

Psychopathology and socioeconomic position: what can be done to break the vicious circle?

Maria Melchior¹ · Cédric Galéra² · Laura Pryor¹

Published online: 15 June 2017
© Springer-Verlag GmbH Germany 2017

Socioeconomic circumstances are known to be associated with mental health since the seminal work conducted by Edward Jarvis in the State of Massachusetts in the United States in 1855, showing that persons belonging to socioeconomically deprived groups were disproportionately represented among those hospitalized in then-called ‘asylums’ [1]. Like many physicians and pioneer epidemiologists of his time, Jarvis primarily attributed the relationship between mental ill health and poverty to individuals’ innate flaws, which were thought to be amenable to change via “moral treatment”, but which were largely unavoidable. It followed that social inequalities in mental health were thought to be equally unavoidable.

160 years later, what is the state of understanding of the relationship between mental health and socioeconomic position? Research conducted in recent years, including the article published by Hu et al. in this month’s issue of ECAP [2] shows that in the twenty-first century, socioeconomic position—as measured by neighborhood characteristics—still predicts psychopathology in children and adolescents (in this case the experience of clinically relevant self-harm). Other studies report that parental educational level, income and employment status as well as family food insecurity and children’s perception of their social standing predict internalizing [3–5] as well as externalizing symptoms and substance use [4–6]. An important issue is that the extent

of social inequalities observed varies both with measures of socioeconomic position and psychopathology. Measures tapping into poverty, such as food insecurity, or those that take into account young people’s perceptions appear most strongly associated with mental health. Similarly, socioeconomic inequalities appear most consistent with regard to externalizing rather than internalizing symptoms.

What are the mechanisms that explain these socioeconomic inequalities? Because psychiatric disorders are multifactorial, many different pathways contribute to higher levels of occurrence and symptoms among the most disadvantaged youths, including birth complications and difficult family circumstances [7], negative life events and their accumulation over time which can create a ‘weathering effect’ [8, 9], and delayed diagnosis [10]. More recently, epigenetic pathways have also been suggested [11]. As shown by Hu et al., parental history of a psychiatric disorder is another important contributor to socioeconomic inequalities in offspring mental health [2]. Moreover, mental health problems can also have an impact on youths’ academic achievement as well as later employment and delinquency. Du Rietz et al. [12] focus specifically on the long-term association between adolescent symptoms of hyperactivity and inattention and later life outcomes; contributing to prior research in this area [13, 14], they show that symptoms reported by parents are more predictive of later outcomes than those reported by youths themselves. This may be because parents may have a higher threshold for identifying symptoms in their offspring and may be more sensitive to disruptive behaviors than inattention. Du Rietz’ paper does not tell us whether parents’ ratings of their children’s symptoms vary depending on whether they themselves have mental health problems, but it may be that the experience of psychological difficulties makes some parents more likely to identify them in their children.

✉ Maria Melchior
maria.melchior@inserm.fr

¹ Sorbonne Universités, UPMC Univ Paris 06, INSERM, Institut Pierre Louis d’Epidémiologie et de Santé Publique (IPLESP UMRS 1136), F75012 Paris, France

² Université de Bordeaux, INSERM U1219, Centre Hospitalier Perrens, Bordeaux, France

Overall, these data point to the long shadow of childhood psychopathology, not only in terms of mental health but also social functioning, which further fuels social inequalities in mental health.

So, is there a way to decrease social inequalities in mental health? Although not specifically geared to answer this question, the study conducted by Wang et al. [15] points to one possible answer. If MRI-ascertained structural brain abnormalities can help identify adolescents who experience schizophrenia, use of such neurological measures for early detection could help adequately address youths' mental health needs and improve their long-term prognosis [16]. And, by ricochet, limit the socioeconomic impact of psychiatric disorders. Moreover, contextual interventions, particularly ones that target family or school functioning have the potential to develop children's and adolescents' resources and have shown efficacy across diverse socioeconomic settings [17]. Finally, a unique study conducted by Costello et al. [18] set in the 1990s among youths growing up on an American-Indian reserve, where some families benefited from additional revenue after a casino opened on their land, showed significantly improved mental health among youths whose families were lifted from poverty. This effect lasted through adulthood [19] and extended beyond improved mental health to higher educational attainment [20]. Interestingly, this study found that supplemental income received in adulthood did not have a significant effect on mental health, highlighting the critical role of childhood and adolescence. Hence, another way of limiting socioeconomic inequalities with regard to mental health is to ensure decent living conditions to all families and children.

