Bromet, E., Bruffaerts, R., de Girolamo, G., de Graaf, R., Florescu, S., Gureje, O., Haro, J.M., Hu, C., Huang, Y., Karam, E.G., Kawakami, N., Kovess, V., Levinson, D., Posada-Villa, J., Sagar, R., Tomov, T., Viana, M.C., Williams, D.R. (2009). Cross-National Analysis of the Associations among Mental Disorders and Suicidal Behavior: Findings from the WHO World Mental Health Surveys. PLoS Medicine, 6 (8):e1000123.

BACKGROUND: Suicide is a leading cause of death worldwide. Mental disorders are among the strongest predictors of suicide; however, little is known about which disorders are uniquely predictive of suicidal behavior,

the extent to which disorders predict suicide attempts beyond their association with suicidal thoughts, and whether these associations are similar across developed and developing countries. This study was designed to test each of these questions with a focus on nonfatal suicide attempts. **METHODS AND FINDINGS** Data on the lifetime presence and age-of-onset of Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) mental disorders and nonfatal suicidal behaviors were collected via structured face-to-face interviews with 108,664 respondents from 21 countries participating in the WHO World Mental Health Surveys. The results show that each lifetime disorder examined significantly predicts the subsequent first onset of suicide attempt (odds ratios [ORs] = 2.9–8.9). After controlling for comorbidity, these associations decreased substantially (ORs = 1.5–5.6) but remained significant in most cases. Overall, mental disorders were equally predictive in developed and developing countries, with a key difference being that the strongest predictors of suicide attempts in developed countries were mood disorders, whereas in developing countries impulse-control, substance use, and post-traumatic stress disorders were most predictive. Disaggregation of the associations between mental disorders and nonfatal suicide attempts showed that these associations are largely due to disorders predicting the onset of suicidal thoughts rather than predicting progression from thoughts to attempts. In the few instances where mental disorders predicted the transition from suicidal thoughts to attempts, the significant disorders are characterized by anxiety and poor impulse-control. The limitations of this study include the use of retrospective self-reports of lifetime occurrence and age-of-onset of mental disorders and suicidal behaviors, as well as the narrow focus on mental disorders as predictors of nonfatal suicidal behaviors, each of which must be addressed in future studies. **CONCLUSIONS:** This study found that a wide range of mental disorders increased the odds of experiencing suicide ideation. However, after controlling for psychiatric comorbidity, only disorders characterized by anxiety and poor impulse-control predict which people with suicide ideation act on such thoughts. These findings provide a more fine-grained understanding of the associations between mental disorders and subsequent suicidal behavior than previously available and indicate that mental disorders predict suicidal behaviors similarly in both developed and developing countries. Future research is needed to delineate the mechanisms through which people come to think about suicide and subsequently progress from ideation to attempts.

54) Scott, K.M., Von Korff, M., Alonso, J., Angermeyer, M.C., Bromet, E., Fayyad, J., de Girolamo, G., Demyttenaere, K., Gasquet, I., Gureje, O., Haro, J.M., He, Y. Kessler, R.C., Levinson, D., **Medina-Mora, ME,** Oakley, Browne, M. Ormel, J., Posada-Villa, J., Watanabe, M., Williams, D. (2009). Mental-physical comorbidity and its relationship with disability: results from the World Mental Health Surveys. Psychological Medicine, 39(1), 33-43. **.**

BACKGROUND: The relationship between mental and physical disorders is well established, but there is less consensus as to the nature of their joint association with disability, in part because additive and interactive models of co-morbidity have not always been clearly differentiated in prior research. **METHOD:** Eighteen general population surveys were carried out among adults as part of the World Mental Health (WMH) Survey Initiative (n=42 697). DSM-IV disorders were assessed using face-to-face interviews with the Composite International Diagnostic Interview (CIDI 3.0). Chronic physical conditions (arthritis, heart disease, respiratory disease, chronic back/neck pain, chronic headache, and diabetes) were ascertained using a standard checklist. Severe disability was defined as on or above the 90th percentile of the WMH version of the World Health Organization Disability Assessment Schedule (WHODAS-II). **RESULTS:** The odds of severe disability among those with both mental disorder and each of the physical conditions (with the exception of heart disease) were significantly greater than the sum of the odds of the single conditions. The evidence for synergy was model dependent: it was observed in the additive interaction models but not in models assessing multiplicative interactions. Mental disorders were more likely to be associated with severe disability than were the chronic physical conditions. **CONCLUSIONS:** This first cross-national study of the joint effect of mental and physical conditions on the probability of severe disability finds

that co-morbidity exerts modest synergistic effects. Clinicians need to accord both mental and physical conditions equal priority, in order for co-morbidity to be adequately managed and disability reduced.

55) Seedat, S., Scott, K.M., Angermeyer, M.C., Berglund, P., Bromet, E.J., Brugha, T.S., Demyttenaere, K., de Girolamo, G., Haro, J.M., Jin, R., Karam, E.G., Kovess-Masfety, V., Levinson, D., **Medina-Mora, ME**, Ono, Y., Ormel, J., Pennell, B.E., Posada-Villa, J., Sampson, N.A., Williams, D., Kessler, R.C. (2009). Cross-National Associations Between Gender and Mental Disorders in the World Health Organization World Mental Health Surveys. Archives of General Psychiatry, 66(7), 785-95.

CONTEXT: Gender differences in mental disorders, including more anxiety and mood disorders among women and more externalizing disorders among men, are found consistently in epidemiological surveys. The gender roles hypothesis suggests that these differences narrow as the roles of women and men become more equal. **OBJECTIVES:** To study time-space (cohort-country) variation in gender differences in lifetime DSM-IV mental disorders across cohorts in 15 countries in the World Health Organization World Mental Health Survey Initiative and to determine if this variation is significantly related to time-space variation in female gender role traditionality as measured by aggregate patterns of female education, employment, marital timing, and use of birth control. **DESIGN:** Face-to-face household surveys. **SETTING:** Africa, the Americas, Asia, Europe, the Middle East, and the Pacific. **PARTICIPANTS:** Community-dwelling adults (N = 72,933). **MAIN OUTCOME MEASURES:** The World Health Organization Composite International Diagnostic Interview assessed lifetime prevalence and age at onset of 18 DSM-IV anxiety, mood, externalizing, and substance disorders. Survival analyses estimated time-space variation in female to male odds ratios of these disorders across cohorts defined by the following age ranges: 18 to 34, 35 to 49, 50 to 64, and 65 years and older. Structural equation analysis examined predictive effects of variation in gender role traditionality on these odds ratios. **RESULTS:** In all cohorts and countries, women had more anxiety and mood disorders than men, and men had more externalizing and substance disorders than women. Although gender differences were generally consistent across cohorts, significant narrowing was found in recent cohorts for major depressive disorder and substance disorders. This narrowing was significantly related to temporal (major depressive disorder) and spatial (substance disorders) variation in gender role traditionality. **CONCLUSIONS:** While gender differences in most lifetime mental disorders were fairly stable over the time-space units studied, substantial intercohort narrowing of differences in major depression was found to be related to changes in the traditionality of female gender roles. Additional research is needed to understand why this temporal narrowing was confined to major depression

56) Von Korff, M., Alonso, J., Ormel, J., Angermeyer, M., Bruffaerts, R., **Fleiz, C**., de Girolamo, G., Kessler, R.C., Kovess-Masfety, V., Posada-Villa, J., Scott, K.M., Uda, H. (2009). Childhood Psychosocial Stressors and Adult Onset Arthritis: Broad Spectrum Risk Factors and Allostatic Load. *Pain,* 143(1-2), 76-83. **.**

