responses, control of complement pathways, tissue repair.
Purpose: A systematic literature review was performed to better define the prognostic role of PTX3 in COVID-19 disease. This study also Aims to analyse PTX-3 levels in our cohort of healthcare workers, belonging to the A.O.U. "G.Martino", who have or have not contracted the infection in their lifetime, after anti-SARS-CoV-2 vaccination (Pfizer/BioNTech Comirnaty).
Materials and Methods: The PubMed database (MEDLINE) was searched using the keywords PTX-3 and COVID-19, considering observational studies, case-control studies, cross-sectional studies, cohorts. Data extraction for this systematic update was performed by two independent reviewers. The cohort analysed consisted of workers vaccinated and supervised by the Hospital Hygiene Unit. A personal and family medical history was taken and an objective examination of the individual participants was carried out, who underwent blood sampling. Serum aliquots obtained after centrifugation were stored at -20°C. Subjects enrolled in the study were divided into 2 groups: SARS-CoV-2 positive (n=40); SARS-CoV-2 negative (n=40). Using commercially available kits, serum PTX-3 concentrations were determined using an enzyme-linked immunosorbent assay (ELISA).
Results: We included 11 studies in the systematic review. PTX-3 was evaluated in COVID-19 patients versus non-infected subjects and in COVID-19 patients in ICU versus COVID-19 patients not in ICU. For the healthcare workers in the study, demographic, clinical, laboratory characteristics were collected and reported in a dedicated database and associated with PTX-3 levels. Preliminary data showed variability in PTX-3 levels in healthy subjects correlated with sex, age, BMI, comorbidities and genetic characteristics.
Discussion and Conclusions: The results to date support the hypothesis that PTX3 levels can be considered a useful biomarker of the inflammatory response and could have a relevant clinical impact on COVID-19 disease outcomes.
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## Mortality from COVID-19 in Belgrade

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Background and Objective: Coronavirus disease (COVID19) has spread worldwide in a short time. It caused a lot of deaths of infected patients. Mortality data provides insight of fatal consequences among population. Risk factors for mortality have not been well summarized, but it was possible to show findings on the association between age, gender and comorbidities from COVID-19 infection. Mortality statistics are fundamental to public health decision making. Mortality varies by time and place and its measurement is affected by some biases that have been exacerbated during the pandemic. This paper aims to present mortality from the COVID-19 pandemic in Belgrade, Serbia.
Methods: An analysis of death certificates shows an insight into the causes of death of Belgrade inhabitants. The paper presents data from database of deceased persons in Belgrade, 2012- 2021, analyzed using frequencies and incidence rates by gender, age groups, month of death.
Results: Mortality (mt) incidence rate in Belgrade 2012 - 2021 is increasing. The highest mortality rate was in 2021, 17,72/1000 population at the age 20 to 64, the highest rate was also in 2021, male (м) 6,73/1000, female (f) 3,48/1000 older age (65 and more) shows highest mt rates in 2021, male 86,92/1000, female 63,46/1000 between march 2020 and December 2021, highest mortality rate from covid19 in man and women at the age 20-64 was in October 2021 (m: 39,12/100000, f: 20,32/100.000). Man 65 and older most frequently died in December 2020 (479,67/100.000), women in October 2021 (282,04/100.000). most common comorbidity were diseases of circulatory system, endocrine, metabolic diseases, neoplasms, etc.
Conclusions: Older age (65 years old), male gender and particular comorbidities were associated with greater risk of death from COVID-19 infection in Belgrade, Serbia. These findings could help clinicians and public health authorities to prevent unnecessary death outcomes.
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## Have public health responses to COVID-19 considered social inequalities in health? Insights from Brazil, Canada, France & Mali