References

- Jarvis E (1971) *Insanity and idiocy in Massachusetts. Report of the commission on Lunacy, 1855.* Harvard University Press, Boston
- Hu N, Li J, Glauert RA, Taylor CL (2017) Influence of exposure to perinatal risk factors and parental mental health related hospital admission on adolescent deliberate self-harm risk. *Eur Child Adolesc Psychiatry*. doi:10.1007/s00787-017-0948-4
- Melchior M, Chastang JF, Falissard B, Galera C, Tremblay RE, Cote SM et al (2012) Food insecurity and children's mental health: a prospective birth cohort study. *PLoS One* 7(12):e52615
- McLaughlin KA, Green JG, Alegria M, Jane Costello E, Gruber MJ, Sampson NA et al (2012) Food insecurity and mental disorders in a national sample of US adolescents. *J Am Acad Child Adolesc Psychiatry* 51(12):1293–1303
- McLaughlin KA, Costello EJ, Leblanc W, Sampson NA, Kessler RC (2012) Socioeconomic status and adolescent mental disorders. *Am J Public Health* 102(9):1742–1750
- Melchior M, Chastang J-F, Walburg V, Galéra Cd, Fombonne E (2010) Family income and youths' symptoms of depression and anxiety: a longitudinal study of the GAZEL Youth cohort. *Depre Anxiety* 27(12):1095–1103
- Galéra C, Côté SM, Bouvard MP, Pingault JB, Melchior M, Michel G et al (2011) Early risk factors for hyperactivity-impulsivity and inattention trajectories from age 17 months to 8 years. *Arch Gen Psychiatry* 68(12):1267–1275
- Melchior M, Touchette E, Prokofyeva E, Chollet A, Fombonne E, Elidemir G et al (2014) Negative events in childhood predict trajectories of internalizing symptoms up to young adulthood: an 18-year longitudinal study. *PLoS One* 9(12):e114526
- Geronimus AT (2013) Deep integration: letting the epigenome out of the bottle without losing sight of the structural origins of population health. *Am J Public Health* 103(Suppl 1):S56–S63
- Anderson KK, Fuhrer R, Malla AK (2010) The pathways to mental health care of first-episode psychosis patients: a systematic review. *Psychol Med* 40(10):1585–1597
- Beach SR, Lei MK, Brody GH, Kim S, Barton AW, Dogan MV et al (2016) Parenting, socioeconomic status risk, and later young adult health: exploration of opposing indirect effects via DNA methylation. *Child Dev* 87(1):111–121
- Du Rietz E, Kuja-Halkola R, Brikell I, Jangmo A, Sariaslan A, Lichtenstein P et al (2017) Predictive validity of parent- and self-rated ADHD symptoms in adolescence on adverse socioeconomic and health outcomes. *Eur Child and Adolesc Psychiatry*. doi:10.1007/s00787-017-0957-3
- Galéra C, Melchior M, Chastang JF, Bouvard MP, Fombonne E (2009) Childhood and adolescent hyperactivity-inattention symptoms and academic achievement 8 years later: the GAZEL Youth study. *Psychol Med* 39(11):1895–1906
- Galéra C, Bouvard MP, Lagarde E, Michel G, Touchette E, Fombonne E et al (2012) Childhood attention problems and socioeconomic status in adulthood: 18-year follow-up. *Br J Psychiatry* 201(1):20–25
- Wang S, Zhan Y, Zhang Y, Lv L, Wu RR, Zhao J et al (2017) Abnormal functional connectivity strength in patients with adolescent-onset schizophrenia: a resting-state fMRI study. *Eur Child Adolesc Psychiatry*. doi:10.1007/s00787-017-0958-2
- McFarlane WR, Levin B, Travis L, Lucas FL, Lynch S, Verdi M et al (2015) Clinical and functional outcomes after 2 years in the early detection and intervention for the prevention of psychosis multisite effectiveness trial. *Schizophr Bull* 41(1):30–43
- Welsh J, Strazdins L, Ford L, Friel S, O'Rourke K, Carbone S et al (2015) Promoting equity in the mental wellbeing of children and young people: a scoping review. *Health Promot Interv* 30(Suppl 2):36–76
- Costello EJ, Compton SN, Keeler G, Angold A (2003) Relationships between poverty and psychopathology: a natural experiment. *J Am Med Assoc* 290(15):2023–2029
- Costello EJ, Erkanli A, Copeland W, Angold A (2010) Association of family income supplements in adolescence with development of psychiatric and substance use disorders in adulthood among an American Indian population. *J Am Med Assoc* 303(19):1954–1960
- Akee RK, Copeland WE, Keeler G, Angold A, Costello EJ (2010) Parents' incomes and children's outcomes: a quasi-experiment. *Am Econ J Appl Econ* 2(1):86–115