



EUROPEAN
PUBLIC
HEALTH
CONFERENCE



Chronic Diseases in 2021

*A summary report of the track on chronic diseases
at the 14th European Public Health conference 2021*

Publication date: January 2022

Authors: Susanna Gentili¹, Vincy Huang² – *EUPHA fellows** at 14th European Public Health conference 2021

Reviewed by: Julian Mamo, Public Health Department, Medical School, Mater Dei Hospital Msida, Malta; EUPHA Chronic diseases section president & Sarah Cuschieri, Faculty of Medicine & Surgery, University of Malta, Malta; EUPHA Chronic diseases section

¹ Department of Biomedicine and Prevention, University of Rome Tor Vergata, Rome, Italy

² Department of Public Health, Policy and Systems, University of Liverpool, Liverpool, United Kingdom

* The fellowship is powered by EUPHANxt, the next generation network within EUPHA for students and young professionals, including early career researchers and policymakers, in the field of public health.



This report received co-funding under an operating grant from the European Union's Health Programme (2014-2020). Disclaimer: The content of this report represents the views of the author(s) only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.



The 14th European Public Health Conference was held 10-12 November, 2021, online. This report summarises the key messages from the track on Chronic diseases and from several plenary sessions dealing with the same theme. A list of the sessions that were summarized for the report can be found in the Annex. In addition to the sessions included in this report, there may have been other presentations and sessions at the conference that addressed the topic of the track. These are, however, not reflected in this track report.

| Key Messages

1. There is a need to identify and develop European guidelines to improve sustainable nutrition and prevent non-communicable diseases.
2. It is essential and beneficial to use genomic data for early detection of chronic diseases. However, guidance and tools are needed to facilitate the patient's involvement for such data gathering.
3. It is necessary to design appropriate and effective interventions to address the health needs of the ever growing number of elderly persons.
4. There needs to be more uptake of digital health tools which are safe and effective to enable the tackling of problems involved in preventing and managing chronic diseases.
5. Public health leadership needs to focus on maintaining essential health services, including mental health, from the EU and Member State level.

| Introduction

The Chronic Diseases track at the 14th European Public Health conference featured important chronic disease related issues around the conference theme “Public health futures in a changing world”. Over the three day conference, a series of plenary sessions and workshops covered a wide range of topics related to detection and prevention as well as care and management of chronic disease in everyday life while living with COVID-19. The conference sessions highlighted several challenges on balancing the health services during the COVID-19 pandemic. These included effective and adequate health communication with citizens as well as managing the ethical and inequality issues encountered while adopting new strategies in chronic disease detection and management.

| Main outcomes

Chronic disease management in the digital age

Due to COVID-19, populations around the world are facing an infodemic, i.e., an overabundance of information. Much of this is on epidemiology and public health. This undoubtedly impacts on the evolution and duration of the pandemic and may eventually heighten the distrust in all things public health by citizens. In a plenary session jointly presented by the World Health Organization (WHO) and the European Public Health Association (EUPHA), panellists discussed how technology contributes, positively or negatively, to strengthening the resilience of health systems and empowering individuals and communities.

Our healthcare systems are being challenged, especially by the increased healthcare costs related to ever growing ageing populations, ever more chronic conditions and recently overstretched systems and health care manpower due to COVID-19. **A safe and effective uptake of digital health solutions for preventing and managing chronic disease could be one of the potential solutions.**

The adoption of digital health can help create a win-win situation for both the healthcare system and the patients. It could greatly benefit several aspects of care delivery, including time spent in hospitals, efficiency of outpatient departments, travelling time reduction for patients, more freedom for social life, sickness absence at work and personal cost reduction at healthcare facilities. Bearing in mind the patient perspective of trust on digital health tools, EUPHA focused on people-centred digital health solutions that could ensure better affordability, inclusion, diversity and transparency. However, digital health technologies may also create new challenges to health literacy.

*“The impact COVID-19 on people with or at risk for chronic disease cannot be overstated. Therefore, next to COVID-19, policymakers and healthcare providers need to re-focus again also on prevention and management of chronic diseases.” Dr Iveta Nagyova,
President of EUPHA*

Early detection of chronic diseases

Genomics has a huge potential to improve the early identification of chronic diseases. For instance, a combination of epigenetic and genetic risk scores could be useful in improving cardiovascular diseases risk prediction. Large datasets and new studies are however needed to fulfil the research needs to reach this goal. When it comes to genomic data sharing, many ethical issues of concern may arise such as genetic data that can be identified as well as the potential for employment discrimination. A careful balance between data sharing and data protection is therefore required. Ongoing projects including the 1+ Million Genome Initiative (1 +MG) and the Maturity Level Model tool are designed to evaluate and support genomic and health information sharing at the EU level.

