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Despite the recognized benefits of organized cancer screening programs, tests outside screening programs are common. Downsides to this practice include the lack of quality control and disparities in participation patterns based on one's perception of risk and willingness/ability to pay. While comprehensive reports on outside program screening in Europe are lacking, the Flemish breast (BC) and colorectal cancer (CRC) screening programs monitor data on non-organized tests prescribed by GPs and specialists. Using multivariate logistic regression, we examined the relationship between health care utilization and BC and CRC screening coverage in 308 Flemish municipalities between 2015-2018. With regards to BC, municipalities with a higher rate of visits with gynecologists have a lower coverage inside (-8%) and higher coverage outside (+17%) the program. By contrast, municipalities with a higher rate of GP visits, have a higher coverage inside (6%) and a lower coverage outside (-7%) the program. As for CRC, municipalities with a higher rate of visits with gastroenterologists have a lower coverage inside the program (-3%). Instead, municipalities with a higher rate of GP visits, have a higher coverage both inside (+2%) and outside (+5%) the program. Municipalities with a higher percentage of people with chronic conditions have a higher coverage within both the BC and CRC programs (+5% and +3%), and lower rates of outside screening (-7% and -6%). Municipalities with a higher percentage of people 65+ affected by dementia, partially overlapping with the target population, have higher inside coverage in both the BC and CRC screening (+13% and +5%, respectively). Finally, a higher percentage of people with mood disorders was associated with lower inside coverage of BC and CRC screening (-3% and -4%). Providers should remain aware of their role in facilitating patients' decision-making process, especially among vulnerable groups, and attempt to increase participation in the organized programs.

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## Madodiet: Comparison of dietary habits and lifestyles between residents of madonie mountain area and those of the metropolitan area of palermo

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Background: We compared dietary and lifestyle habits in a sample population living in the small cities of the Madonie Mountains (MM), Palermo's Province, an Italian area characterized by one of the highest prevalence of centenarians and in a sample of residents living in the Metropolitan Area of Palermo (PA) to highlight any difference of public health interest.

Methods: A cross sectional study was conducted administering an anonymous questionnaire in digital format since August 2022 and still ongoing.

The questionnaire includes items which explore socio-demographic features, lifestyle, eating habits and supplement use. A MD adherence score was calculated based on fruit, vegetable, red meat intake, and walking habit.

Results: Overall, 749 subjects were enrolled (RR 74%), with an average age of 38.6 years: 526 living in MM and 223 in PA.

Only 21% of sample showed good adherence to MD, with young individuals having a statistically significant lower adherence to MD.

Wholegrain flours consumption was found to be significantly associated with greater adherence to MD (Adj-OR: 2.04; CI95%:1.41-2.96)

Residents in MM showed a significantly higher consumption of fruits (61.2% vs 52% - Adj-OR:1.45; Cl95%:1.06-2.00) and vegetables (80.7%vs.50.9% - Adj-OR:4.02; Cl95%:2.86-5.65), mainly coming from local or homegrown production.

Lastly, MM subjects were found to eat red meat mainly from local or household production as comparison with urban residents (Adj-OR:4.77; Cl95%:3.32-6.85). Conclusion: Our findings confirmed the central role played in dietary habits by local and household production.

Because of important role played by seasonality of fruits and vegetables and local production on MD food pyramid, data collected should encourage public health Authorities to promote proper lifestyle and nutrition also in Metropolitan Areas.

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## Mapping of the state-of-the-art and bottlenecks for the adoption of personalised preventive approaches in health systems

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Background: Personalised medicine, especially in the field of prevention, is one of the priorities on the research agenda of the European Commission, which has funded the project "a PeRsonalised Prevention roadmap for the future HEalThcare" (PROPHET), a Coordination and Support Action of the International Consortium for Personalised Medicine (ICPerMed). This project has the objective to support health systems in the implementation of innovative, sustainable, and high-quality personalised strategies for preventing chronic diseases. In the PROPHET context, a scoping review was performed to map the state-of-the-art and bottlenecks for the adoption of these approaches in health systems.

Methods: The search, which followed the latest PRISMA-ScR checklist, was conducted until November 2022 on Pubmed, Web of Science, Scopus, Google Scholar databases and national and international official repositories. All documents published in the last five years, concerning personalised prevention approaches for common chronic diseases were included.

Results: Of the 8990 results obtained, 18 articles were included. Among these, 30% concerned primary prevention, including genomic screening approaches for cardiovascular or cancer risk prediction; 55.5% were related to secondary prevention, i.e. cancer screening with omic biomarkers; 14.5% focused on tertiary prevention, encompassing pharmacogenomics and nutrigenomics. The main bottlenecks were data analysis and management, high costs of technology, education of healthcare workforce in omics science and public health literacy. However, limited examples of personalised prevention were in place in high developed countries, mainly limited to international-funded research projects.

Conclusions: Personalised prevention has great potential, both for improving the health of population and reducing the burden of chronic diseases on health systems. Several bottlenecks currently limit full implementation, but some approaches, especially including genomics, have been deployed in clinical practice. Therefore, it is necessary to ensure that personalised prevention is consistently adopted and becomes a priority on the health agendas of all countries in Europe and beyond.

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## Health seeking behaviour among cancer patients using Geographic Information System: A Mixed-Methods study from Western India

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Background and objective: Cancer prognosis is dependent on early diagnosis and treatment as well as on awareness, beliefs, accessibility, and affordability of the health services. Delay in seeking health care by patients increases mortality risk. This study has been undertaken in rural Jodhpur (Rajasthan, Western India) to determine health-seeking behavior related to common cancers and the factors affecting them.

Methods: A community-based mixed-methods study was conducted in randomly chosen one-third villages (37 villages out of total 113 villages were included in the study) of Mandore block of Jodhpur. Data was collected from individuals diagnosed with cancer/their relatives. In-Depth Interviews (IDI) were conducted with frontline workers, cancer survivors, and their caregivers. A geographic information system (GIS) was also used to depict health care facilities accessed by cancer patients.

Results: A total 82983 population was covered in 37 villages. Among the population covered, 146 participants were diagnosed cancer cases. About one-third (34.2%) preferred alternative medicine along with allopathic medicine. The behavior of changing hospitals frequently was depicted maximum by patients suffering from primary brain tumors (62.5%, 5). Forty-five (31%) participants did not continue their treatment after initiation. From the content analysis of IDI, major factors for delays in health-seeking were misconceptions, superstitions, stigmatization, financial burden, miscommunication from doctors, no proper referral mechanism,