

Summary bio: Carsten Hjorthøj, MSc., PhD

Dr. Hjorthøj is an associate professor and research leader at the Copenhagen Research Center for Mental Health – CORE at Copenhagen University Hospital and at the University of Copenhagen, Department of Public Health, Section of Epidemiology. Dr. Hjorthøj is internationally recognized as an expert within the area of dually diagnosed substance use disorder and psychiatric disorders. Dr. Hjorthøj has a special focus on the area of cannabis and psychosis and has published numerous highly cited studies in the field. Dr. Hjorthøj has worked tirelessly to shed light on the mental health sequelae of cannabis use, both in relation to developing mental illness and in people already suffering from mental illness. In addition to his focus on cannabis and schizophrenia, Dr. Hjorthøj is currently working to expand our knowledge on substance-induced psychosis in general and cannabis-induced psychosis in particular. Finally, Dr. Hjorthøj is also involved in research into whether cannabinoids, in particular CBD, are safe and efficacious for various disorders.

Education

- PhD from University of Copenhagen 2012. Dissertation: *Cannabis and psychosis – the CapOpus trial: Treatment and measurement of cannabis use disorders in psychosis*
- Master in public health science (cand.scient.san.publ.) from University of Copenhagen, 2006.
- Bachelor in public health science from University of Copenhagen, 2004

Employment

- Research leader and senior researcher at Copenhagen Research Center for Mental Health – CORE, Mental Health Center Copenhagen, Copenhagen University Hospital since February 2012 (current)
- Associate professor at University of Copenhagen, Department of Public Health, Section of Epidemiology since 2018 – extension of affiliation from 2008-2015 (current)
- Research assistant and PhD student at Copenhagen Research Center for Mental Health – CORE, Mental Health Center Copenhagen, Copenhagen University Hospital 2007-2012.
- Research assistant at Statens Serum Institut, 2006-2007
- Censor at the censor corps for public health since 2010 (current)

Management experience

- Since 2012 I have been research leader on our institution's research program on psychosis and substance abuse. Apart from a range of register-based studies involving mainly supervision, I have also been project manager with direct responsibility of a range of trials and other studies. Project management within these have included everything from leading employees, managing approvals and documentation, communicating with internal and external stakeholders, setting up and adapting projects to circumstances, etc. Examples of projects I have or still manage include:
 - FOCUS, randomized trial currently employing 2 PhD students and 1 postdoc, formerly also 1 additional PhD student, 2 therapists and several student assistants
 - SOREAL, randomized trial currently employing 2 PhD students, with project collaborations with 2 treatment clinics and 1 private enterprise
 - F-ACT, quasi-experimental study currently employing 1 PhD student
 - Evaluation of the experimental introduction of medical cannabis in Denmark, quasi-experimental study currently employing 3 research assistants
 - OPUS 2, randomized trial previously employing 1 PhD student and 1 research nurse
 - CHANGE, randomized trial previously employing 2 PhD students and 1 research assistant
- In addition, I have a formal education in research leadership and leading researchers from Region Hovedstaden in 2017

Scientific focus areas

Through 14 years at the Copenhagen Research Center for Mental Health – CORE, I have developed and demonstrated strong skills and an expert level of knowledge within areas such as substance abuse, dual diagnosis, planning and conducting randomized trials, advanced statistical analyses, etc. I have a strong interest in the cross-disciplinary areas of substance abuse of mental health and have had an interest in and worked with research within treatment of cannabis abuse and epidemiology of substance-induced psychosis and dual diagnosis since I started working at the research center in 2007.

