The Healthy City Conference

A short overview of presenters and presentations

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Introduction

On April 18th 2023, the Healthy City Conference took place. The aim of this event was to connect researchers and partners working on projects regarding health inequalities and transitions.This document is another step in achieving this goal. We hope that you as attendees in rereading the contents of the presentations will find inspiration for new projects and partnerships. If you want to contact any of the presenters, feel free to email *R.deJonge@tudelft.nl*

Warm regards,

On behalf of the organization of the Healthy City Conference,

Roos de Jonge

Contents

1 Morning presentations

1.1 SPRING

Presenters: Renske Keizer & Machiel van Dorst

We conduct research in order to improve the lifestyles, living environment and life expectancy of residents of neighbourhoods like Rotterdam-Zuid, with the objective of reducing the differences in health and well-being in the city. We do that by means of long-term research with, for and by residents and other local parties. In this way, practice and scholarship go hand in hand at SPRING.

1.2 SURREAL

Presenters: Daina Kosite & Vernon Cail

How does living in a large city affect cardiovascular health and mental health? And how can we design a city that stimulates exercise and healthy eating? With the SURREAL Innovative Training Network (ITN) we want to develop a comprehensive understanding of the complex relationships between exposures to environments, behaviors and urban health.

1.3 Underserved Groups

Presenters: Valérie Eijrond & Nora Bünemann

The disease burden of COVID-19 infection, morbidity, and mortality is unevenly distributed across different population groups. The one-size-fits all policy and practice approach during the COVID-19 pandemic did not reach certain subgroups of the population. Therefore, identifying barriers and drivers that influence people's behaviour towards COVID- 19 measures (vaccination, testing and non-pharmaceutical measures) is an important step when designing tailored interventions. The World Health Organization (WHO) has developed the Tailoring Health Programmes (THP) approach to assist countries in diagnosing barriers and drivers to health protective behaviours. During the conferences the findings of the situation analysis, phase 1 of the THP approach, were presented. The aim was to identify the population subgroups that are underserved, gain an overview of their barriers and drivers to COVID-19 measures and to obtain an overview of interventions and research initiated by various stakeholders in the Netherlands. In the next phase of this project, we will explore the barriers and drivers to COVID-19 prevention measures among older migrants, to inform tailored interventions.

1.4 Getting the rub of the green: reframing how we measure access to greenspaces for all

Presenter: Achilleas Psyllidis

Measuring the physical environment is crucial to determining the degree of exposure, assessing health and well-being outcomes, and achieving local and global health and sustainability goals. Effective health policy and planning interventions necessitate evidence-informed quantifiable targets and standards that can be measured consistently across different geographical contexts. The presentation highlighted innovative human-centred methods for measuring access to greenspaces and playgrounds that account for both environmental and experiential qualities of a place, as well as

age-group differences. Case studies in Rotterdam, The Hague, and Amsterdam have been presented to demonstrate how these methodological tools can be used to achieve a healthy, sustainable, and welcoming environment for all.

2 Afternoon presentations

2.1 Low neighbourgood SES associated with lower ongoing pregnancy rate after IVF

Presenter: Jeroen Speksnijder

Our study investigates if there is a difference in pregnancy chances after 2.5 years of in vitro fertilisation (IVF) treatment between patients that live in good or poor neighbourhoods based on socioeconomic neighbourhood scoring. It is known that a low socioeconomic status (SES) affects general health negatively. What the influences are of living in a low socioeconomic neighbourhood on the chances of attaining a pregnancy by IVF treatment is less studied. Our study showed that even with equal access to fertility care, like in the Netherlands, patients living in a low SES neighbourhood have significant less chance of treatment success. This information can be used to create more awareness on this topic by health care professionals and integrating this in their approach and treatment plan for an individual patient.

2.2 Healthy Storytelling

Presenter: Niko Vegt

To prevent obesity and improve the lifestyle of middle-aged adults in Rotterdam we identified two major issues: stigma and causes throughout people's life course. To tackle weight stigma we developed a storytelling-based game together with experts by experience. The life course perspective led to a co-created interactive storytelling education program for primary school children to teach them a holistic healthy lifestyle. Storytelling appeared a strong medium to convey health-related themes to people in low SEP neighbourhoods.

2.3 CEPHIR

Presenters: Mariëlle Beenackers, Dorien Beerens & Reint Huijzendveld

The Centre for Effective Public Health In the larger Rotterdam area (CEPHIR), is the academic collaborative centre for public health in the regions of Rotterdam- Rijnmond, Zeeland and Zuid-Holland Zuid. In CEPHIR, the Department of Public Health of Erasmus MC, the municipality of Rotterdam and GGDs and municipalities from the region work together on achieving a vital population and reducing health disadvantages in Rotterdam and surrounding areas. We do this by research, teaching and knowledge sharing activities in order to connect research, practice and policy. Some current projects involve studying the feasibility of environmental norms for health (e.g. green, food), the effect of reduced urban speed limits on perceived safety, the impact of school lunches, and how to research and involve vulnerable groups in prevention. Key to successful implementation are structural and close collaboration between research, practice and policy and openness towards each other's different perspectives and working methods.

