# HOW CAN WE REDUCE INEQUALITIES IN CHILD HEALTH? PERSPECTIVES FROM ACROSS EUROPE.

## EUROPEAN PUBLIC HEALTH CONFERENCE

## WORKSHOP

***FRIDAY NOVEMBER 30TH 2018***
***TIME: 08.30 – 09.30***
***LOCATION: M3+4***

## LJUBLJANA - SLOVENIA

EUROPEAN PUBLIC HEALTH CONFERENCE

**Organized by EUPHA Section on child and adolescent public health; Section on public health epidemiology; Section on environment and health**

## Objectives

Inequalities in health are unnecessary and unjust yet are persisting or increasing both between and within countries. Reducing inequalities in health is a priority of many governments and the World Health Organisation recognises the importance of health for all as the foundation for achieving the Sustainable Development Goals. It is clear that the will to reduce health inequalities is there; the problem is finding out what best to do and how to do it with limited resources. The Commission on the Social Determinants of Health noted the importance of starting early since improvements in early child development have the potential to improve health throughout the lifecourse due to the influence of childhood on the risk of obesity, malnutrition, mental health problems, heart disease and criminality amongst others. The Glasgow Declaration "'All hands on deck' to close the health inequalities gap", made following the EPH Conference in Glasgow in 2014, recognised that describing inequalities in health was not enough. The declaration recommended that the public health community should increase studies on how to achieve population wide impact; translate research/evidence to policy; understand what works to reduce inequalities, for whom, and why; ensure that policies are based on established models of good practice; and exchange best practice so that we might learn from each other. This workshop follows these principles by looking at ways in which we might reduce inequalities in child health.

The first presentation considers health literacy and its impact on child and adolescent health inequalities. Evidence is presented based on nine projects on health literacy, mental health literacy and e-health literacy looking at where health literacy impacts on inequalities in child health with recommendations made regarding ways in which equity might be increased. The second presentation reports on a novel approach to parental support in a deprived neighbourhood. The experiences of professionals, parents and their children will help to inform as to the utility of the approach. The final presentation models how different existing interventions to improve maternal mental health would impact on child health and health inequalities. This shows the potential decreases in inequalities in child mental health that could be achieved under varied scenarios.

All presentations consider some form of targeting, including proportionate universalism, as a means of reducing inequalities in child health. The discussion will then be built around the following questions: What interventions work in terms of reducing inequalities in child health? How should interventions or services be targeted to help those in the greatest need? What are the "quick wins" for policy and practice to reduce child health inequalities?

## MAIN MESSAGES

**Message 1**
It is a public health priority to reduce inequalities in child health, yet we know very little about how to achieve this in practice

**Message 2**
We discuss different interventions and different ways to target the most disadvantaged populations in a bid to reduce inequalities

## CHAIRPERSONS FOR THE WORKSHOP

Professor Alastair Leyland, Vice President, EUPHA section on Public Health Epidemiology, University of Glasgow, UK, alastair.leyland@glasgow.ac.uk

Danielle Jansen, President, EUPHA section on Child and Adolescent Public Health (CAPH), University Medical Center Groningen, The Netherlands, d.e.m.c.jansen@umcg.nl

Peter van den Hazel, President, EUPHA section on Environment and Health, Public Health Services Gelderland-Midden, Arnhem, the Netherlands, peter.van.den.hazel@vggm.nl

# PROGRAM

**Introduction 08.30 – 08.35**

**Presentation 1 08.35 – 08.47** Health literacy in children and adolescents: associations between health literacy and health inequalities

**Presentation 2 08.47 – 08.59** A preventive and environment-centered approach of parent support in a deprived neigbourhood in the city of Groningen: experiences from professionals, parents and their children

**Presentation 3 08.59 – 09.11** How might improvements to maternal mental wellbeing reduce inequalities in child health in the UK? A simulation of hypothetical interventions using a causal mediation method.

**Discussion and closing 09.11 – 09.30**

## PRESENTATION 1: 08.35 – 08.47

# HEALTH LITERACY IN CHILDREN AND ADOLESCENTS: ASSOCIATIONS BETWEEN HEALTH LITERACY AND HEALTH INEQUALITIES

Presenting author: Orkan Okan [1]
Presenting author's email: orkan.okan@uni-bielefeld.de

*Authors*
**Okan [1], Jochimsen [2], Hendricks [2], Wasem [2], Bauer [1]**

1Bielefeld University, Bielefeld, Germany
2 University of Duisburg – Essen, Duisburg, Germany

**Background:** The social gradient in health is well established, with good education linked to better health, but health inequalities in children have not been as well researched as in adults. Available findings indicate health and behavioural inequalities in children. In this context, health literacy (HL) is a social determinant of health and low HL is associated with health inequalities. Based on a consortium project on HL in children and adolescents, this presentation will discuss HL related inequalities.

**Methods:** The results of nine projects on HL, mental HL, and e-HL have been synthesized based on data collected using a questionnaire completed by the project researchers. The focus was on a) summarizing the main results and b) drafting recommendations for research, practice and policy. Data have been analysed and translated into recommendations for action.

