Improving Child & Adolescent Health for better Public Health – Fiction or within the scope of possibility?

The perspective of a lifestyle-centered approach for Addressing Today's Global Health Paradox

Health is a critical condition to a fulfilled life. Given the fact that children are key to a nation's present and its future, there is growing recognition of the importance of preventative measures at young ages. Furthermore, many lifestyle behaviors that affect health for good or bad are established during childhood and adolescence. Accordingly, there is an ethical, social and economic imperative to ensure children's health. Even though there are many different definitions of child & adolescent health (eg. WHO, UN), there is consensus on the importance of enabling children to reach their full potential as a prerequisite for sustainable development, which includes a state of physical, mental, intellectual, emotional and social well-being that is based on lifestyle behaviors, such as healthy foods, sufficient physical exercise and sleep.

Poor lifestyle choices, however, have contributed to the occurrence of non-communicable disease (NCDs) risk factors at young ages that have been previously observed in adults only. For example, 30% of Austrian children/adolescents suffer from overweight/obesity; 80% do not reach the recommended physical activity level of 60 min/day; and many face circumstances of other serious and chronic health conditions (eg. hypertension, high blood glucose, high cholesterol levels, type 2 diabetes, lung disease, vascular fatty streaks, cancer, heart disease, stroke). Based on the underlying causes and mechanisms to develop NCDs, it is also well accepted that lifestyle behaviors track over time from childhood into adulthood. Thus, it is crucial to establish healthy lifestyle behaviors at a young age.

In addition to these lifestyle-based diseases, the world is facing challenges like antibiotic resistance and the current COVID-19 pandemic, which puts extra impact on shaping child & adolescent health. Today's children therefore face an uncertain future despite considerable improvements in the past. Although healthcare costs and budgets increased over the past decades (estimated € 52.4 billion for healthcare budget in 2020 in Austria), failing health is one of today's paradoxes.

Therefore, the aim of this international meeting and research exchange is to bring together researchers and stakeholders to:

- (1) discuss the themes and areas around lifestyle-centered child & adolescent health
- (2) showcase ongoing and completed research projects; and
- (3) introduce new research ideas that address the complex challenges and needs of child & adolescent health for future collaborative projects in order to apply for national and international grants

Contributions could be from – but are not limited to – the following thematic areas (see preliminary program outlined subsequently) **across various settings** (eg. school, health education, health literacy; clinical setting; community and public health inclusive public and statutory healthcare; others):

- Lifestyle factors & behaviors different areas and settings of health-orientated action and measures to improve health (eg. Food & Nutrition, Physical Activity, Sports & Exercise; Relationships; Substances affecting health; and/or combination for of more dimensional health approach)
- Mental health and stress management
- COVID-19 affecting children, adolescents, and adults: effects on health and lifestyle choices
- Environmental factors (eg. social, ecological, economical, climate change and many more)
- Education and Literacy addressing Health and Sustainability
- Healthy aeging from childhood into adulthood and the old age
- Others, eg. diverse aspects, theories or models to apply scientific data into practical/everyday actions

This **2-day meeting (Nov. 10-11, 2020)** will provide the platform for scientists to (i) address the current state of research on child & adolescent health and well-being and the impact on future public health, as well as (ii) invite and discuss collaborations for future projects that tackle urgent health issues in key areas of chronic disease and NCDs. In order to underline the importance of these topics, **the intention is to further** create & publish an abstract-based proceeding along with a consensus/position statement paper.

We are looking forward to welcoming you here at Graz!

Dr. Katharina Wirnitzer, University College of Teacher Education Tyrol, Innsbruck, AT Prof. Clemens Drenowatz, University College of Teacher Education Upper Austria, Linz, AT Prof. Nandu Goswami, Medical University of Graz, Graz, AT

Presentations + Q&A: 15 min + 3 min

Attention! Meeting is held at AUSTRIAN time (CET or UTC+1)

ZOOM Online Meeting: Tuesday, Nov 10, 2020

https://zoom.us/i/96012628022?pwd=UFBWU3pJS2dLNnNIRnVaYWqxcmq5UT09 & ID: 960 1262 8022 & Code: 9KL2#tWR ZOOM Online Meeting: Wednesday, Nov 11, 2020

https://zoom.us/j/95323910483?pwd=WHZ2NURjQjlzWURJdWRJTGtRSmY0UT09 & ID: 953 2391 0483 & Code: ZG+aMi7Y

DAY 1: Tuesday, 10. November 2020, 1 – 6 pm

Zoom - Technical testing & issues: 12.30 - 1 pm

PART 1 - Welcome, Background & Aim of scientific meeting

Session 1: 1 − 2 pm

Wirnitzer KC, Drenowatz C, Goswami N – Welcome from Austria, University College of Teacher Education
Tyrol & Upper Austria, University of Innsbruck, Medical University of Graz

Keynote

Klaper M, Moving Medicine Forward, PlantPure Communities, Medical School Nutrition Education Initiative, USA: Taking the Fear Out Feeding Vegan Diets to Children

PART 2 – Scientific themes to be put into action considering lifestyle factors and behaviors different areas and settings of health-orientated action and measures

Session 2: 2 - 5 pm

Thematic Area-1: COVID-19 in children & adolescents: facts vs. beliefs

Kofler W, Medical University of Innsbruck, AT: Unspecific effects – Overseen hopes for COVID 19 Lima RA, University of Graz, AT: Possible effects of the Covid-19 pandemic on child and adolescent mental health: An opinion

Gregori M, University of Vienna, AT: An examination of changes in health behaviour in children and adolescents as a consequence of the COVID-19 pandemic

Tortella P, Free University of Bolzano, ITA: Effects of lockdown on physical activity, sedentariness and sleep of Italian children from 0 to 12 years old.

