

HEALTH INEQUALITIES AND DIGITAL TOOLS: A QUALITATIVE STUDY IN KRONOBERG REGION¹

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ABSTRACT

Health inequalities persist as a significant societal problem [1]. The COVID-19 pandemic highlighted their impact on morbidity and mortality. Health inequalities arise from various factors, including social determinants of health [2]. Mitigating these inequalities is crucial to improve human health and align with the UN Sustainable Development Goal 3.

The rapid adoption of digital technologies is helping health care services to enhance efficiency, reduce costs, and make data-driven decisions, however, it has also unintended consequence and has been reported to result in new kind of inequities [5]. Previous findings emphasize the digital divide of vulnerable groups and the need to increase their digital inclusion to improve their access to healthcare and guarantee their right to health [3].

In Sweden, health inequalities not only persist but have increased in some regions [4]. Sweden's 21 regions and 290 municipalities are responsible for providing health and welfare services. In 2018, the Swedish Parliament enacted a new national public health policy that aims to abolish avoidable health inequalities. The policy sets out specific targets and emphasizes that public health is a shared responsibility of all, at all levels, including academic researchers and practitioners in the field.

In 2021, the Public Health Agency, *Folkhälsomyndigheten*, presented a framework which implies coordinated efforts at national and regional levels to realize the new health policy. In line with the Public Health Agency's idea of coordinated effort, a transdisciplinary team of researchers with expertise in *health, social, computing, and information* sciences has been formed to develop a study in the Kronoberg Region, with the aim of exploring the factors, barriers, and other such elements that lead to health inequalities in the region and the use of digital tools in the provision of primary healthcare services.

¹ Study developed in the framework of the Seed Project "[Mitigating health inequalities in the Kronoberg Region: A transdisciplinary System Thinking approach](#)"

To that end, we used a qualitative inductive design. To align with limited resources we restricted the scope to the Araby area in the city of Växjö, which is considered by the Municipality as one of the priority areas for its socio-economic challenges [6]. We conducted nine semi-structured interviews with stakeholders from Region Kronoberg, primary healthcare professionals and organizations supporting vulnerable people in the selected area, to get their perspectives and experiences towards health inequalities and the use of digital tools. The interviews specifically focused on identifying the factors leading to health inequalities in the region, exploring the use of digital tools in the primary healthcare services and understand the strengths and challenges in their implementation. We also investigated stakeholders' requirements and needs in relation to the mitigation of health inequalities. The interview data is analyzed using manifest content analysis.

Preliminary findings of the analysis are as follows. Language and cultural barriers and lack of knowledge about the health system represent the main factors leading to challenges in the access to primary health care services. Elderly people and people with different ethnic background (mostly immigrants) represent the most vulnerable groups for health inequalities. They also suffer from digital divide and require both health and digital literacy for use of digital solutions. The Poor layout and design of digital solutions (e.g. 1177 web and app) that contains a consistent amount of health information and offer health services, negatively impact user experience, satisfaction, and trust towards the healthcare services. Regardless of such challenges, a large majority of interviewees also appreciated the advantages of using digital solutions in healthcare and suggested improvements to address the specific needs and challenges of vulnerable groups.

The results of this study are largely in favor of use of digital tools in agreement with the findings reported by WHO [3]. This study suggests further research on solutions to improve digital tools' usability and vulnerable groups' digital literacy. Moreover, it will be used to provide recommendations for how existing digital solutions can be better addressed to eliminate avoidable and mitigate types of health inequalities.

Keywords: health inequalities, health inequities, digital tools, digital divide, Sweden

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