3 Afternoon workshops

3.1 Resilient Delta - T-RoffaLAB

Presenter: Jelle Burger

The T-Roffalab is the first research facility offered by Resilient Delta within Rotterdam used for impact-driven research. Roffalab contributes to the implementation of measures to ameliorate urban microclimates in heat-stress situations. It develops movable above-ground planters for a 'climate arboretum' of semi-mature trees, to realize short to medium term adaptation measures in various arrangements and in various urban typo-morphologies. The arboretum improves the overall experience, use and microclimate of public spaces while improving the thermal conditions of adjacent buildings. The climate arboretum consists of 30 tree species planted in mobile containers that can be positioned in existing public spaces (squares, streets) in various configurations. As such, the project aims to create a more pleasing and comfortable environment, showing the cooling benefit of trees in the city. The arboretum functions as an outdoor learning environment in multiple ways: students, designers and researchers can participate by carrying out measurements and processing data; co-designing new configurations; learn about tree species and their properties; apply results and insights in their own design projects. In terms of awareness, residents and visitors are made aware of the challenges of climate change for cities and can experience first-hand what trees mean for temperature mitigation in the city. Second, there is a focus on citizen engagement (livability) via stewardship pilot programs that are designed and tested iteratively with members of the consortia and leading citizens. The arboretum and stewardship pilot programs could together create a space for citizens to communicate their shared experiences in urban landscapes. The community empowerment together with integration of green space in various configuration could not only forge emotional bond between citizens and trees but also achieve healthy placemaking. Co-designing the various spatial configurations with citizens can strengthen the relationship of place, health, and well being in a more equitable way in urban planning and design.

3.2 Exploring transdisciplinary collaborations for healthy cities

Presenters: Valentijn Visch, Jasper Faber, Timothy Houtman, Niko Vegt & Noa van den Brink

In this workshop we want to explore why, how and which scientific disciplines need to play a role in addressing the complex 'wicked' problem of unhealthy cities and health inequalities. The aim of the workshop was to discover with which disciplines you can team up in order to tackle the complex societal issue of unhealthy cities and health inequalities.

3.3 Institute for Health Systems Science

Presenter: Samantha Copeland

Our aim with the Institute for Health Systems Science is to apply systems science to research, education, and innovation in health and healthcare. Systems science is a relatively unknown approach in the medical domain and has underused potential. This potential has been shown to be highly valuable in other socio-technical challenges, such as climate change, industrial safety and digital ethics. In light of the actual challenges healthcare is facing, systems science can contribute to solving its complex problems. To name a few: the consequences of demographic shifts that are taking place, workforce shortages, resilience in the context of expected future disruptions, such as new

pandemics or other global crises, safety in healthcare, environmental and financial sustainability, disproportionate rises in costs when we do not fundamentally change redundant routines, and also need for better understanding of disease dynamics and better and more balanced decision-making.

3.4 Actieonderzoek Wijkpreventieketen

Presenter: Anniek Bosdijk

The Municipality of Rotterdam is increasingly focusing on prevention. One of the efforts is the development of a preventative infrastructure in neighborhoods (de wijkpreventieketen), which aims to stimulate professional care and welfare providers in neighborhoods in Rotterdam to work together more intensively, use each other's strengths, make timely referrals, and coordinate services. This is expected to result in better and more suitable care and support for citizens. The main goal of this research project is to evaluate the development of the preventative and integrated neighborhood approach in the three pilot-neighborhoods in Rotterdam.

4 Stands

4.1 Bridging the gap: The development of the inclusive eHealth guide

Presenters: Isra Al-Dhahir & Jasper Faber

We developed a comprehensive guide for a diverse group of professionals, such as eHealth developers and researchers, to create and adapt appropriate eHealth interventions for individuals with a low socioeconomic position (SEP). The guide is in the form of a website that includes a set of guidelines to assist professionals in their work.

4.2 Real Time logistics of patients & decision-making strategies for disasters

Presenter: Julien Magana

This research project aims to develop a comprehensive model and approach for patient flow management in healthcare systems during disasters. By conducting interviews and ethnographic research in hospitals and throughout the healthcare system, starting from patient flows and considering uncertainties caused by disasters, it will be possible to collect data on patient behaviours and on system answers to disruptions. The outcome will be decision and flow models to generate a comparative analysis of patient journeys under different circumstances, using a modelling tool that simulates the patient journey through the healthcare system. Afterall, these simulations can feed into an optimization module to help develop optimal strategies for scheduling and assigning appropriate capacities and resources given constraints, behaviours, reactions and workload.