**Results**: First, vulnerable families and children of parents with mental health problems experience difficulties when seeking help. In particular, associated stigma affects mental health. Social care, education, and health systems are not user-friendly in relation to these families, making their situation more unjust. Second, findings of pilot studies indicate that low HL levels of children are associated with lower family affluence. Third, in the context of e-HL and digital health information, adolescents in general and migrant and refugee adolescents in particular experience inequities for several reasons, such as cultural/religious differences, poor online health information services, and separation from their home.

**Conclusions:** More research and action are needed on HL and inequalities in children. The consortium's synthesis report contains recommendations to address system complexities (HL of organisations/decision-makers), improve public health interventions, support children early in the lifecourse, and implement effective and equity-sensitive prevention concepts such as the proportionate universalism model.

## PRESENTATION 2: 08.47 – 08.59

# A PREVENTIVE AND ENVIRONMENT-CENTERED APPROACH OF PARENT SUPPORT IN A DEPRIVED NEIGBOURHOOD IN THE CITY OF GRONINGEN: EXPERIENCES FROM PROFESSIONALS, PARENTS AND THEIR CHILDREN

Presenting author: Jeanet Landsman [1]
Presenting author's email: j.a.landsman@umcg.nl

*Authors*
**Landsman [1], Tuinstra [1]**

1University Medical Center Groningen – Groningen, The Netherlands

**Background:** Professionals develop new methods to support parents with multiple and chronic life problems in raising their child. A preventive and environment-centred approach is frequently used: parents living in the same neighbourhood meet in groups and professionals stimulate interaction between them. One of the main goals of a project '3D parent support' in the north of the Netherlands (the cities Groningen, Hoogeveen and Veendam) is to unravel the activities and actions of the professionals in this approach. In addition, we collect experiences of all participants: professionals, parents and their children using Storytelling. Results of one deprived neighbourhood in Groningen will be presented: Beijum. A local 'Living-Room' (LR) in Beijum: The LR is a community centre in Beijum where professionals facilitate 1) meetings between parents with multiple and chronic life problems, 2) supportive social networks, 3) participation, 4) empowerment of the parents.

**Methods:** We installed a taskforce consisting of a researcher, a professional of the LR, a volunteer LR, a parent LR and two students of Social Work studies. At first they collected information to make a description of the LR. Next, all members were trained in Storytelling and they formulated the interview topics. The researcher and the students conducted the interviews with ten parents and their children and all involved professionals and volunteers. Data collection is still going on. All interviews are transcribed and coded, both inductive and deductive. We analyse the data with Atlas Ti.

**Next steps**: Coding the first transcribed interviews shows some preliminary themes like 'contribution parents', 'role volunteer' and 'helping network'. The results will be discussed in the taskforce to make practice-based interpretations. In addition, we will organise focus groups with professionals and experts to discuss the results. In the workshop presentation, our results will be presented and discussed with the audience.

## PRESENTATION 3: 08.59 – 09.11

# HOW MIGHT IMPROVEMENTS TO MATERNAL MENTAL WELLBEING REDUCE INEQUALITIES IN CHILD HEALTH IN THE UK? A SIMULATION OF HYPOTHETICAL INTERVENTIONS USING A CAUSAL MEDIATION METHOD.

Presenting author: Anna Pearce [1]
Presenting author's email: anna.pearce@glasgow.ac.uk

*Authors*
**Pearce [1], Hope [2], Dundas[1], Leyland[1]**

1University of Glasgow, Glasgow – United Kingdom
2 UCL Great Ormond Steet Institute of Child Health, London – United Kingdom

**Background:** Early years' services, such as the Family Nurse Partnership (FNP), aim to improve maternal mental health (MMH) to support child health and development. We examined how inequalities in child mental health (CMH) might change if interventions to improve MMH were scaled-up nationally, using data from the UK Millennium Cohort (18000 children born 2000-02).

**Methods:** Exposure: Maternal education in infancy. Mediator: MMH (Kessler Psychological Distress Scale at 3yrs). Outcome: CMH using the Strengths and Difficulties Questionnaire at 5yrs. Predicted probabilities for poor CMH were estimated in marginal structural models, accounting for confounding with inverse-probability-treatment-weights (n=14451). Prevalence ratios (PRs) captured relative HIs in CMH. Intervention scenarios were simulated by re-estimating predicted probabilities after modifying MMH by given amounts reflecting effect size (ES), in eligible groups (for targeted interventions), using random sampling (if uptake [U]<100%). Survey weights and multiple imputation addressed sample design, attrition, item missingness.

**Results:** 10% children had poor CMH, with a 2-fold difference in low v high education groups (PR 2.33 [1.94-2.72]). Simulations informed by meta-analyses of trials had limited benefit: a proportionate universal intervention combining a universal intervention (ES: 0.2SD, U: 75%), a targeted intervention in FNP eligible mothers <25 years (ES: 0.3SD, U: 66%), and an intensive intervention in mothers previously treated for depression (ES: 0.7SD, U: 66%) produced a prevalence of 9.2% and PR 2.36 (0.96-2.76). An optimistic scenario produced modest reductions in prevalence in CMH (to 8.5%) with PR 1.63 (1.34-1.91).

**Conclusion:** If achievable, levelling-up MMH could produce a substantial reduction in HIs. However, scale-up of existing interventions carries limited potential, even when targeting high-risk groups. These results require replication in other contexts and using alternative MMH measures.