ABSTRACT: Neural, endocrine, and immune stress mediators are hypothesized to increase risks of diverse chronic diseases, including arthritis. Retrospective data from the World Mental Health Surveys (N=18,309) were employed to assess whether adult onset of arthritis was associated with childhood adversities and early onset psychological disorder. Cox proportional hazard models assessed the association of number of childhood adversities and the presence of early onset psychological disorder with arthritis age of onset. Controlling for age, sex, and early onset mental disorder, relative to persons with no childhood adversities, persons with two adversities had an increased risk of adult onset arthritis (hazard ratio=1.27, 95% CI=1.08, 1.50), while persons with three or more adversities had a higher risk (HR=1.44, CI=1.24, 1.67). Early onset depressive and/or anxiety disorder was associated with an increased risk of adult onset arthritis after controlling for childhood adversities (HR=1.43, CI=1.28, 1.61). Since psychosocial stressors may be broad spectrum risk factors that increase risks of diverse chronic conditions in later life (e.g. arthritis, heart disease, diabetes, asthma, and chronic pain), prospective studies of childhood psychosocial stressors may be most productive if multiple disease outcomes are

assessed in the same study. Results from this study provide methodological guidance for future prospective studies of the relationship between childhood psychosocial stressors and subsequent risk of adult onset arthritis

2010

57) Alonso, J., Petukhova, M., Vilagut, G., Chatterji, S., Heeringa, S., Üstün, T.B., Alhamzawi, A.O., Viana, M.C., Angermeyer, M., Bromet, E., Bruffaerts, R., de Girolamo, G., Florescu, S., Gureje, O., Haro, J.M., Hinkov, H., Hu, C.-Y., Karam, E.G., Kovess, V., Levinson, D., **Medina Mora, M.E**., Nakamura, Y., Ormel, J., Posada-Villa, J., Sagar, R., Scott, K.M., Tsang, A., Williams, D.R., Kessler, R.C. (2010). Days out of role due to common physical and mental conditions: Results

ABSTRACT: Days out of role because of health problems are a major source of lost human capital. We examined the relative importance of commonly occurring physical and mental disorders in accounting for days out of role in 24 countries that participated in the World Health Organization (WHO) World Mental Health (WMH) surveys. Face-to-face interviews were carried out with 62 971 respondents (72.0% pooled response rate). Presence of ten chronic physical disorders and nine mental disorders was assessed for each respondent along with information about the number of days in the past month each respondent reported being totally unable to work or carry out their other normal daily activities because of problems with either physical or mental health. Multiple regression analysis was used to estimate associations of specific conditions and comorbidities with days out of role, controlling by basic socio-demographics (age, gender, employment status and country). Overall, 12.8% of respondents had some day totally out of role, with a median of 51.1 a year. The strongest individual-level effects (days out of role per year) were associated with neurological disorders (17.4), bipolar disorder (17.3) and post-traumatic stress disorder (15.2). The strongest population-level effect was associated with pain conditions, which accounted for 21.5% of all days out of role (population attributable risk proportion). The 19 conditions accounted for 62.2% of all days out of role. Common health conditions, including mental disorders, make up a large proportion of the number of days out of role across a wide range of countries and should be addressed to substantially increase overall productivity.Molecular Psychiatry advance online publication, 12 October 2010; doi:10.1038/mp.2010.101.

58) **Benjet, C., Borges, G., Medina-Mora, M.E.** (2010). Chronic childhood adversity and onset of psychopathology during three life stages: Childhood, adolescence and adulthood. *Journal of Psychiatric Research,* 44, 732-740.

BACKGROUND: The aim is to report the individual and joint effects of a range of chronic childhood adversities on the first onset of a broad range of psychiatric disorders, and to evaluate their impact at different stages of the life course in a representative sample of the Mexican population. **METHOD**: The data is from the Mexican National Comorbidity Survey (M-NCS), a stratified, multistage area probability sample of persons aged 18–65. The WHO World Mental Health Composite International Diagnostic Interview (WMH-CIDI) measured 12 childhood adversities, 20 psychiatric disorders and ages of onset. Discrete-time survival models were performed to estimate the odds of disorder onset. **RESULTS:** In bivariate models, all adversities (except economic adversity and parental death) were significant predictors of psychopathology; however in multivariate models which correct for the clustering of adversities, family dysfunction and abuse adversities were the strongest and most consistent predictors of all four classes of psychopathologies examined (mood, anxiety, substance use and externalizing), and for the most part, over all three life course stages (childhood, adolescence and adulthood). The effect of the number of adversities was nonlinear such that although the odds of disorder onset increased with increasing numbers of adversities, the odds increased at a decreasing rate. **CONCLUSIONS:** Childhood family dysfunction and abuse is a strong predictor of the onset of psychopathology throughout the life course, consistent with

evidence for the enduring effects of chronic stress on brain structures involved in many psychiatric disorders and with stress-sensitization models of psychopathology.

59) **Borges G, Orozco R, Benjet C, Medina-Mora ME**. (2010) Suicidio y conductas suicidas en México: retrospectiva y situación actual. Salud Pública de México, 52 (4), 292-304.

OBJECTIVE. To summarize the epidemiology of completed suicide and suicidal behavior in Mexico. **MATERIAL AND METHODS**. National data registries on mortality from the year 1970 to 2007 and cross-sectional surveys were used to analyze suicide mortality and suicidal behavior. **RESULTS**. The suicide rate grew 275% from 1970 to 2007. Suicide has been increasing among Mexicans 15-29 years old since 1970. In adults aged 18-29 years the lifetime prevalence of ideation was 9.7%, and attempt 3.8%. About 6,601,210 Mexicans had suicidal thoughts, 593,600 attempted suicide and 99,731 used some sort of medical service as a direct consequence of the latter in the year prior to the survey. **CONCLUSIONS**. Suicide and suicide-related behaviors are significant public health problems and, as such, actions are urgently required to identify and treat persons with suicidal thoughts, assess suicidal risk in patients with psychiatric disorders and implement population interventions

60) **Borges, G.,** Nock, M.K., **Medina-Mora, M.E**., Hwang, I., Kessler, R.C. (2010). Psychiatric disorders, comorbidity, and suicidality in Mexico. *Journal of Affective Disorders*, 124(1-2), 38-44.

BACKGROUND: Prior studies have reported that psychiatric disorders are among the strongest predictors of suicidal behavior (i.e., suicide ideation, plans, and attempts). However, surprisingly little is known about the independent associations between each disorder and each suicidal behavior due to a failure to account for comorbidity. **METHODS:** This study used data from a representative sample of 5782 respondents participating in the Mexican National Comorbidity Survey (2001-2002) to examine the unique associations between psychiatric disorders and suicidality. **RESULTS:** A prior psychiatric disorder was present in 48.8% of those with a suicide ideation and in 65.2% of those with an attempt. Discrete-time survival models adjusting for comorbidity revealed that conduct disorder and alcohol abuse/dependence were the strongest predictors of a subsequent suicide attempt. Most disorders predicted suicidal ideation but few predicted the transition from ideation to a suicide plan or attempt. **LIMITATIONS:** M-NCS is a household survey that excluded homeless and institutionalized people, and the diagnostic instrument used did not include an assessment of all DSM-IV disorders which would increase the comorbidity discussed here. **CONCLUSIONS:** These results reveal a complex pattern of associations in which diverse psychiatric disorders impact different parts of the pathway to suicide attempts. These findings will help inform clinical and public health efforts aimed at suicide prevention in Mexico and other developing countries

61) Bruffaerts, R., Demyttenaere, K., **Borges, G**., Haro, J.M., Chiu, W.T., Hwang, I., Karam, E.G., Kessler, R.C., Sampson, N.A., Alonso, J., Andrade, L.H., Angermeyer, M., **Benjet, C**., Bromet, E., de Girolamo, G., de Graaf, R., Florescu, S., Gureje, O., Horiguchi, I., Hu, C., Kovess, V., Levinson, D., Posada-Villa, J., Sagar, R., Scott, K.M., Tsang, A., Vassilev, S.M., Williams, D.R., Nock, M.K. (2010). Childhood adversities as risk factors for onset and persistence of suicidal behaviour. *British Journal of Psychiatry,* 197 (1), 20-27.

