

Press release

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Basic information

Name: Kathrine Pape Madsen Email: kpm@nfa.dk Phone: 28602966

Department of: Public Health

Main supervisor: Professor Vivi Schlünssen, PhD, MD

Title of dissertation: Preconception, prenatal and early life exposures and the risk of childhood asthma

Date for defence: 15/5/2020 at (time of day): 1pm Place: Due to COVID-19, the defence will be held as a web defence via Zoom. Please e-mail kpm@nfa.dk to receive an invitation with a Zoom link.

Press release (Danish)

Ph.d.-forsvar om prækonceptionelle, prænatale og tidlige postnatale eksponeringer samt risiko for børneastma

Astma er den hyppigste kroniske sygdom hos børn verden over, men trods omfattende forskning om emnet er årsagerne til børneastma stadig dårligt belyst. Men det er kendt, at prænatale samt tidlige postnatale stadier i livet er perioder, som er sårbare i forhold til risikoen for udvikling af sygdom senere i livet.

Nyere studier peger på, at de eksponeringer en kvinde er udsat for, selv før undfangelsen af et barn kan have betydning for barnets sundhed og sygdom senere i livet.

Ph.d. projektets formål

Kathrine Pape Madsens ph.d.-projekt bidrager med ny viden om, hvordan eksponeringer før undfangelse, prænatale samt tidligt postnatale, kan påvirke risikoen for udvikling af astma hos børn. Samlet set tyder resultaterne ikke på, at eksponeringer før undfangelse eller under graviditeten har stor betydning for udvikling af astma i barndommen, hverken for drenge eller piger. Kvinders oplevelse af kontrol på arbejdet under graviditeten var forbundet med børns astma, men resultaterne er inkonsistente. Negative begivenheder, fx forældres død eller sygdom i de første livsår var også relateret til øget risiko for børneastma.

Ph.d.-afhandlingen er baseret på fire kohortestudier samt et valideringsstudie. Der indgår således data fra dels den danske mor-barn kohorte "Bedre Sundhed i Generationer" (BSIG), dels fra de internationale kohorter: "The Respiratory Health in Northern Europe, Spain and Australia (RHINESSA) generation study", "the Melbourne Atopy Cohort Study (MACS)", "the Tasmanian Longitudinal Health Study (TAHS)" samt fra landsdækkende registre i Danmark.

Resultater præsenteres med baggrund i et nyt ph.d.-projekt fra Aarhus Universitet, Health samt Det Nationale Forskningscenter for Arbejdsmiljø. Projektet er gennemført af Kathrine Pape Madsen, der forsvare det d. 15. Maj 2020 kl. 13.00.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 15/05/2020 kl. 13.00. Grundet COVID-19 vil forsvaret blive gennemført som et web forsvar via Zoom. For at deltage i forsvaret skal du sende en mail til kpm@nfa.dk for at modtage en invitation med et link til Zoom.

Titlen på projektet er "Prækonceptionelle, prænatale og tidlige livsbegivenheder samt risiko for børneastma". Yderligere oplysninger: Kathrine Pape Madsen, e-mail: kpm@nfa.dk, tlf. 28602966.

Bedømmelsesudvalg:

Lektor Bodil Hammer Bech, PhD (chairperson og moderator af forsvaret)

Institut for Folkesundhed, Sektion for Epidemiologi, Aarhus Universitet, Aarhus, Danmark

Professor Marike Boezen, PhD

Department of Epidemiology, University of Groningen, Groningen, the Netherlands

Professor Naja Hulvej Rod, PhD

Institut for Folkesundhedsvidenskab, Afdeling for Epidemiologi, Københavns Universitet, København, Danmark

Press release (English)

Preconception, prenatal and early life exposures and the risk of childhood asthma

Asthma is the most common chronic disease in children, and despite much research, the etiology is poorly understood. At present, it is known that early life environments are susceptible periods for the development of disease later in life.

In recent studies, new vulnerable periods of life are still being explored. For instance, environmental exposures before conception are also suggested as risk factors for diseases in their future children.

Aim of the PhD project

Kathrine Pape Madsen's PhD project contributes to new knowledge on how preconception, prenatal, and early life exposures might affect childhood asthma.

Overall, the results do not indicate that exposures before conception or during pregnancy are of great importance for the development of childhood asthma, neither for boys nor girls. However, women's experience of control at work during pregnancy was associated with children's asthma, but the results are inconsistent. Adverse life events, such as parents' death or illness in the first years of life, were also related to increased risk of childhood asthma.

The PhD thesis is based on four cohort studies and one validation study. Data is included from the Danish mother-child cohort "Better Health in Generations" (BSIG) and the international cohorts: "The Respiratory Health in Northern Europe, Spain and Australia (RHINESSA) generation study", "the Melbourne Atopy Cohort Study (MACS)", "the Tasmanian Longitudinal Health Study (TAHS)" and from nationwide registries in Denmark.

The results will be presented in a new PhD project from Aarhus University, Health, and the National Research Centre for the Working Environment. The project was carried out by Kathrine Pape Madsen, who is defending her dissertation on May 15th, 2020, at 1 pm.

The defence is public and takes place May 15th, 2020, 1 pm. Due to COVID-19, the defence will be held as a web defence via Zoom. Please e-mail kpm@nfa.dk to receive an invitation with a Zoom link.

The title of the project is "Preconception, prenatal and early life exposures and the risk of childhood asthma. For more information, please contact Kathrine Pape Madsen, email: kpm@nfa.dk, Phone +45 28602966.

Assessment committee:

Associate Professor Bodil Hammer Bech, PhD (chairperson and moderator of the defence)

Department of Public Health, Section for Epidemiology, Aarhus University, Aarhus, Denmark

Professor Marike Boezen, PhD

Department of Epidemiology, University of Groningen, Groningen, the Netherlands

Professor Naja Hulvej Rod, PhD

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