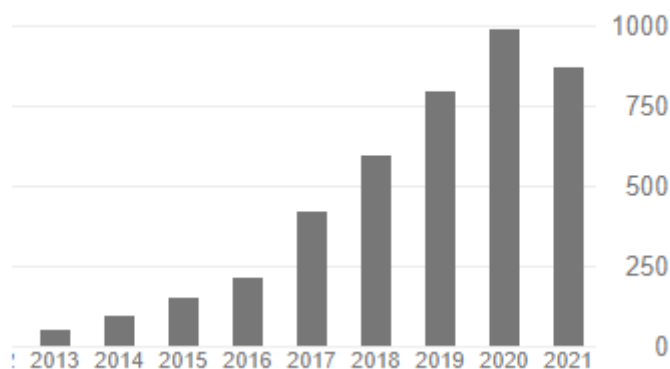
Relevant national and international relations

I am a founding member of a Nordic team of researchers with a strong interest in the epidemiology and treatment of substance-induced psychosis. Other than myself, the team consists of Jørgen Bramness, professor at The Arctic University of Norway and senior researcher at the Norwegian Institute of Public Health; Solja Niemelä, associate professor at the University of Turku in Finland; Heidi Taipale, assistant professor at the Karolinska Institutet in Sweden and Academy Research Fellow at Niuvanniemi Hospital in Finland; and Eline Rognli, group leader and senior researcher at Oslo University Hospital in Norway. I am currently involved in a consortium working on a position paper on cannabis and mental health for the World Federation of Societies of Biological Psychiatry.

Publications

H-index 36 ([Google Scholar](#)). 133 publications in [PubMed](#), [17 as last author](#) and [25 as first author](#).

Currently 4,300+ citations listed in Google Scholar:



Selected publications relevant to IASIC's work:

- **Hjorthøj C**, Posselt CM, Nordentoft M. Development Over Time of the Population-Attributable Risk Fraction for Cannabis Use Disorder in Schizophrenia in Denmark. *JAMA Psychiatry*. 2021 Jul 21:e211471. doi: 10.1001/jamapsychiatry.2021.1471. Epub ahead of print. PMID: 34287621.
- **Hjorthøj C**, Madsen T, Starzer M, Erlangsen A, Nordentoft M. Mortality in substance-induced psychosis: a register-based national cohort study. *Addiction*. 2021 Jun 9. PMID: 34105214.
- **Hjorthøj C**, Starzer MSK, Benros ME, Nordentoft M. Infections as a Risk Factor for and Prognostic Factor After Substance-Induced Psychoses. *Am J Psychiatry*. 2020. PMID: 32046532.
- Olesen JA, Posselt CM, Poulsen CH, Nordentoft M, **Hjorthøj C**. Cannabis use disorders may protect against certain disorders of the digestive organs in people with schizophrenia but not in healthy controls. *Psychol Med*. 2020. PMID: 30880659.
- Mårtensson S, Johansen KS, **Hjorthøj C**. Dual diagnosis and mechanical restraint - a register based study of 31,793 patients and 6562 episodes of mechanical restraint in the Capital region of Denmark from 2010-2014. *Nord J Psychiatry*. 2019 Apr;73(3):169-177. PMID: 30848979.
- Petersen SM, Toftdahl NG, Nordentoft M, **Hjorthøj C**. Schizophrenia is associated with increased risk of subsequent substance abuse diagnosis: A nation-wide population-based register study. *Addiction*. 2019 Dec;114(12):2217-2226. PMID: 31301685.
- Demontis D, Rajagopal VM, Thorgeirsson TE, Als TD, Grove J, Leppälä K, Gudbjartsson DF, Pallesen J, **Hjorthøj C**, Reginsson GW, Tyrfingsson T, Runarsdottir V, Qvist P, Christensen JH, Bybjerg-Grauholm J, Bækvad-Hansen M, Huckins LM, Stahl EA, Timmermann A, Agerbo E, Hougaard DM, Werge T, Mors O, Mortensen PB, Nordentoft M, Daly MJ, Stefansson H, Stefansson K, Nyegaard M, Børglum AD. Genome-wide association study implicates CHRNA2 in cannabis use disorder. *Nat Neurosci*. 2019 Jul;22(7):1066-1074PMID: 31209380.
- **Hjorthøj C**, Larsen MO, Starzer MSK, Nordentoft M. Annual incidence of cannabis-induced psychosis, other substance-induced psychoses and dually diagnosed schizophrenia and cannabis use disorder in Denmark from 1994 to 2016. *Psychol Med*. 2019. PMID: 31839011.
- **Hjorthøj C**, Uddin MJ, Wimberley T, Dalsgaard S, Hougaard DM, Børglum A, Werge T, Nordentoft M. No evidence of associations between genetic liability for schizophrenia and development of cannabis use disorder. *Psychol Med*. 2019. PMID: 31813396.
- **Hjorthøj C**, Albert N, Nordentoft M. Association of Substance Use Disorders With Conversion From Schizotypal Disorder to Schizophrenia. *JAMA Psychiatry*. 2018. PMID: 29710317.
- Starzer MSK, Nordentoft M, **Hjorthøj C**. Rates and Predictors of Conversion to Schizophrenia or Bipolar Disorder Following Substance-Induced Psychosis. *Am J Psychiatry*. 2018. PMID: 29179576.

