

MediPIET Summary report of work activities

Donjet Bislimi

Republic of Kosova, Cohort 5 (2022)

Background

About MediPIET

The Mediterranean and Black Sea Programme for Intervention Epidemiology Training (MediPIET) aims to enhance health security in the Mediterranean and the Black Sea region by supporting capacity building for prevention and control of natural or man-made threats to health posed by communicable diseases. It is a competency-based **in-service two-year fellowship** during which selected fellows conduct projects and field investigations at a MediPIET Training Site in their home country and attend MediPIET modules.

Since mid-2021, MediPIET is implemented by ECDC as a part of the [EU Initiative on Health Security](https://www.ecdc.europa.eu/en/training-and-tools/training-programmes/fellowships/medi Piet). You can find more information about the programme at: <https://www.ecdc.europa.eu/en/training-and-tools/training-programmes/fellowships/medi Piet>

Pre-fellowship short biography

Before starting the MediPIET fellowship, Dr Donjet Bislimi served as a lecturer at Universum International College and as a public health specialist at the National Public Health Institute of Kosovo. He also pursued a PhD at Comenius University in Bratislava, Slovakia, where his research focused on health systems management.

Dr Bislimi previously earned his Doctor of Medicine degree from the University of Pristina, Faculty of Medicine. Over the years, he has completed several accredited international trainings in public health and epidemiology.

He has held leadership and advisory roles in both professional and civic organizations, including serving as Vice President of the European Democracy Youth Network. For his volunteer work during the COVID-19 pandemic, he was awarded the John McCain Freedom Award.

His specialisation in Public Health was completed in January 2025, marking the culmination of his academic and professional training prior to joining the MediPIET fellowship.

Fellowship

In September 2022, Donjet Bislimi started his MediPIET fellowship at the National Institute of Public Health, in Pristina, Republic of Kosovo. This report summarises the work performed during the fellowship.

National supervisor:

Pranvera Kaqaniku Gunga

Scientific coordinators:

Katie Palmer, Netta Beer and Amy Mikhail

Fellowship projects

1. Surveillance

Evaluation of the meningitis surveillance system (2020–2023) – Republic of Kosovo

Introduction: Meningitis remains a critical public health concern in Kosovo, requiring timely identification and response to prevent outbreaks. From 2020 to 2023, Kosovo used a paper-based surveillance system to track meningitis cases. This study evaluates the system's effectiveness in capturing, processing, and using data for public health interventions.

Methods: A comprehensive mixed-method evaluation was conducted, including document analysis of reporting forms, stakeholder interviews with 25 healthcare providers, and a data quality analysis of 1 500 reported cases over three years. A subsample of 50 cases from 2023 was used for in-depth analysis of data completeness and reporting timeliness.

Results: The paper-based system successfully captured core epidemiological data, with improvements in data completeness from 85.1% in 2021 to 90% in 2023. However, 3–5% of reports still lacked critical information. In the 2023 subsample, variables like gender and symptom onset were consistently complete, while medical history had 14% missing data. Reporting delays were notable, with 36% of cases reported over 48 hours after symptom onset. Stakeholders reported familiarity with the system but expressed concerns over manual data entry, delays, and error risks. Qualitative feedback and quantitative trends indicated that rural reporting was particularly affected by logistical delays.

Conclusions: While Kosovo's current paper-based meningitis surveillance system offers fundamental epidemiological monitoring, it falls short in ensuring timely and accurate outbreak response. Key weaknesses include manual processing, delayed data transmission, and data security vulnerabilities. A digital transformation of the surveillance infrastructure is recommended to improve data accuracy, timeliness, and security. Implementing a digital platform with integrated reporting protocols and real-time analytics would significantly strengthen the country's public health preparedness and response to meningitis outbreaks.

Role and outputs: Donjet Bislimi was the principal investigator. He wrote the protocol, submitted it to the ethical committee, analysed surveillance data, developed interview templates and data entry forms, conducted interviews with key stakeholders, performed data entry, qualitative analysis, wrote a report and presented findings at an oral presentation at the International Social and Health Sciences Conference – Universum International College.

Supervisor: Pranvera Kaqaniku Gunga

Status: completed

2. Outbreaks

Salmonella outbreak in a local fast-food shop in Mitrovica

Background: On 6 October 2023, the epidemiological surveillance unit in the National Institute of Public Health received an alert of a food poisoning outbreak following the visit of pupils to a local fast food takeaway shop in Mitrovica. We investigated the outbreak to identify the potential vehicle for transmission.