Based on the idea of making the data *“from research and healthcare, and for research and healthcare”*, 1 +MG is a declaration for cross-border access to genomic databases, aiming to build a research cohort of at least 1 million sequenced genomes accessible in the European Union by 2022. It provides a trust framework for legal security. Undeniably, the majority of the dataset is not suitable for use in clinical settings. To assist the data sharing, the B1MG

Maturity Level Model is a tool for healthcare systems to self-evaluate the level of maturity of their genomic medicine practices and define a path for healthcare system optimization. It will be pilot tested in national and regional healthcare systems as the next step of its development.

Chronic disease prevention and management

The European Union recently launched two initiatives in order to improve the lives of more than three million people affected by cancer by 2030: the EU Mission on Cancer and the Europe's Beating cancer plan (see figure 1). The Mission on Cancer focuses on research and innovation on cancer while the Europe's Beating Cancer Plan focuses on cancer policies. *"This is a perfect example of European collaboration. The Mission on Cancer served as the research base for Europe's Beating Cancer Plan."* Dr Walter Ricciardi commented at the Round Table on optimal development and interactions between cancer policy tools at the EU and national levels. The Mission on Cancer is the European initiative to better understand cancer. It helped shed light on the need for better and equitable cancer prevention and diagnosis, treatment and care in order to improve survival rates and the quality of life while living with cancer. Europe's Beating Cancer plan, on the other hand, tackles the issue from the policy level by seeking to achieve better standard uniformity and enhanced policies.

The central concepts of cancer planning are 1) comprehensiveness, 2) structuring of care and the necessary resources, 3) modularity and 4) forecasting models on human resources, costing, and modalities of cancer care. Since 2019, with the strong backing of the European Commission, the National Cancer Plan has been rapidly adopted by several Member states.

With stronger Member State collaboration and a strong European Health union, the National Cancer Plan is moving from national to cross-national. It will build upon the success stories of the national cancer plans from some Member States to help the others. **To better alleviate the burden of chronic disease, strong coordinated actions between the EU and Member States is crucial.**

Conquering cancer: mission possible



Draft Mission Outline



Goal:
"By 2030, more than 3 million lives saved, living longer and better"

Five intervention areas:

1. understanding
2. prevention
3. diagnosis and treatment
4. quality of life
5. equitable access

13 recommendations for bold actions



Figure 1: Draft mission outline of the Mission on Cancer, Source: European Commission

Challenges to the success of Europe's Beating Cancer Plan include: 1) the need for adequate and harmonious cooperation across all levels, 2) the need for Member States to meet deadlines and invest in providing for the different actions needed, 3) the need for strong EU support for the implementation of actions agreed upon, and 4) the need for supportive financial mechanisms.

Ageing and chronic diseases

Ageing has been the outstanding achievement of continuous progress in social, medical and scientific development globally. However, how societies address the challenges of ageing is a "political choice". Various interventions exist to ensure that people age in good health and maintain their quality of life without damaging fiscal sustainability and burdening economic systems.

Beyond the intrinsic value of good health, there are many benefits to support healthy ageing. Unfortunately however, one of the most common consequences of ageing is the development of multimorbidities. Living with several concurrent health conditions in later life has become the norm rather than the exception. We need to replace the old simplistic view of the determinants of health with a more contemporary view that considers the individual as a complex behavioural system. The potential benefits of behavioural insights are manifold, as they are often very inexpensive, scalable, and lightweight. Health care systems tend to lack a holistic approach by analysing and addressing one condition at a time. There is a clear need to shift back to a more comprehensive patient care. Moreover, to reduce the impact on economic spending and social care, designing appropriate interventions to address older adults' health needs is now essential.

Nutrition and chronic diseases

The importance of a healthy diet in the prevention of chronic non-communicable diseases (NCDs) is widely recognized. Conversely, an unhealthy diet has been officially recognized as a behavioural risk factor that can potentially influence the insurgence, clinical course, and prognosis of NCDs. A WHO report in 2016 estimated that 39% of adults worldwide were overweight and 13% obese. (WHO, 2021) The leading causes of death attributable to dietary risks include cardiovascular disease (817'302), neoplasia (101'477), diabetes and, kidney disease (32'009). (Grosso et al., 2021) Professor Scazzina presented the Mediterranean Diet as a *"healthy and sustainable"* diet promoting *"well-being and longevity"*. Moreover, there is now also evidence to suggest that an improved diet reduces clinical depression. *"Lifestyle factors, including diet, are modifiable"*, said Prof Felice Jacka of Deakin University. Prof Jacka and her colleagues are working to produce guidelines and materials to apply dietary intervention in reducing mental health symptoms.