BACKGROUND; Suicide is a leading cause of death worldwide, but the precise effect of childhood adversities as risk factors for the onset and persistence of suicidal behaviour (suicide ideation, plans and attempts) are not well understood. **AIMS:** To examine the associations between childhood adversities as risk factors for the onset and persistence of suicidal behaviour across 21 countries worldwide. **METHOD:** Respondents from nationally representative samples (*n* = 55 299) were interviewed regarding childhood adversities that occurred before the age of 18 years and lifetime suicidal behaviour. **RESULTS:** Childhood adversities were associated with an increased risk of suicide attempt and ideation in both bivariate and multivariate models (odds ratio range 1.2–5.7). The risk increased with the number of adversities experienced, but at a decreasing rate. Sexual and physical abuse were consistently the strongest risk factors for both the onset and persistence of suicidal behaviour, especially during adolescence. Associations remained similar after additional adjustment for respondents' lifetime mental disorder

status. **CONCLUSIONS:** Childhood adversities (especially intrusive or aggressive adversities) are powerful predictors of the onset and persistence of suicidal behaviours.

62) De Graaf, R., Radovanovic, M., van Laar, M., Fairman, B., Degenhardt, L., Aguilar-Gaxiola, S., Bruffaerts, R., de Girolamo, G., Fayyad, J., Gureje, O., Haro, J.M., Huang, Y., Kostychenko, S., Lépine, J.P., Matschinger, H., **Medina Mora, M.E**., Neumark, Y., Ormel, J., Posada-Villa, J., Stein, D.J., Tachimori, H., Wells, J.E., Anthony, J.C. (2010). Early cannabis use and estimated risk of later onset of depression spells: epidemiological evidence from the population-based World Health Organization World Mental Health Survey Initiative. *American Journal of Epidemiology,* 172 (2), 149-159. .

ABSTRACT: Early-onset cannabis use is widespread in many countries and might cause later onset of depression. Sound epidemiologic data across countries are missing. The authors estimated the suspected causal association that links early-onset (age <17 years) cannabis use with later-onset (age ≥17 years) risk of a depression spell, using data on 85,088 subjects from 17 countries participating in the population-based World Health Organization World Mental Health Survey Initiative (2001–2005). In all surveys, multistage household probability samples were evaluated with a fully structured diagnostic interview for assessment of psychiatric conditions. The association between early-onset cannabis use and later risk of a depression spell was studied using conditional logistic regression with local area matching of cases and controls, controlling for sex, age, tobacco use, and other mental health problems. The overall association was modest (controlled for sex and age, risk ratio = 1.5, 95% confidence interval: 1.4, 1.7), was statistically robust in 5 countries, and showed no sex difference. The association did not change appreciably with statistical adjustment for mental health problems, except for childhood conduct problems, which reduced the association to nonsignificance. This study did not allow differentiation of levels of cannabis use; this issue deserves consideration in future research

63) Degenhardt, L., Dierker, L., Chiu, W.T., **Medina-Mora, ME,** Neumark, Y., Sampson, N., Alonso, J., Angermeyer, M., Anthony, J.C., Bruffaerts, R., de Girolamo, G., de Graaf, R., Gureje, O., Karam, A.N., Kostyuchenko, S., Lee, S., Lépine, J.-P., Levinson, D., Nakamura, Y., Posada-Villa, J., Stein, D., Wells, J.E., Kessler, R.C. (2010). Evaluating the drug use "gateway" theory using cross-national data: Consistency and associations of the order of initiation of drug use among participants in the WHO World Mental Health Surveys. Drug and Alcohol Dependence, 108, 84-97.

BACKGROUND: It is unclear whether the normative sequence of drug use initiation, beginning with tobacco and alcohol, progressing to cannabis and then other illicit drugs, is due to causal effects of specific earlier drug use promoting progression, or to influences of other variables such as drug availability and attitudes. One way to investigate this is to see whether risk of later drug use in the sequence, conditional on use of drugs earlier in the sequence, changes according to time-space variation in use prevalence. We compared patterns and order of initiation of alcohol, tobacco, cannabis, and other illicit drug use across 17 countries with a wide range of drug use prevalence. **METHOD:** Analyses used data from World Health Organization (WHO) World Mental Health (WMH) Surveys, a series of parallel community epidemiological surveys using the same instruments and field procedures carried out in 17 countries throughout the world.**RESULTS:** Initiation of "gateway" substances (i.e. alcohol, tobacco and cannabis) was differentially associated with subsequent onset of other illicit drug use based on background prevalence of gateway substance use. Cross-country differences in substance use prevalence also corresponded to differences in the likelihood of individuals reporting a non-normative sequence of substance initiation. **CONCLUSION:** These results suggest the "gateway" pattern at least partially reflects unmeasured common causes rather than causal effects of specific drugs on subsequent use of others. This implies that successful efforts to prevent use of specific "gateway" drugs may not in themselves lead to major reductions in the use of later drugs

64) Kessler, R.C., Birnbaum, H., Shahly, V., Bromet, E., Hwang, I., McLaughlin, K.A., Sampson, N., Andrade, L.H., de Girolamo, G., Demyttenaere, K., Haro, J.M., Karam, A.N., Kostyuchenko, S., Kovess, V., **Lara, C.,** Levinson, D., Matschinger, H., Nakane, Y., Oakley Browne, M., Ormel, J., Posada-Villa, J., Sagar, R., Stein, D.J. (2010). Age differences in the prevalence and comorbidity of DSM-IV major depressive episepisodes: Results from the WHO World Mental Health Survey Initiative. Depression & Anxiety, 27(4), 351-364. .

BACKGROUND: Although depression appears to decrease in late life, this could be due to misattribution of depressive symptoms to physical disorders that increase in late life. **METHODS:** We investigated this issue by studying age differences in co-morbidity of DSM-IV major depressive episodes (MDE) with chronic physical conditions in the WHO World Mental Health (WMH) surveys, a series of community epidemiological surveys of respondents in 10 developed countries (n=52,485) and 8 developing countries (n=37,265). MDE and other mental disorders were assessed with the Composite International Diagnostic Interview (CIDI). Organic exclusion rules were not used to avoid inappropriate exclusion of cases with physical co-morbidity. Physical conditions were assessed with a standard chronic conditions checklist. **RESULTS:** Twelve-month DSM-IV/CIDI MDE was significantly less prevalent among respondents ages 65+ than younger respondents in developed but not developing countries. Prevalence of co-morbid mental disorders generally either decreased or remained stable with age, while co-morbidity of MDE with mental disorders generally increased with age. Prevalence of physical conditions, in comparison, generally increased with age, while co-morbidity of MDE with physical conditions generally decreased with age. Depression treatment was lowest among the elderly in developed and developing countries. **CONCLUSIONS:** The weakening associations between MDE and physical conditions with increasing age argue against the suggestion that the low estimated prevalence of MDE among the elderly is due to increased confounding with physical disorders. Future study is needed to investigate processes that might lead to a decreasing impact of physical illness on depression among the elderly.