Methods: We conducted a retrospective cohort study among pupils who had eaten in the local fast food shop in Mitrovica. A case was defined as a student attending one of three high schools who consumed lunch that was served at the local fast food shop on 5 October 2023, and developed gastrointestinal symptoms (one or more of abdominal pain, nausea, vomiting, diarrhoea, high temperature, or weakness) between 5 and 7 October 2023. We performed active case finding in Mitrovica (field investigation). The local business owners were requested to provide the overall number of people who attended the fast food shop that day, and the Family Medicine Centre in Mitrovica was requested to provide a list of people that were admitted with gastrointestinal symptoms during the period of interest. People who met the case definition were interviewed and asked to provide a stool sample. Food and environmental samples from the fast food shop were also taken for microbiological analyses.

Results: Of 300 fast food shop customers on the day of interest, 120 (40%) were interviewed. Of the 120 interviewees, 101 (84.17%) presented with symptoms. The individuals were 11 to 34 years old, 26 (26%) of them were female and 75 (74%) were male. The main symptoms were diarrhoea (78%), fever (71%), stomach-ache (67%), vomiting (68%) and weakness (68%). The overall attack rate was 34%. *Salmonella* Enteritidis was isolated in all six samples taken for coproculture in the Microbiology laboratory in Mitrovica. Of the four food samples, *Salmonella* Enteritidis was isolated from two; mayonnaise and mayonnaise with ham. *Staphylococcus aureus* was isolated from a swab of the hands of the person who prepared and served the food.

Conclusion: The causative agent of the outbreak, *Salmonella* Enteritidis, was determined using human and food samples. The epidemiological findings pointed to the mayonnaise as a possible source of the outbreak. Several microorganisms could be implicated due to poor food handling, storage and serving.

Role and outputs: Donjet Bislimi was the principal investigator. He wrote the protocol, developed the questionnaire, submitted it to the ethical committee, performed data entry and analysis, developed and presented findings as an oral presentation at the International Social and Health Sciences Conference – Universum International College

Supervisor: Pranvera Kaqaniku Gunga

Status: Completed

3. Research

Determinants of public confidence in public health authorities and the medical community to manage the COVID-19 crisis, Kosovo, September- October 2022

Background: Trust in healthcare systems is critical for effective pandemic response, yet factors influencing public confidence remain poorly understood. This study aimed to identify determinants of trust in healthcare professionals and public health authorities during the COVID-19 pandemic in Kosovo, to inform strategies for strengthening public health systems during future crises.

Methods: We conducted a cross-sectional telephone survey of 1 005 adults in Kosovo from September-October 2022, as part of the WHO COVID-19 Behavioural Insights survey (Wave VI). Participants were selected using random digit dialling with quota sampling to ensure representativeness by gender, residence, age, and education. Trust in healthcare providers was measured on a 7-point Likert scale (≥ 5 indicating high trust). We conducted multivariable logistic regression with LASSO variable selection to identify determinants and derive adjusted odds ratios (aOR) with 95% confidence intervals (CI).

Results: Trust in clinical healthcare professionals was positively associated with COVID-19 vaccination (fully vaccinated: aOR 1.64, CI 1.03-2.59; booster: aOR 10.8, CI 2.76-74.2), sustained preventive behaviours after mandate relaxation (aOR 2.10, CI 1.24-3.69), and concern about economic impacts (aOR 1.98, CI 1.19-3.24). Perceived infection susceptibility was negatively associated with trust (aOR 0.21, CI 0.11-0.40). Trust in public health authorities was positively associated with older age (≥ 65 years: aOR 2.24, CI 1.21-4.18), health literacy (aOR 3.51, CI 2.25-5.51), frequent information seeking (aOR 2.6, CI 1.21-6.26), booster receipt (aOR 2.22, CI 1.11-4.60) and perceiving national decisions as fair (aOR 2.04, CI 1.48-2.84). Male gender (aOR 0.59, CI 0.43-0.80), perceived infection susceptibility (aOR 0.29, CI 0.17-0.49), and believing media exaggerated COVID-19 (aOR 0.65, CI 0.44-0.96) were negatively associated with trust.