- Jørgensen KB, Nordentoft M, **Hjorthøj C**. Association between alcohol and substance use disorders and psychiatric service use in patients with severe mental illness: a nationwide Danish register-based cohort study. *Psychol Med*. 2018 Nov;48(15):2592-2600. PMID: 29429425.
- Nielsen SM, Toftdahl NG, Nordentoft M, **Hjorthøj C**. Association between alcohol, cannabis, and other illicit substance abuse and risk of developing schizophrenia: a nationwide population based register study. *Psychol Med*. 2017. PMID: 28166863.
- Østergaard MLD, Nordentoft M, **Hjorthøj C**. Associations between substance use disorders and suicide or suicide attempts in people with mental illness: a Danish nation-wide, prospective, register-based study of patients diagnosed with schizophrenia, bipolar disorder, unipolar depression or personality disorder. *Addiction*. 2017 Jul;112(7):1250-1259. PMID: 28192643.
- Toftdahl NG, Nordentoft M, **Hjorthøj C**. Prevalence of substance use disorders in psychiatric patients: a nationwide Danish population-based study. *Soc Psychiatry Psychiatr Epidemiol*. 2016. PMID: 26260950.
- Toftdahl NG, Nordentoft M, **Hjorthøj C**. The Effect of Changes in Cannabis Exposure on Psychotic Symptoms in Patients With Comorbid Cannabis Use Disorder. *J Dual Diagn*. 2016 Apr-Jun;12(2):129-36. PMID: 27070732.
- **Hjorthøj C**, Østergaard ML, Benros ME, Toftdahl NG, Erlangsen A, Andersen JT, Nordentoft M. Association between alcohol and substance use disorders and all-cause and cause-specific mortality in schizophrenia, bipolar disorder, and unipolar depression: a nationwide, prospective, register-based study. *Lancet Psychiatry*. 2015 Sep;2(9):801-8. PMID: 26277044.
- **Hjorthøj CR**, Orlovská S, Fohlmann A, Nordentoft M. Psychiatric treatment following participation in the CapOplus randomized trial for patients with comorbid cannabis use disorder and psychosis. *Schizophr Res*. 2013 Dec;151(1-3):191-6. PMID: 24189290.
- **Hjorthøj CR**, Baker A, Fohlmann A, Nordentoft M. Intervention efficacy in trials targeting cannabis use disorders in patients with comorbid psychosis systematic review and meta-analysis. *Curr Pharm Des*. 2014;20(13):2205-11. PMID: 23829367.
- **Hjorthøj CR**, Fohlmann A, Larsen AM, Gluud C, Arendt M, Nordentoft M. Specialized psychosocial treatment plus treatment as usual (TAU) versus TAU for patients with cannabis use disorder and psychosis: the CapOplus randomized trial. *Psychol Med*. 2013 Jul;43(7):1499-510. PMID: 23040144.
- **Hjorthøj C**, Fohlmann A, Nordentoft M. Treatment of cannabis use disorders in people with schizophrenia spectrum disorders - a systematic review. *Addict Behav*. 2009 Jun-Jul;34(6-7):520-5. PMID: 19268481.