65) Kessler, R.C., Green, J.G., Gruber, M.J., Sampson, N.A., Bromet, E., Cuitan, M., Furukawa, T.A., Gureje, O., Hinkov, H., Hu, C., **Lara, C**., Lee, S., Mneimneh, Z., Myer, L., Oakley Browne, M.A., Posada-Villa, J., Sagar, R., Viana, M.C., Zaslavsky, A.M. (2010). Screening for serious mental illness in the general population with the K6 screening scale: Results from the WHO World Mental Health (WMH) Survey Initiative. *International Journal of Methods in Psychiatric Research,* 19(S1), 4-22. .

ABSTRACT: Data are reported on the background and performance of the K6 screening scale for serious mental illness (SMI) in the World Health Organization (WHO) World Mental Health (WMH) surveys. The K6 is a six-item scale developed to provide a brief valid screen for Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV) SMI based on the criteria in the US ADAMHA Reorganization Act. Although methodological studies have documented good K6 validity in a number of countries, optimal scoring rules have never been proposed. Such rules are presented here based on analysis of K6 data in nationally or regionally representative WMH surveys in 14 countries (combined *N* = 41,770 respondents). Twelve-month prevalence of DSM-IV SMI was assessed with the fully-structured WHO Composite International Diagnostic Interview. Nested logistic regression analysis was used to generate estimates of the predicted probability of SMI for each respondent from K6 scores, taking into consideration the possibility of variable concordance as a function of respondent age, gender, education, and country. Concordance, assessed by calculating the area under the receiver operating characteristic curve, was generally substantial (median 0.83; range 0.76–0.89; inter-quartile range 0.81–0.85). Based on this result, optimal scaling rules are presented for use by investigators working with the K6 scale in the countries studied.

66) Lee, S., Tsang, A., Kessler, R.C., Jin, R., Sampson, N., Andrade, L., Karam, E.G., **Medina-Mora, ME,** Merikangas, K., Nakane, Y., Popovici, D.G., Posada-Villa, J., Sagar, R., Wells, J.E., Zarkov, Z. (2010). A cross national community study of rapid cycling bipolar disorder. British Journal of Psychiatry, 196(3), 217-225. .

BACKGROUND: The epidemiology of rapid-cycling bipolar disorder in the community is largely unknown. **AIMS:** To investigate the epidemiological characteristics of rapid-cycling and non-rapid-cycling bipolar disorder in a large cross-national community sample. **METHOD:** The Composite International Diagnostic Interview (CIDI version 3.0) was used to examine the prevalence, severity, comorbidity, impairment, suicidality, sociodemographics, childhood adversity and treatment of rapid-cycling and non-rapid-cycling bipolar disorder in ten countries (n = 54 257). **RESULTS:** The 12-month prevalence of rapid-cycling bipolar disorder was 0.3%. Roughly a third and two-fifths of participants with lifetime and 12-month bipolar disorder respectively met criteria for rapid cycling. Compared with the non-rapid-cycling, rapid-cycling bipolar disorder was associated with younger age at onset, higher persistence, more severe depressive symptoms, greater impairment from depressive symptoms, more out-of-role days from mania/hypomania, more anxiety disorders and an increased likelihood of using health services. Associations regarding childhood, family and other sociodemographic correlates were less clear cut. **CONCLUSIONS:** The community epidemiological profile of rapid-cycling bipolar disorder confirms most but not all current clinically based knowledge about the illness.

67) Miller M, **Borges G, Orozco R**. Mukamal K,.Rimme E.B, .**Benjet C, Medina-Mora ME**. (2010) Exposure to alcohol, drugs and tobacco and the risk of subsequent suicidality: Findings from the Mexican Adolescent Mental Health Survey. Drug and Alcohol Dependence. On line: DAD-3873; No. of Pages 8.

AIMS: To examine whether the association between prevalence measures of suicidality ands substance abuse/dependence among adolescents(1) is attenuated when temporal priority of exposure and outcome are taken into account,(2)extends to substance use(i.e. without disorder),(3)applies to tobacco use and dependence independent of illicit drugs and alcohol use/disorder, and(4) is confounded by comorbid mental illness. **DESIGN**: Discrete-time survival models were applied to retrospectively reported age of onset of first suicidal ideation, plan and attempt and age of onset of first substance use and disorder. **PARTICIPANTS:** 3005 adolescentsaged12–17residingintheMexicoCityMetropolitanAreain2005. Measurements: The World Mental Health computer-assisted adolescent version of the Composite Inter- national Diagnostic Interview was used to assess suicidal out comes and psychiatric disorders including substance dependence/abuse. **FINDINGS**: Use of and dependence on tobacco is as strong a predictor of subsequent suicidality as is use of and dependence with abuse of alcohol and drugs. The association between substance use and subsequent suicidality is not fully accounted for by comorbid mental illness. **CONCLUSION**: Efforts to reduce the use as well as the abuse of alcohol, drugs and tobacco may help reduce the risk of subsequent suicidal behaviors among adolescents in Mexico.

68) Scott, K.M., Wells, J.E., Angermeyer, M., Brugha, T.S., Bromet, E., Demyttenaere, K., de Girolamo, G., Gureje, O., Haro, J.M., Jin, R., Karam, A.N., Kovess, V., **Lara, C**., Levinson, D., Ormel, J., Posada-Villa, F., Sampson, N., Takeshima, T., Zhang, M., Kessler, R.C. (epub 2009). Gender and the relationship between marital status and first onset of mood, anxiety and substance use disorders. *Psychological Medicine,* 40 (9), 1495-1505. **.**

BACKGROUND. Prior research on whether marriage is equally beneficial to the mental health of men and women is inconsistent due to methodological variation. This study addresses some prior methodological limitations and investigates gender differences in the association of first marriage and being previously married, with subsequent first onset of a range of mental disorders. **METHOD**. Cross-sectional household surveys in 15 countries from the WHO World Mental Health survey initiative (n=34493), with structured diagnostic assessment of mental disorders using the Composite International Diagnostic Interview 3.0. Discrete-time survival analyses assessed the interaction of gender and marital status in the association with first onset of mood, anxiety and substance use disorders. Results. Marriage (versus never married) was associated with reduced risk of first onset of most mental disorders in both genders ; but for substance use disorders this reduced risk was stronger among women, and for depression and panic disorder it was confined to men. Being previously married (versus stably married) was associated with increased risk of all disorders in both genders ; but for substance use disorders, this increased risk

was stronger among women and for depression it was stronger among men. **CONCLUSIONS**. Marriage was associated with reduced risk of the first onset of most mental disorders in both men and women but there were gender differences in the associations between marital status and onset of depressive and substance use disorders. These differences may be related to gender differences in the experience of multiple role demands within marriage, especially those concerning parenting

69) Stein, D.J., Scott, K., Haro Abad, J.M., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M., Demytteneare, K., de Girolamo, G., Iwata, N., Posada-Villa, J., Kovess, V., **Lara, C.,** Ormel, J., Kessler, R.C., Von Korff, M. (2010). Early childhood adversity and later hypertension: Data from the World Mental Health Survey. Annals of Clinical Psychiatry, 22(1), 19-28. .

BACKGROUND: Although many studies have indicated that psychosocial factors contribute to hypertension, and that early childhood adversity is associated with long-term adverse mental and physical health sequelae, the association between early adversity and later hypertension is not well studied. **METHOD:** Data from 10 countries participating in the World Health Organization (WHO) World Mental Health (WHM) Surveys (N = 18,630) were analyzed to assess the relationship between childhood adversity and adult-onset hypertension, as ascertained by self-report. The potentially mediating effect of early-onset depression-anxiety disorders, as assessed by the WHM Survey version of the International Diagnostic Interview (WMH-CIDI), on the relationship between early adversity and hypertension was also examined. **RESULTS:** Two or more early childhood adversities, as well as early-onset depression-anxiety, were significantly associated with hypertension. A range of specific childhood adversities, as well as early-onset social phobia and panic/agoraphobia, were significantly associated with hypertension. In multivariate analyses, the presence of 3 or more childhood adversities was associated with hypertension, even when early-onset depression-anxiety or current depression-anxiety was included in the model. **CONCLUSIONS:** Although caution is required in the interpretation of self-report data on adult-onset hypertension, the results of this study further strengthen the evidence base regarding the role of psychosocial factors in the pathogenesis of hypertension.