Conclusion: Our results suggest that vaccination status, health literacy, and addressing media misinformation are associated with trust, and may represent targets for intervention. Gender-sensitive approaches and clearer risk communication which distinguishes personal susceptibility from community threat may enhance public health credibility during crises.

Role and outputs: Donjet Bislimi wrote the study protocol, contributed to the design of the data collection tools, defined and extracted a subset of data from the WHO Behavioural Insights study Wave VI, performed descriptive analysis, contributed to statistical analysis, interpreted results and wrote a manuscript, which was submitted to the Central European Journal of Public Health. The results were also presented orally at the IV Regional Conference for Health Promotion and Education - NIPHK (04.06.2025).

Supervisor: Pranvera Kaqaniku Gunga

Status: complete

Scientific communication

Conference presentations

- International Social and Health Sciences Conference. Universum International College, Prishtina; December 2023. Bislimi D, Fejza T, Xhekovik K, Jashari R, Muslija T, Rashiti Bytyci A. AN OUTBREAK OF SALMONELLA ENTERITIDIS AS A BUSINESS RISK IN A LOCAL FAST FOOD SHOP IN MITROVICA.
- International Social and Health Sciences Conference. Universum International College, Prishtina; December 2024. Bislimi D, Jashari R, Bislimi D, Muslija T, Pireva E, Rashiti Bytyci A, Salihu B. EVALUATION OF THE MENINGITIS SURVEILLANCE SYSTEM (2020-2023) - REPUBLIC OF KOSOVA.
- IV Regional Conference for Health Promotion and Education. National Public Health Institute of Kosova, Prishtina; June 2025. Bislimi D, Ramadani N, Bislimi D, Kalaveshi A, Humolli I, Kaqaniku P, Jashari R, Gregus M, Berisha M, Miftari Basholli F, Rashiti Bytyci A, Kryeziu B. Assessment of public trust in public health authorities and the medical community to manage the COVID-19 crisis, Kosovo, September-October 2022.

Publications and outputs

- Bislimi D, Ramadani N, Bislimi D, Kalaveshi A, Humolli I, Kaqaniku P, Jashari R, Gregus M, Berisha M, Basholi FM, Kryeziu B and Mikhail A (2025). Determinants of public confidence in public health authorities and the medical community to manage the COVID-19 crisis, Kosovo, September - October 2022 (submitted to the Central European Journal of Public Health)
- Bislimi D, Fejza T, Xhekovik K, Jashari R, Muslija T, Rashiti Bytyci A. December 2023. AN OUTBREAK OF SALMONELLA ENTERITIDIS AS A BUSINESS RISK IN A LOCAL FAST FOOD SHOP IN MITROVICA. Book of Proceedings International Social and Health Sciences Conference. Universum International College.
- Bislimi D, Jashari R, Bislimi D, Muslija T, Pireva E, Rashiti Bytyci A, Salihu B. December 2024. EVALUATION OF THE MENINGITIS SURVEILLANCE SYSTEM (2020-2023) - REPUBLIC OF KOSOVA. Book of Proceedings International Social and Health Sciences Conference. Universum International College.
- Jashari R, Shabani A, Musliu D, Bislimi D, Kafexholli A. Presentation of Myopericytoma in the Lower Leg: A Case Report with a Brief Review of the Literature.

Teaching activities

On 16 May 2023, I delivered a four-hour educational session on 'COVID-19: Lessons Learned' at the University of León, Ponferrada, León, Spain, targeting second year nursing students.

As the lead instructor, I was responsible for developing the full set of training materials, including lecture presentations, case studies, multimedia resources, and interactive exercises. The session aimed to provide students with a comprehensive understanding of the COVID-19 pandemic, including virology, transmission dynamics, public health impact, and epidemic management.

Teaching methods employed included:

- Structured lecture presentations;
- Case studies based on real-life scenarios;
- Interactive activities (Q&A and group discussions);
- Multimedia tools (videos and graphics);
- Live feedback sessions to assess comprehension and engagement.

Key topics included the origin and genome of SARS-CoV-2, modes of transmission, symptoms, diagnosis and testing, mutation and seasonality, risk factors, treatment approaches, epidemiological concepts, and strategies for epidemic management.

The training was evaluated through open feedback discussions, active student participation, and self-reflection on the achievement of 11 defined learning objectives. Feedback confirmed that students gained valuable insights, demonstrated critical thinking, and actively engaged throughout the session.

