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!

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Preliminary Program (subject to change)

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

PART 1 - Welcome, Background & Aim of scientific meeting

Session 1: 13 - 14.15 pm

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: 14.30 - 16.30 pm

Thematic Area-1: Nutrition: Food over Medicine

Thematic Area-2: Physical Activity, Sports and Exercise: Exercise is Medicine

Session 3: 16.45 - 18 pm

Thematic Area-3: Mental Health (eg. relationships, stress, resilience, social, economical, psychological, etc.)

Dinner/Social Event: right subsequently/6.30 or 7 pm - open end

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 - 10.30 am

Thematic Area-4: COVID-19 in children & adolescents: facts vs. beliefs (sleep, health status, immune function, diet, PA, risk groups etc.)

Thematic Area-5: Environmental factors (eg. external, social, economical, ecology, climate change, ressources)

Session 5: 10.45 am - 1 pm

Thematic Area-6: Education and Literacy considering Health and Sustainability – Diverse Aspects affecting Children's Health to improve Public Health (eg. sustainability, healthcare systems, skills and competencies, adults, elderly, global strategies/actions etc.)

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

Lunch: 1 - 1.45 pm

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

Session 6: 2 – 3.30 pm Session 7: 3.45 – 5 pm

PART 5 - Review and Consensus: Interactive session on "How to go on?" & Closing Remarks

Session 8: 5.15 – 5.45 pm Closing Remarks: 5.45 – 6 pm

Dinner/Social Event: 7 pm - open end

Venue:

MUG – Medical University of Graz, Neue Stiftingtalstraße 6/D05, 8010 Graz, AUT Otto Loewi Research Center (for Vascular Biology, Immunology and Inflammation)

Division of Physiology: https://physiologie.medunigraz.at/

Online meeting (information to follow).