Collier L, School of Social Workers/UFF, Brazil: Covid-19 and social inequalities: participatory diagnosis of the school community

3.45 pm - Break 15 min

Thematic Area-2: Mental Health

Culen M, RED NOSES Clowndoctors International, Vienna, AT: The Impact of Clowndoctors on Hospitalized Children - and Beyond

Martinus C, Teen Yoga Foundation, UK: Yoga as a mental health prevention strategy
Joulaei H, Shiraz University of Medical Sciences, Iran: Scrutinizing High-Risk Behaviors amongst
marginalized adolescents: A Mixed-Method Study in Southwest Iran

Session 3: 5 - 5.45 pm

Thematic Area-3: Physical Activity, Sports and Exercise – Exercise is Medicine

Haditsch B, Österreichische Gesundheitskasse, Graz, AT: Physical Activity: Important Lifestyle Factor for Prevention and Exercise Immunology

Jeitler M, Charité Universitätsmedizin, GE: Yoga in school sport – a non-randomized controlled explorative study in Germany including a qualitative evaluation and heart rate variability analysis

5.45 pm - End of Meeting Day 1

DAY 2: Wednesday, 11. November 2020, 9 am – 1 pm & 2 – 6 pm

PART 3 – Scientific themes considering lifestyle factors and behaviors continued

Session 4: 9 - 11 am

Thematic Area-4: Nutrition - Food over Medicine

Khan N, Université de Bourgogne, FRA: Childhood obesity and Nutrition

Schätzer M, Special Institute for Preventive Cardiology and Nutrition, AT: The catering situation at Austrian schools

Gregori M, University of Vienna, AT: A local school meal initiative to promote healthy plant-based meals in secondary schools

Schätzer M, Special Institute for Preventive Cardiology and Nutrition, AT: Sugar reduction in beverages - From a school intervention to a nationwide public health initiative

Thematic Area-5: Environmental factors

Gregori M, University of Vienna, AT: A local approach towards more sustainable and resilient food systems

Nkeh-Chungag BN, Walter Sisulu University, SA: Association of indoor air particulate matter count with obesity and blood pressure parameters in 10-14 year old children

11 am - Break 15 min

Session 5: 11.15 am – 3 pm (incl. Lunchbreak)

Thematic Area-6: Education and Literacy considering Health and Sustainability – Diverse Aspects affecting Children's Health to improve Public Health

von Seelen J, University College South Denmark, DK: Schools for Health in Europe (SHE) – the Network Foundation and SHE Research Group (SHE RG)

Keshani P, Shiraz University of Medical Sciences, Iran: Nutrition literacy as a determinant for diet quality amongst young adolescents

Wild B, University College of Teacher Education Tyrol, AT: Relationship between nutrition knowledge, education and other determinants of food intake and lifestyle habits among adolescents from urban and rural secondary schools in Tyrol, Western Austria

Fatemi M, Shiraz University of Medical Sciences, Iran: Education and Literacy Sexual Health in Child & Adolescent

Haditsch B, Österreichische Gesundheitskasse, Graz, AT: Planetary Health

1 – 1.40 pm – Lunchbreak

Pfeiffer T, SANATOR, CZ: TCIM: Biotronics as part of the comprehensive child health care, and Platform 2020 Prague

Mocherla S, LV Prasad Eye Institute, India: Campaigning about Consanguinity and Emergent Eye
Diseases in Children

Motevalli MS, Ferdowsi University of Mashhad, Iran: Preventative and Therapeutic Approaches to Manage Childhood Obesity – Time to Shift from Generalized to Personalized Intervention Strategies

Mannan MA, University of Dhaka, Bangladesh: Strengthening adolescent healthcare in the community clinics in Bangladesh

3 pm - Break 15 min

Session 6: 3.15 - 4.40 pm

Thematic Area-7: Healthy ageing from childhood into adulthood and the old age

Walter Kofler, Medical University of Innsbruck, AT: The last child in the wood – early contact to nature and further health

Tanous DR, University of Innsbruck, AT: Breaking the cycle from older adulthood to childhood: implications of a healthy lifestyle on aging

Olutoye F, Southern Medical University, China: Adolescent sexual and reproductive health: Examining the attitudes of in-school adolescents toward contraception in Nigeria

Nguyen TTD, Hue University of Medicine and Pharmacy, Vietnam: Using home healthcare services:

Situation and demands among the elderly in Thuy Bieu Ward, Hue City,

Vietnam

4.40 pm - Break 10 min

PART 4 - Introduction of research ideas & projects for future collaborations

Session 7: 4.50- 5.40 pm

Ngoumou G, Charité Universitätsmedizin, GE: Projected study proposal: A multicenter prospective controlled observational Study investigating the effects of a vegetarian and a vegan diet on physical and cognitive development in early childhood: the APEK-Study

Wirnitzer KC, University College of Teacher Education Tyrol, AT: Sustainably healthy – active & veggy: 'From Science 2 School' going international/Europe

PART 5 - Review & Closing Remarks

Session 8: 5.40 - 6 pm

Drenowatz C, Wirnitzer KC, Goswami N – Good Bye from Austria, University College of Teacher Education
Tyrol & Upper Austria, University of Innsbruck, Medical University of Graz

6 pm – End of Meeting Day 2