70) Stein, D.J., Ruscio, A.M., Lee, S., Petukhova, M., Alonso, J., Andrade, L.H., **Benjet, C.**, Bromet, E., Demyttenaere, K., Florescu, S., de Girolamo, G., de Graaf, R., Gureje, O., He, Y., Hinkov, H., Hu, C-Y., Iwata, N., Karam, E.G., Lepine, J.P., Matschinger, H., Oakley Browne, M., Posada-Villa, J., Sagar, R., Williams, D.R., Kessler, R.C. (2010). Subtyping social anxiety disorder in developed and developing countries. Depression & Anxiety, 27(4), 390-403. .

BACKGROUND: Although social anxiety disorder (SAD) is classified in the fourth edition of The Diagnostic and Statistical Manual (DSM-IV) into generalized and non-generalized subtypes, community surveys in Western countries find no evidence of disjunctions in the dose-response relationship between number of social fears and outcomes to support this distinction. We aimed to determine whether this holds across a broader set of developed and developing countries, and whether subtyping according to number of performance versus interactional fears would be more useful. **METHODS:** The World Health Organization's World Mental Health Survey Initiative undertook population epidemiological surveys in 11 developing and 9 developed countries, using the Composite International Diagnostic Interview to assess DSM-IV disorders. Fourteen performance and interactional fears were assessed. Associations between number of social fears in SAD and numerous outcomes (age-of-onset, persistence, severity, comorbidity, treatment) were examined. Additional analyses examined associations with number of performance fears versus number of interactional fears. **RESULTS:** Lifetime social fears are quite common in both developed (15.9%) and developing (14.3%) countries, but lifetime SAD is much more common in the former (6.1%) than latter (2.1%) countries. Among those with SAD, persistence, severity, comorbidity, and treatment have dose-response relationships with number of social fears, with no clear nonlinearity in relationships that would support a distinction between generalized and non-generalized SAD. The distinction between

performance fears and interactional fears is generally not important in predicting these same outcomes. **CONCLUSION:** No evidence is found to support subtyping SAD on the basis of either number of social fears or number of performance fears versus number of interactional fears.

MANUALES, CAPÍTULOS DE LIBRO

2005

71) **Medina-Mora, ME, Borges G**, **Lara, C., Benjet, C.** (2005). La salud mental en México y los retos para su atención. Resultados de la Encuesta Nacional de Epidemiología Psiquiátrica. Asociación Psiquiátrica Mexicana: Manual de los Trastornos Mentales Edición 2005. México, 2005, pp. 13-24.

RESUMEN: El índice de personas con trastornos mentales en México es inferior al que se reporta en Estados Unidos, pero el índice de personas que recibe tratamiento es también más bajo (WHO 2004), sin tratamiento los padecimientos se agravan y los efectos en la calidad de vida se exacerban. Este capítulo pretende dar cuenta de la magnitud de las necesidades de atención psiquiátrica en el país que puede servir de guía al quehacer del especialista. Utiliza como fuente la Encuesta Nacional de Epidemiología Psiquiátrica que se llevó a cabo en México en el marco de la iniciativa Mundial de Salud Mental de la Organización Mundial de la Salud. Los desórdenes mentales y del comportamiento afectan a un amplio espectro de la población, causan un nivel importante de discapacidad, afectan la sobrevida de las personas que padecen otros trastornos crónicos incrementando la mortalidad. A pesar de esto no han logrado ocupar su lugar en las prioridades de salud de muchos países y México no es la excepción.

2006

72) **Borges G**, **Medina-Mora, ME,** Zambrano, J., Garrido, G. (2006). Epidemiología de la conducta suicida en México (Epidemiology of suicidal behavior in Mexico), en: Informe Nacional sobre la Violencia y la Salud en México, DF: SSA; noviembre 2006, pp. 205-236 [Epidemiology of suicidal behavior in Mexico, Chap. VII, Nacional Report on Violence and Health]. **. 827**

Abstract: El Informe Mundial sobre Violencia y la Salud, elaborado por la Organización Mundial de la Salud (OMS), identificó a la violencia autoinflingida como uno de los padecimientos sustanciales que deben de enfrentar las sociedades modernas. Dicho informe muestra en forma sucinta cómo las tasas de suicidio consumado en México son de las más bajas en el mundo. Sin embargo, la misma OMS había presentado en su informe previo, de 2001, que México mostraba un incremento de 62% en su tasa de mortalidad por suicidio en los últimos 15 años. En una comparación internacional, México fue el sexto país con tasas de crecimiento más altas para el suicidio para el periodo 1980-1999, con un crecimiento de 90.3% en los hombres y de 25.0% en las mujeres. este capítulo busca ahondar sobre la conducta autoinflingida en nuestro país. Siguiendo la diferencia que hace el Informe Mundial, se ha dividido el capítulo en dos grandes apartados: el suicidio consumado y el intento de suicidio. El suicidio, desde la perspectiva epidemiológica, es la muerte resultante de un acto autoinflingido con la intención deliberada de matarse. Los intentos de suicidio se entienden como una conducta que llevó a un resultado no fatal, para la cual hay evidencias (explícitas o implícitas) de que la persona intentó quitarse la vida. Se utilizaron las estadísticas vitales de México para presentar el panorama epidemiológico actual del suicidio consumado y de la Encuesta Nacional de Salud Mental para presentar la epidemiología de los intentos de suicidio en el país.

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73) Kessler, R.C., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M.C., Anthony, J.C., Brugha, T.S., Chatterji, S., de Girolamo, G., Demyttenaere, K., Gluzman, S.F., Gureje, O., Haro, J.M., Heeringa, S.G., Hwang, I., Karam, E.G., Kikkawa, T., Lee, S., Lépine, J.P., **Medina-Mora, ME,** Merikangas, K.R., Ormel, .J, Pennell, B.E., Posada-Villa, J, Üstün, T.B., von Korff, M.R., Wang, P.S., Zaslavsky, A.M., Zhang, M. Prevalences and Severity of Mental Disorders in the World Mental Health Survey Initiative. Chapter 26. Part III. Cross-National Comparisons. In: Ronald C. Kessler & T. Bedirhan Üstün, eds. The WHO World Mental Health Surveys: global Perspectives on the Epidemiology of Mental Disorders. New York: Cambridge University Press, 2008. pp. 534-540.

74) Kessler RC, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, Anthony JC, Berglund PA, Chatterji S, de Girolamo G, de Graaf R, Demyttenaere K, Gasquet I, Gluzman SF, Gruber MJ, Gureje O, Haro JM, Heeringa SG, Karam AN, Kawakami N, Lee S, Levinson D, **Medina-Mora ME**, Oakley-Browne MA, Pennell BE, Petutkova M, Posada-Villa J, Ruscio A, Stein DJ, Tsang CHA, Üstün TB. Lifetime Prevalence and Age of Onset Distributions of Mental Disorders in the World Mental Health Survey Initiative. Chapter 24. Part III. Cross-National Comparisons. In: Ronald C. Kessler & T. Bedirhan Üstün, eds. The WHO World Mental Health Surveys: global Perspectives on the Epidemiology of Mental Disorders. New York: Cambridge University Press, 2008. pp. 511-521.

75) Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, **Borges G**, Bruffaerts R, Chatterji S, Chiu WT, de Girolamo G, Fayyad JA, Gureje O, Haro JM, Heeringa SG, Huang Y, Kessler RC, Kovess-Masfety V, Lee S, Levinson D, Nakane Y, Oakley-Browne MA, Ormel J, Pennell BE, Posada-Villa J, Üstün TB. Delay and Failure in Treatment Seeking after First Onset of Mental Disorders in the World Mental Health Survey Initiative. Chapter 25. Part III. Cross-National Comparisons. In: Ronald C. Kessler & T. Bedirhan Üstün, eds. The WHO World Mental Health Surveys: global Perspectives on the Epidemiology of Mental Disorders. New York: Cambridge University Press, 2008. pp. 522-533.

76) Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, **Borges G**, Bromet EJ, Bruffaerts R, Chatterji S, de Girolamo G, de Graaf R, Gureje O, Haro JM, Heeringa SG, Karam EG, Kessler RC, Kovess-Masfety V, Lane MC, Lee S, Levinson D, Ono Y, Pennell BE, Petukhova M, Posada-Villa J, Saunders K, Seedat S, Shen Y, Üstün TB, Wells JE. Recent Treatment of Mental Disorders in the World Mental Health Survey Initiative. Chapter 27. Part III. Cross-National Comparisons. In: Ronald C. Kessler & T. Bedirhan Üstün, eds. The WHO World Mental Health Surveys: global Perspectives on the Epidemiology of Mental Disorders. New York: Cambridge University Press, 2008. pp. 541-552.

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77) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** Blanco, J., Rojas, E., Fleiz, C., Méndez, E., Zambrano, J., & Aguilar-Gaxiola, S.A., (2009). La Encuesta de Salud Mental en Adolescentes de México. In J. Rodríguez, R. Kohn, S.A. Aguilar-Gaxiola (eds.). Epidemiología de los trastornos mentales en América Latina y el Caribe. Washington, DC: PAHO, 90-100.

78) **Medina-Mora, ME, Borges G**, **Benjet, C.**, **Lara, C.,** Rojas, E., Fleiz, C., Zambrano, J., Villatoro, J., Blanco, J., & Aguilar-Gaxiola, S.A., (2009). Estudio de los trastornos mentales en México: resultados de la Encuesta Mundial de Salud Mental. In J. Rodríguez, R. Kohn, S.A. Aguilar-Gaxiola (eds.). Epidemiología de los trastornos mentales en América Latina y el Caribe. Washington, DC: PAHO, 79 - 89. .

Encuesta Nacional de Epidemiología Psiquiátrica en Adolescentes

México

Los hallazgos de las Encuestas Mundiales de Salud Mental de 17 diferentes países muestran que los trastornos psiquiátricos consistentemente inician en las primeras décadas de la vida (WHO-World Mental Health Consortium, 2007). Sin embargo hay una escasez de datos epidemiológicos en población adolescente especialmente en países en vías de desarrollo como el nuestro para guiar a las políticas de salud pública. En los sectores de salud y educación el TDA y la depresión se han destacado como prioridades en México (Programa de acción Salud Mental 2001-2006). Un trastorno mental en un menor tiene un costo no sólo por el sufrimiento que se representa para los jóvenes sino también por las secuelas que pueda tener para el funcionamiento en la vida adulta como el menor alcance educacional, ocupacional y económico, una peor productividad laboral, el embarazo no deseado, accidentes automovilísticos, y relaciones interpersonales disfuncionales. La detección e intervención oportuna contrarresta estas secuelas. El objetivo general es estimar las necesidades de atención para la patología mental entre adolescentes del Distrito Federal, específicamente, para estimar (a) la prevalencia de 23 trastornos mentales, incluyendo la depresión y el déficit de atención (b) el impacto de estos trastornos mentales en el rendimiento y deserción escolar, (c) los factores de riesgo y protección para poder identificar a alumnos en riesgo y dirigir con más eficacia los esfuerzos de prevención e intervención, y (d) los patrones y barreras para la búsqueda de ayuda y uso de servicios entre los jóvenes y sus familias. El objetivo especifico de la fase actual de este estudio es estimar la exposición a la adversidad social, la posible asociación entre la adversidad y los trastornos psiquiátricos, y el papel que juega diversos factores en magnificar o disminuir el riesgo de desencadenar trastornos psiquiátricos, consumo de sustancias y conducta suicida como secuela de la adversidad. La encuesta tiene un diseño probabilístico, multietápico y estratificado representativo de los 1'834,661 adolescentes entre 12 y 17 años de edad de la Ciudad de México y área metropolitana. Se entrevistaron a 3005 adolescentes y 2845 padres utilizando la versión computarizada de la Entrevista Internacional Psiquiátrica Compuesta (WMH-CIDI-A). Es una entrevista estructurada instalada en una computadora portátil y aplicada cara a cara por

entrevistadores en los hogares de los participantes. Además se realizó un tamizaje de 1,000 alumnos de secundaria para ajustar las tasas para esta población ya que uno de los principales usuarios de esta investigación es la Subsecretaria de Servicios Educativos para el D.F. A 5% de la muestra de hogares, se realizaron re-entrevistas por parte de un psiquiatra o psicológico (en su institución) con el K-SADS para evaluar la concordancia diagnostica.

Dra. Corina Benjet.
Responsable del Proyecto Adolescentes
Otros Integrantes: Dra. María Elena Medina-Mora,
Dr. Guilherme Borges

2007

79) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** Blanco, J., Zambrano, J., Orozco, R., Fleiz, C., Rojas, E. (2007). Drug use opportunities and the transition to drug use among adolescents from the Mexico Metropolitan Area. Drug and Alcohol Dependence, 90, 128-34. .

ABSTRACT
The earliest stage of drug involvement is being presented with the opportunity to use drugs. During adolescence these opportunities increase. Because of the scarcity of data for the Mexican population, the aim is to estimate the prevalence of drug use opportunities among Mexican adolescents, the prevalence of drug use among those who were presented with the opportunity, and the socio-demographic correlates of both. A multistage probability survey was carried out among 12-17 year olds from Mexico City. Adolescents were administered the adolescent version of the World Mental Health Composite International Diagnostic Interview. The response rate was 71% (n=3005). Descriptive and logistic regression analyses were performed considering the multistage and weighted sample design. Twenty-nine percent has had the opportunity to try illicit drugs; of those presented with an opportunity, 18% has done so. Males, older adolescents, school drop-outs, and those whose parent has had drug problems are more likely to have been exposed to drug use opportunities while more religious adolescents are less likely. Given the chance to try drugs, older adolescents and school drop-outs are more likely to do so and those with high parental monitoring and religiosity are less likely. These results suggest that less substance use among females in Mexico may be due in part to fewer opportunities to use since females were equally likely to use drugs given the opportunity. Given the increase in opportunity among older adolescents, preventive efforts should start by age 12 and with special attention to adolescents who have dropped out of school.

80) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** Fleiz, C., Blanco, J., Zambrano, J., Rojas, E., Ramirez, M. (2007). Prevalence and socio-demographic correlates of drug use among adolescents: Results from the Mexican Adolescent Mental Health Survey. Addiction, 102, 1261-1268. .