Additionally, malnutrition develops from childhood and 2019 numbers from a 2020 UNICEF report estimated that 38.3 million children under five years old were obese or overweight. (UNICEF, 2020) Therefore, the European Office for the Prevention and Control of

Noncommunicable Diseases has developed innovative methodologies for monitoring children's unhealthy product marketing to act indirectly on childhood obesity. In addition to direct effects on NCDs, unhealthy diets caused by mismanagement of food resources can also impact on environmental quality by causing an increase in antibiotic-resistant infections due to excessive use of pesticides and antibiotics. The workshop "*Impact of nutrition on chronic diseases and environment in Europe: evidence and policy orientation*" highlighted the need to identify and develop European guidelines to improve sustainable nutrition and prevent non-communicable diseases.

Mental health and chronic disease

For this theme, there were two main workshops. The first one was "*Emerging behavioural risk factors for mental health: a life-course perspective*". During this workshop, speakers presented research findings on behavioural risk factors and the association with depression and anxiety. These factors included dietary elements, physical activity routine, and sleep quality and duration. A common conclusion was that depressive illness is modifiable through lifestyle changes.

The second workshop featured "*Disasters and mental health*" to specifically understand the mental health impact of the COVID-19 pandemic.

All speakers agreed that the COVID-19 pandemic was accompanied by an increase in both short-term and long-term mental illness, affecting various population groups and health care workers. The COVID-19 pandemic especially burdened the elderly, due to physical and social isolation, interruption of services, and fear that impacted their mental health. One problem identified was how hospitals focused exclusively on urgent care, neglecting chronic illnesses, especially mental illnesses, that were taken care of more exclusively by community care services. **To improve community health promotion, the public health leadership needs to focus on maintaining essential health services, including mental health.** All in all, modern public health should break down internal silos and embrace collaboration to promote community health within and across sectors.

| Conclusions

The challenges presented in the chronic diseases track have shown that plans for managing non-communicable diseases have been developed at European level, although COVID-19 has disrupted several plans and services. Clearly, there is still much to be done. Many topics were covered, with the recurring words being: **prevention** and **diagnosis, treatment, infodemic** and **health care expenditure**. Moreover, the focus should be on implementing existing successful health policies and looking to emulate countries with successful models. For example, the SUNI-SEA project, a project on non-communicable diseases research to adapt community-based health interventions to local culture contextual aspects in Southeast Asia. This project strengthened the synergies between communities and primary health care facilities.

During the 14th European Public Health conference, it became abundantly clear that it is time to actively work towards recovering health services and improving those systems' resilience. However, some key questions remain: How do we ensure equitable access for all European citizens? How do we organise chronic disease management during a pandemic that resulted in hospital overcrowding? How can this growing infodemic be managed? What are the key actors ensuring effective communication across health care workers and with citizens? Are there widespread guidelines to ensure adequate health communications?

| References

- G Grosso, M Di Cesare, Dietary factors and non-communicable disease risk in Europe: evidence for European nutritional guidelines?, *European Journal of Public Health*, Volume 31, Issue Supplement_3, October 2021, ckab164.185, <https://doi.org/10.1093/eurpub/ckab164.185>
- World Health Organization. (2021). Obesity and overweight. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- United Nations Children’s Fund (UNICEF), World Health Organization, International Bank for Reconstruction and Development/The World Bank. Levels and trends in child malnutrition: Key Findings of the 2020 Edition of the Joint Child Malnutrition Estimates. Geneva: World Health Organization; 2020.
- COVID-19 continues to disrupt essential health services in 90% of countries. (n.d.). Retrieved 28 November 2021, from <https://www.who.int/news/item/23-04-2021-covid-19-continues-to-disrupt-essential-health-services-in-90-of-countries>
- EU Mission: Cancer. (n.d.). [Text]. European Commission - European Commission. Retrieved 22 November 2021, from https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/missions-horizon-europe/cancer_en
- A cancer plan for Europe. (n.d.). [Text]. European Commission - European Commission. Retrieved 22 November 2021, from https://ec.europa.eu/info/strategy/priorities-2019-2024/promoting-our-european-way-life/european-health-union/cancer-plan-europe_en

| Annex - List of the EPH2021 sessions attended by the fellows

PL0 - Opening Ceremony: Public health futures in a changing world

PL1 - Plenary 1: Public health practice, training and workforces for the future -Lessons from the pandemic (<https://doi.org/10.1093/eurpub/ckab166>)

1.D. - Workshop: Emerging behavioral risk factors for mental health: a life-course perspective (<https://doi.org/10.1093/eurpub/ckab164.017> , <https://doi.org/10.1093/eurpub/ckab164.018> , <https://doi.org/10.1093/eurpub/ckab164.019> , <https://doi.org/10.1093/eurpub/ckab164.020> , <https://doi.org/10.1093/eurpub/ckab164.021> , <https://doi.org/10.1093/eurpub/ckab164.022>)