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Background: Research has indicated an increased risk of self-harm repetition and suicide among individuals with frequent self-harm episodes. Co-occurring physical and mental illness further increases the risk of self-harm and suicide. However, the association between this co-occurrence and frequent self-harm episodes is not well understood. We examined the profile of individuals with frequent self-harm episodes and the association between physical and mental illness comorbidity, self-harm repetition and highly lethal self-harm acts.
Methods: The study included consecutive patients with five or more self-harm presentations to Emergency Departments across three general hospitals in the Republic of Ireland. The study included file reviews (n=183) and semi-structured interviews (n=36). Multivariate logistic regression models were used to test the association between the sociodemographic and the comorbidity variables on highly lethal self-harm acts. Thematic analysis was applied to identify themes related to the comorbidity and frequent self-harm repetition.
Findings: Most of the participants were female (59.6%), single (56.1%) and unemployed (57.4%). The predominant current self-harm method was drug overdose (60%). Almost 90 % of the participants had history of a mental or behavioural disorder, and 56.8% had recent physical illness. The most common psychiatric diagnoses were alcohol use disorders (51.1%), borderline personality disorder (44.0%), and major depressive disorder (37.8%). Male gender (OR=2.89) and alcohol abuse (OR=2.64) were associated with highly lethal self-harm acts. Major qualitative themes were a) the functional meaning of self-harm b) self-harm comorbidity c) family psychiatric history and d) contacts with mental health services. Participants described experiencing an uncontrollable self-harm urge, and self-harm was referred to as a way to get relief from emotional pain or self-punishment to cope with anger and stressors.
Conclusions: Physical and mental illness comorbidity was high among the participants. The mental and physical illness comorbidity of these patients should be addressed via a biopsychosocial assessment and subsequent interventions.
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## Strategies to fight the COVID-19 pandemic in remote rural municipalities of Piaui state, Brazil

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Background and Objective: Ensuring the provision of health services in rural remote municipalities (MRR) remains a challenge for the Brazilian Public Health System-SUS. This problem increased dramatically during the COVID-19 pandemic, as MMR context amplifies the devastating potential of the virus, such as insufficient supply of professionals/services and the great distance from urban centers (technological density). Our aim is to analyze the initiatives to combat the pandemic adopted in Piauís MMR; discuss the role of primary healthcare (PHC) in the pandemic; and identify itineraries of patients diagnosed with COVID-19.
Methods: Exploratory qualitative case study, developed in two MMR of Piauí, both with less than 4000 inhabitants. Data were collected in 2022, through individual in-depth interviews with PHC professionals, SUS users SARS-Cov-2 infected and community leaders. The interviews were conducted with open questions about coping with the pandemic (professionals and leaders) and the experience and care received during the illness caused by COVID-19 (users). The interviews were recorded, transcribed and treated qualitatively, applying content analysis technique.
Results: Initiatives adopted: sanitary barriers, mandatory use of masks, social isolation, ban on parties/gatherings, closure of non-essential establishments, "covid kit", distribution, testing of suspected cases and vaccination. PHC: concentrated care for COVID-19 cases, protagonism and work overload of community workers (CHW), on barriers, home visits, vaccination and service through messaging applications. Itineraries: non or mildly-symptomatic were advised to isolate themselves at home, severe cases were referred by ambulance to reference hospitals in other municipalities in Piauí.
Conclusions: Primary care coordinated and/or actively participated in coping with the pandemic. Positive points: population bonds and CHW's assistance. Users felt supported. Distance from larger cities was not considered a protective factor against COVID-19. Previous results suggest the existence of long-term COVID-19 cases, with different clinical presentations, and an increase in mental disorders' prevalence (depression, alcoholism and drug use).
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## Working in the territory or in the health care facility? Community

# 17TH WORLD CONGRESS ON PUBLIC HEALTH

2023 May 2-6 ROME ITALY

# ABSTRACT BOOK

Abstract book by:

Population Medicine

# ORGANISING COMMITTEE

## CMC

The three organising partners of the 17th World Congress on Public Health established a Congress Management Committee (CMC) consisting of representatives of WFPHA, SItI, ASPHER and the PCO. The CMC has the full managerial and financial management responsibility for the Congress.

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John Middleton – ASPHER
Robert Otok – ASPHER

## ICC

The International Congress Council (ICC) consisted of the Congress Management Committee and international public health experts representing various regions of the WFPHA, international health organisations, European health non-governmental organisations and Italian universities and institutes. The ICC in particular develops, in consultation with the CMC, the scientific programme including subthemes and plenary programme of the WCPH and identify speakers/panellists/moderators of the plenary sessions.

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## ISC

The International Scientific Committee (ISC) consists of experienced public health experts from around the world nominated by WFPHA, SItI and Aspher. It mainly advises the ICC on scientific matters of the conference and contributes to the scientific evaluation of the conference. We would like to thank the ISC for their support.

# Aim & Scope

Population Medicine is an open-access double-blind peer-reviewed scientific journal that encompasses all aspects of population, preventive, and public health research including health care systems and health care delivery. Its broader goal is to address major and diverse health issues, to provide evidence-based information to professionals at all levels of the health care system, and to inform policymakers who are responsible for the formation of health policies that can lead to evidence-based actions.

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