AIMS: To estimate the life-time and 12-month prevalence of illicit drug use among Mexican adolescents, the age of onset of first drug use and the socio-demographic correlates. **METHOD:** A multi-stage probability survey of adolescents aged 12-17 years residing in the Mexico City Metropolitan Area was carried out in 2005. Adolescents were administered the computer-assisted adolescent version of the World Mental Health Composite International Diagnostic Interview by trained lay interviewers in their homes. The response rate was 71% (n = 3005). Descriptive and logistic regression analyses were performed considering the multi-stage and weighted sample design of the survey. **FINDINGS:** Of the adolescents, 5.2% have ever tried illicit drugs, 2.9% in the last 12 months. The most frequently used drugs are marijuana, followed by tranquilizers/stimulants. The median age of first use is 14 years. Correlates of life-time drug use are older age, having dropped out of school, parental drug problems, low religiosity and low parental monitoring. **CONCLUSIONS:** While drug use among Mexican adolescents is lower than among adolescents from other developed countries, its increasing prevalence with age and the narrowing male/female ratio calls for firm public health actions, particularly prevention strategies.

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81) **Borges G**, **Benjet, C.**, **Medina-Mora, ME,** Orozco, R., Nock, M.K. (2008). Suicide ideation, plan and attempt in the Mexican Adolescent Mental Health Survey. Journal of the American Academy of Child and Adolescent Psychiatry, 47(1), 41-52. .

OBJECTIVE: No representative data among adolescents in Mexico exist on the prevalence and risk factors for suicide ideation, plan, and attempt despite a recent increase in suicide deaths. **METHOD:** Data are presented from the Mexican Adolescent Mental Health Survey, a representative household survey of 3,005 adolescents ages

12 to 17 in metropolitan Mexico City who were gathered in 2005, regarding lifetime prevalence and age-of-onset distributions of suicide ideation, plan, and attempt and demographic and psychiatric disorders risk factors. **RESULTS:** Lifetime ideation was reported by 11.5% of respondents, whereas 3.9% reported a lifetime plan and 3.1% a lifetime suicide attempt. Onset of suicidality started around age 10 and at age 15 showed the highest hazards. Suicide ideators were more likely to report a plan and attempt within the first year of onset of ideation. Suicidality was more likely to occur among females. The presence of one or more mental disorders was strongly related to suicide ideation, plan, and attempt. Among ideators only dysthymia was consistently related to a plan and attempt. **CONCLUSIONS:** Intervention efforts should focus on assessment and target adolescents with mental disorders, particularly mood disorders, to be effective in prevention.

82) **Borges G**, **Benjet, C.**, **Medina-Mora, ME,** Orozco-Zavala, R., Molnar, B.E., Nock, M.K. (2008). Traumatic life events and suicide related outcomes among Mexico City Adolescents. Journal of Child Psychology and Psychiatry, 49(6), 654-666. .

BACKGROUND: We report the prevalence and associations between traumatic events and suicidal ideation, suicide plans and suicide attempts among Mexican adolescents. **METHODS:** The data are from a representative multistage probability household survey of 3,005 adolescents aged 12 to 17 years residing in the Mexico City Metropolitan Area that was carried out in 2005. We used discrete time survival analyses to model the net impact of retrospectively reported prior occurrence of traumatic events on ideation, plans and attempts, taking into account the onset of psychiatric disorders. **RESULTS:** Prevalence of suicidality was high among respondents with traumatic events, ranging from a 43% prevalence of suicidal ideation among those with a history of 'Being raped' to a 25% prevalence of suicide attempts among those that reported 'Purposely injured, tortured or killed someone.' In cross-sectional estimates, any traumatic event was associated with an increase of 3.2 times the odds of suicide ideation, 5.1 times the odds of a plan and 6.6 times the odds of an attempt. Number of events was also associated with increasing suicidality such that those with three or more events were 13.7 times more likely to report a suicide attempt than those with none. Multivariate discrete time survival models that took into account a large number of demographic, suicide-related and psychiatric disorder variables reduced in strength but did not alter these basic relationships. **CONCLUSIONS:** We conclude that traumatic events such as rape and sexual assault have a profound impact upon suicidality and that this relationship is not entirely explained by the onset of psychiatric disorders. Comprehensive interventions for adolescent victims of traumatic events, especially those with a history of cumulative events, should include, but not be restricted to, treatment of any associated psychiatric disorder.

83) **Borges G**, **Benjet, C.**, **Medina-Mora, ME,** Orozco, R., Wang, P.S. (2008). Treatment of mental disorders for adolescents in Mexico City. Bulletin of the World Health Organization, 86(10), 757- 764. .

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.

84) **Orozco R, Borges G, Benjet C, Medina-Mora ME**, López-Carrillo L. (2008). Traumatic life events and posttraumatic stress disorder among Mexican adolescents: results from a survey. *Salud Pública de México*, *50* (S1): 29-37. **.**

OBJETIVO. Estimar la prevalencia y la asociación entre los Eventos Traumáticos (ET) y Trastorno de Estrés Postraumático (TEPT) en la población adolescente del Área Metropolitana de la Ciudad de México (AMCM). **MATERIAL Y MÉTODOS.** 3 005 adolescentes del AMCM entre 12 y 17 años fueron entrevistados empleando la versión para adolescentes de la Entrevista Diagnóstica Internacional de Salud Mental, en una muestra probabilística, estratificada y multietápica. **RESULTADOS.** 68.9% de los adolescentes en el AMCM reportaron por lo menos un ET alguna vez en su vida, con diferencias por sexo. La prevalencia de TEPT fue 1.8% (2.4% mujeres y 1.2% hombres), y el abuso sexual se asoció al desarrollo de TEPT [OR=3.9 (CI95%=1.8-8.2)], independientemente del sexo, educación o edad. **CONCLUSIONES**. La exposición a ET es común en los adolescentes. Se debe poner énfasis en los esfuerzos que buscan reducir el abuso sexual en la infancia y la adolescencia, ya que se asocia fuertemente al TEPT

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85) **Benjet, C.**, **Medina-Mora, ME, Borges G**, Zambrano, J., Aguilar-Gaxiola, S. (2009). Youth mental health in a populous city of the developing world: Results from the Mexican Adolescent Mental Health Survey. Journal of Child Psychology and Psychiatry, 50 (4), 386-395. **.**

BACKGROUND: Because the epidemiologic data available for adolescents from the developing world is scarce, the objective is to estimate the prevalence and severity of psychiatric disorders among Mexico City adolescents, the socio-demographic correlates associated with these disorders and service utilization patterns. **METHODS:** This is a multistage probability survey of adolescents aged 12 to 17 residing in Mexico City. Participants were administered the computer-assisted adolescent version of the World Mental Health Composite International Diagnostic Interview by trained lay interviewers in their homes. The response rate was 71% (n = 3005). Descriptive and logistic regression analyses were performed considering the multistage and weighted sample design of the survey. **RESULTS:** One in every eleven adolescents has suffered a serious mental disorder, one in five a disorder of moderate severity and one in ten a mild disorder. The majority did not receive treatment. The anxiety disorders were the most prevalent but least severe disorders. The most severe disorders were more likely to receive treatment. The most consistent socio-demographic correlates of mental illness were sex, dropping out of school, and burden unusual at the adolescent stage, such as having had a child, being married or being employed. Parental education was associated with treatment utilization. **CONCLUSIONS:** These high prevalence estimates coupled with low service utilization rates suggest that a greater priority should be given to adolescent mental health in Mexico and to public health policy that both expands the availability of mental health services directed at the adolescent population and reduces barriers to the utilization of existing services.

86) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** Zambrano, J., Cruz, C., Méndez, E. (2009). Descriptive epidemiology of chronic childhood adversity in Mexican adolescents. Journal of Adolescent Health, 45(5), 483-489. **. 933**

PURPOSE: To estimate the prevalence of adversity (neglect and abuse, parental loss, parental psychopathology, economic adversity, and serious physical illness), the interrelatedness of adversities, and their socio-demographic correlates. **METHODS:** This is a multistage probability survey of 3005 adolescents aged 12-17 years residing in Mexico City. Youth were administered the computer-assisted adolescent version of the World Mental Health Composite International Diagnostic Interview in their homes. The childhood and posttraumatic stress disorder sections provided information regarding adversity. Descriptive and logistic regression analyses were performed

considering the multistage and weighted sample design. **RESULTS:** A total of 68% of adolescents have experienced at least one type of chronic childhood adversity, whereas almost 7% have experienced four of more. The most frequent adversity is economic adversity followed by witnessing domestic violence. Boys experience more neglect than girls, and girls experience more sexual abuse than boys. Family dysfunction adversities tend to clump together such that youth exposed to abuse of any form also report witnessing domestic violence and parental mental pathology. Youth whose parents have divorced are likely to experience economic adversity. Parental death is independent of experiencing other childhood adversities. Older adolescents, school drop-outs, those with young mothers, those with more siblings, and those whose parents have less education are more likely to experience adversity. **CONCLUSIONS:** Although most adolescents have experienced some adversity, a small group is exposed to many adversities. Understanding the distribution of adversities may help us to identify at-risk youth and to better interpret the findings from studies on the role of adversity in diverse health outcomes.

87) **Benjet, C.**, **Borges G**, **Medina-Mora, ME,** Méndez, E., Fleiz, C., Rojas, E., Cruz, C.(2009). Diferencias de sexo en la prevalencia y severidad de trastornos psiquiátricos en adolescentes de la ciudad de México [Sex differences in the prevalence and severity of psychiatric disorders in Mexico City adolescents]. Salud Mental, 32(2), 155-163.

INTRODUCCIÓN: El presente trabajo proporciona datos de la Encuesta Mexicana de Salud Mental Adolescente y tiene el objetivo de estimar las diferencias por sexo de la prevalencia y la severidad en los últimos 12 meses para 17 trastornos psiquiátricos en adolescentes de la Ciudad de México y área metropolitana así como las edades de inicio de dichos trastornos. **MATERIAL Y MÉTODOS**: El diseño de la muestra fue probabilístico y multietápico, ésta estuvo compuesta por adolescentes entre los 12 y 17 años, residentes del Distrito Federal y área metropolitana. Para ello, se entrevistó a 3005 adolescentes en sus hogares, con una tasa de respuesta de 71% y se utilizó como instrumento diagnóstico la Entrevista Internacional Diagnóstica Compuesta (WMH-CIDI-A 3.0) aplicada cara a cara, por medio de una computadora portátil, por encuestadores capacitados en los hogares de los participantes. **RESULTADOS**: Los trastornos individuales más frecuentes en ambos sexos fueron las fobias específicas y la fobia social. Para las mujeres, los trastornos más prevalentes en orden decreciente fueron las fobias, la depresión mayor, el trastorno negativista desafiante, la agorafobia sin pánico y la ansiedad por separación. Mientras que en los varones, los trastornos más prevalentes después de las fobias fueron: el trastorno negativista desafiante, el abuso de alcohol y el trastorno disocial. Las mujeres presentaron un mayor número de trastornos y una mayor prevalencia de cualquier trastorno. Los padecimientos con mayor proporción de gravedad fueron los trastornos de ánimo y en menor proporción los trastornos ansiosos. Este patrón fue similar para hombres y mujeres, sin embargo existen diferencias en la proporción de casos graves entre ambos ya que las mujeres tuvieron una mayor proporción de casos de este tipo. Los trastornos que se presentaron en edades de inicio más tempranas fueron los trastornos de ansiedad, seguidos por los trastornos de impulsividad y los trastornos de ánimo. Además los trastornos que se presentaron en edades más tardías fueron los trastornos por uso de sustancias. Las edades de inicio para los trastornos de ansiedad, ánimo y por uso de sustancias son similares entre los sexos, a diferencia de los trastornos de impulsividad en los cuales los hombres tienen edades de inicio más tempranas que las mujeres. **DISCUSIÓN**: La mayor prevalencia general y severidad de trastornos psiquiátricos en las mujeres comparadas con los varones sugiere que la adolescencia podría ser un periodo de mayor vulnerabilidad para aquellas. Hay teorías biológicas y psicosociales que pretenden explicar la mayor vulnerabilidad de las niñas en la etapa adolescente, entre ellas la teoría de la intensificación del rol de género, la exposición a mayor adversidad y la mayor reactividad del eje hipotálamo-pituitario-adrenal ante el estrés. Los hallazgos de este estudio son relevantes para la práctica clínica así como para la vigilancia epidemiológica en nuestra población ya que sirven para la planificación de servicios y políticas públicas de salud y educación.

2010

88) **Borges G**, **Benjet, C.**, **Medina-Mora, ME**, Miller, M. (2010). Body mass index and its relationship to mental disorders in the Mexican Adolescent Mental Health Survey. Salud Pública de México, 52(2), 103-110. **.980**
OBJETIVO. Evaluar la asociación entre el índice de masa corporal (IMC) y la prevalencia de trastornos psiquiátricos en adolescentes de la Ciudad de México. **MATERIAL Y MÉTODOS**. 3005 adolescentes entre 12 y 17 años fueron entrevistados en 2005 (tasa de respuesta =71%). Las entrevistas cara a cara se hicieron en los hogares de los participantes seleccionados después del consentimiento de los padres o tutores. Se utilizó regresión logística. **RESULTADOS**. Sólo se encontró asociación entre IMC extremadamente bajo y trastornos de control de impulsos. El IMC elevado estuvo asociado con trastornos de control de impulsos sólo en las mujeres. Los trastornos de control de impulsos específicamente relacionados con bajo IMC incluyen el trastorno explosivo intermitente y el trastorno de conducta. El alto IMC estuvo relacionado únicamente con el trastorno explosivo intermitente. **CONCLUSIÓN**. Entre los adolescentes mexicanos, es más probable que aquellos con IMC extremadamente alto o bajo presenten trastornos de control de impulsos que aquellos con IMC normal.

89) **Borges G**, **Benjet, C.**, **Medina-Mora, ME, Orozco, R.,** Itziar Familiar, Nock, M.K., Wang, P.S. (2010). Service use among Mexico City adolescents with suicidality. Journal of Affective Disorders, 120(1-3), 32-39
BACKGROUND: We report the lifetime and 12-month prevalence and associations of mental health treatment among Mexican adolescents with suicide-related outcomes (SROs; including ideation, plans, gestures and attempts). **METHODS:** A representative multistage probability household survey of 3005 adolescents aged 12 to 17 years residing in the Mexico City Metropolitan Area was carried out in 2005. Discrete-time survival analyses were used to assess the relationships between SROs and receiving treatment for emotional, alcohol, or drug problems. **RESULTS:** The prevalence of lifetime service use among respondents with SROs was 35% for those with ideation only, 44% for those with ideation and plan, 49% for those with gesture and 50% for those with attempt; the prevalence of 12-month service use was 10%, 24%, 6% and 21%, respectively. Timing between onset of SRO and receiving treatment for emotional, alcohol, or drug problems showed that about 50% of adolescents will have contact with a service provider before developing any SRO. Healthcare professionals were the most likely to be consulted, followed by school-based programs. **LIMITATIONS:** This survey was limited to adolescents living in one of the largest metropolitan areas in the world and the analyses used data on retrospectively reported ages of onset that are subject to recall errors. **CONCLUSIONS:** Most suicidal adolescents do not receive treatment, and many adolescents develop their suicidality in spite of prior contacts with service providers. Interventions to increase treatment, prevention, and monitoring are sorely needed for this vulnerable population

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