This activity contributed to improving health literacy and preparedness among future healthcare providers, aligning with public health education goals.

European Centre for Disease Prevention and Control (ECDC)

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Other activities

COVID-19 related activities:

- Actively involved in health education and awareness campaigns during the pandemic across multiple municipalities.
- Assisted in contact tracing, case follow-up, and community surveillance during the early phases of the pandemic in Kosovo.
- Provided medical support and communication to travellers and patients under stress.
- Contributed to COVID-19 response coordination meetings at the municipal level.
- Took part in vaccine promotion efforts and infodemic management via social media.
- Supported public health residency rotations in immunization, hygiene, epidemiology, and field outbreak responses, including outside office hours.

Communication activities:

- Frequent guest on national TV and radio shows, covering public health, youth engagement, and COVID-19 updates.
- Gave keynote speeches at local and international conferences on youth, health, and leadership.
- Engaged in media appearances and press conferences during high-risk periods of COVID-19 and public health events.
- Delivered public lectures and health education talks across schools, universities, and civic spaces.
- Active contributor to social media campaigns promoting health awareness, One Health approaches, and youth participation in governance.

International exchanges & mobility

- Participated in Erasmus and Academic Staff Mobility programs as a lecturer, representing Universum College at several European partner universities.
- Delivered lectures on public health, global health systems, and youth political engagement during Erasmus teaching mobilities.
- Represented Kosovo in youth exchange programs, health diplomacy meetings, and political forums in over 10 countries including: United Kingdom (Conservative Party Conference), Germany, Poland, Turkey, Albania, North Macedonia, Belgium, Switzerland, Italy, and the United States.

Honors & awards:

- John McCain Freedom Award – awarded for volunteer medical work and civic contribution during the COVID-19 pandemic.
- Recognized by national and local institutions for humanitarian work, youth activism, and health advocacy.

MediPIET modules attended

- ECDC Fellowship Introductory Course
 - Spetses, Greece (26 September – 7 October 2022), face to face
- Operational Research Inject Days
 - Virtual (8–10 November 2022), online
- Outbreak Investigation
 - Berlin, Germany (5–9 December 2022), face to face
- Chemical, Biological, Radiation and Nuclear
 - Petrovac, Montenegro (13–17 March 2023), face to face
- Vaccinology
 - Virtual (29 March 2023), online
- Multivariable Analysis
 - Frankfurt, Germany (22–26 May 2023), face to face
- Rapid Assessment and Survey Methods
 - Stockholm, Sweden (19–23 June 2023), face to face
- Time Series Analysis
 - Rome, Italy (11–15 December 2023), face to face
- One Health
 - Belgrade, Serbia (3–7 June 2024), online
- Project Review 2024
 - Lisbon, Portugal (26–30 August 2024), face to face

Personal conclusions of fellow

Completing the MediPIET Fellowship Programme has been an enriching and transformative journey. Throughout the two years, I have had the opportunity to deepen my expertise in field epidemiology, outbreak investigation, and public health research while working alongside leading professionals and experts across Europe. Each module provided me with critical skills, from multivariable analysis to rapid assessment and surveillance methods, which I have applied in real-world public health challenges in Kosovo. The hands-on experience in outbreak response reinforced the importance of timely and data-driven decision-making in public health emergencies. Furthermore, the collaborative nature of the fellowship allowed me to build strong professional networks and contribute to meaningful health security initiatives. This experience has not only enhanced my technical competencies but also strengthened my commitment to evidence-based public health interventions that have a tangible impact on population health.

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I would like to express my sincere gratitude to everyone who has contributed to my journey throughout the MediPIET Fellowship Programme. The support and guidance from my mentors, supervisors, and colleagues have been invaluable in shaping my professional growth and enhancing my learning experience. I deeply appreciate the encouragement from my peers, who have made this journey both intellectually stimulating and personally rewarding. My heartfelt thanks also go to the institutions and organisations that provided the platform for me to conduct research, participate in fieldwork, and engage in high-quality training. Lastly, I am grateful for the opportunity to be part of a dynamic network of public health professionals working towards strengthening health security in our region. This fellowship has been an incredible learning experience, and I look forward to applying the knowledge and skills gained to improve public health systems and response capacities.