2.P. - Workshop: Disasters and mental health (<https://doi.org/10.1093/eurpub/ckab164.159> , <https://doi.org/10.1093/eurpub/ckab164.160> , <https://doi.org/10.1093/eurpub/ckab164.161> , <https://doi.org/10.1093/eurpub/ckab164.162>)

3.D. - Workshop: Impact of nutrition on chronic diseases and environment in Europe: evidence and policy orientation (<https://doi.org/10.1093/eurpub/ckab164.184> , <https://doi.org/10.1093/eurpub/ckab164.185> , <https://doi.org/10.1093/eurpub/ckab164.186> , <https://doi.org/10.1093/eurpub/ckab164.187> , <https://doi.org/10.1093/eurpub/ckab164.188>)

3.A. - Workshop: Integrating the use of genomic data in personalised healthcare: implications across the board (<https://doi.org/10.1093/eurpub/ckab164.169> , <https://doi.org/10.1093/eurpub/ckab164.170> , <https://doi.org/10.1093/eurpub/ckab164.171> , <https://doi.org/10.1093/eurpub/ckab164.172>)

PL2 - Plenary 2: Communication and public health (<https://doi.org/10.1093/eurpub/ckab166.001>)

4.N. - Skills building seminar: Making the elevator pitch perfect: how to convince a policymaker in less than 2 minutes (<https://doi.org/10.1093/eurpub/ckab164.305>)

5.H. - Skills building seminar: Methodological choices in burden of disease studies: a literature review of European studies (<https://doi.org/10.1093/eurpub/ckab164.352> , <https://doi.org/10.1093/eurpub/ckab164.353> , <https://doi.org/10.1093/eurpub/ckab164.354> , <https://doi.org/10.1093/eurpub/ckab164.355>)

PL3 - Plenary 3: Learning from the pandemic and getting ready for the next one (<https://doi.org/10.1093/eurpub/ckab166.002>)

6.E. - Round table: Governance and diplomacy of climate health adaptation: roles for public health community (<https://doi.org/10.1093/eurpub/ckab164.420> , <https://doi.org/10.1093/eurpub/ckab164.421> , <https://doi.org/10.1093/eurpub/ckab164.422> , <https://doi.org/10.1093/eurpub/ckab164.423>)

7.D. - Workshop: Optimal development and interactions between cancer policy tools at the EU and national level (<https://doi.org/10.1093/eurpub/ckab164.489> , <https://doi.org/10.1093/eurpub/ckab164.490> , <https://doi.org/10.1093/eurpub/ckab164.491>)

8.D. - Workshop: Population ageing: societal triumph or end of the welfare state? (<https://doi.org/10.1093/eurpub/ckab164.557> , <https://doi.org/10.1093/eurpub/ckab164.558> , <https://doi.org/10.1093/eurpub/ckab164.559> , <https://doi.org/10.1093/eurpub/ckab164.560> , <https://doi.org/10.1093/eurpub/ckab164.561>)

PL4 - Plenary 4: Capturing the breadth and depth of the digital health era – beyond the COVID-19 pandemic (<https://doi.org/10.1093/eurpub/ckab166.003>)

9.D. - Skills building seminar: Community based NCD prevention and control: what can we learn from research in South East Asia? (<https://doi.org/10.1093/eurpub/ckab164.626> , <https://doi.org/10.1093/eurpub/ckab164.627> , <https://doi.org/10.1093/eurpub/ckab164.628> , <https://doi.org/10.1093/eurpub/ckab164.629>)

11.D. - Workshop: Global Burden of Multimorbidity: from Epidemiology to Policy (<https://doi.org/10.1093/eurpub/ckab164.815> , <https://doi.org/10.1093/eurpub/ckab164.816> , <https://doi.org/10.1093/eurpub/ckab164.817> , <https://doi.org/10.1093/eurpub/ckab164.818> , <https://doi.org/10.1093/eurpub/ckab164.819>)

PL5 - Plenary 5: Climate change, justice and public health (<https://doi.org/10.1093/eurpub/ckab166.004>)

PL6 - Closing Ceremony of the 14th European Public Health Conference



The European Public Health Association, or EUPHA in short, is an umbrella organisation for public health associations in Europe. Our network of national associations of public health represents around 20'000 public health professionals. Our mission is to facilitate and activate a strong voice of the public health network by enhancing visibility of the evidence and by strengthening the capacity of public health professionals. EUPHA contributes to the preservation and improvement of public health in the European region through capacity and knowledge building. We are committed to creating a more inclusive Europe, narrowing all health inequalities among Europeans, by facilitating, activating, and disseminating strong evidence-based voices from the public health community and by strengthening the capacity of public health professionals to achieve evidence-based change.



www.eupha.org



[@EUPHActs](https://twitter.com/EUPHActs)



office@eupha.org