

**1** FORUM Euripa  
Polska

&

**10<sup>th</sup>** EURIPA  
Rural Health  
Forum



23-25 September 2021



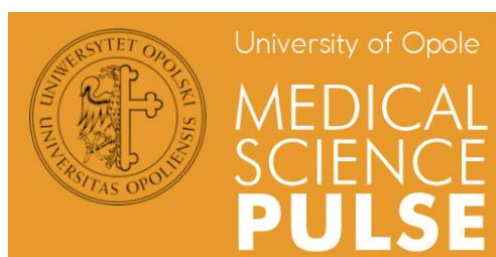
# **10<sup>th</sup> EURIPA Rural Health Forum**

“Understanding our Patients - working closely together”

## **Programme - Book of Abstracts**

<http://euripa.woncaeurope.org/>

The conference is organised under the patronage of Medical Science Pulse journal,  
MSP e-ISSN 2544-1620, Supplement 2, DOI 10.5604/01.3001.0015.2770



This book is available on the EURIPA website: <https://euripa.woncaeurope.org/>

## Colophon

10th EURIPA Rural Health Forum Abstract Book 23 - 25th September 2021

### Editor-in-Chief

Özden Gökdemir, Turkey

### Editors

Jean-Pierre Jacquet, France  
Ferdinando Petrazzuoli, Italy  
Donata Kurpas, Poland  
Patrick Ouvrard, France  
Jane Randall-Smith, UK

---

### Organizing Committee

Marika Guzek, Poland  
Pawel Zuk, Poland  
Jean-Pierre Jacquet, France, Euripa  
President  
Jane Randall-Smith, UK

---

### Language editors

Louise Wilson, UK  
Miriam Dolan, UK  
Joyce Kenkre, UK  
Joanne Robins, UK  
Jane Randall-Smith, UK

### Scientific Committee

Slawomir Chlabicz, Poland, chair  
Professor at the Department of Family  
Medicine. Medical University of  
Bialystok, Poland

Ferdinando Petrazzuoli, co-chair  
Family doctor in rural Italy  
Center for Primary Health Care  
Research, Department of Clinical  
Sciences, Lund University, Malmö,  
Sweden

Donata Kurpas, Poland

Jean-Pierre Jacquet, France

Patrick Ouvrard, France

Ludmila Marcinowicz, Poland

Alicja Malgorzata Oftarzewska, Poland

---

### International Advisory Committee

Donata Kurpas, Poland, Chair

Natasa Mrdujas-Dujic, Croatia  
Katerina Javorska, Czech Republic  
Brian Norton, Ireland  
Sody Naimer, Israel  
Claudio Colosio, Italy  
Rosario Falanga, Italy  
Marit Karlsen, Norway  
Cristina Barbu, Romania  
Beata Blahova, Slovakia  
Joyce Kenkre, UK  
Joanne Robins, UK  
Victoria Tkachenko, Ukraine

---

### Editorial Office

Jane Randall-Smith, EURIPA  
Secretary  
e-mail:jane@montgomery-powys.co.uk

## Table of contents

Colophon	2
Table of contents	3
Introduction	4
Programme	7
Thursday September 23rd	13
Friday September 24th	14
Saturday September 25th	15
Workshops	17
Oral Communications	27
Posters	43
2022 EURIPA Rural Health Forum	66

## Introduction



*2021 is probably an important milestone to rural world. Lockdown, social distancing, pandemic, climate change, greenhouse effects, planetary health.... all these key words in the same pot. The consequences of these terrible circumstances are already alarming. We will have to work closely with our patients, working together, thinking together, not only as professionals but also as global citizens. Join us, in the most appropriate way, to share the present and build the future.*

***Jean Pierre Jacquet***

***President of EURIPA***



*The theme of 10th EURIPA Rural Health Forum, which will be held in Siedlce, Poland on 23-25 September 2021 is “Understanding our patients – working closely together”. Rural general practice/family medicine requires the ability of physicians to care for a highly dispersed population with limited or remote access to specialist support and highly technical services. This can involve care of patients with complex and serious illnesses who, in large urban cities, would be managed by a team of specialists. One of the differences between rural and urban general practice is a more socially oriented patient centred model of care and higher community expectations of social roles. Rural health is less biomedical and more holistic than in the city and rural doctors usually have an increased social standing compared with those in the city. The local doctor is the one who has to deal with very personal issues, a reliable friend you can always go to if you have a problem. Rural communities offer extraordinary opportunities to conduct more holistic, integrative, and relevant research using new methods and data sources. Rural health research is crucial to the provision of quality health care for the rural population. A considerable proportion of the population live in a rural setting even in Europe, however WHO Europe reported that ‘in the health sector and beyond, limited data and analysis of the situation of rural populations, and in particular of the rural poor, contribute to their invisibility and neglect in policy processes in many countries and that the rural dimension is often neglected in analyses of health status and health system performance. The Forum will address the full scope of research and educational questions facing rural family doctors, through oral presentations, workshops and poster sessions.*

**Ferdinando Petrazzuoli MD, PhD,**

**Co-chair of the Scientific Committee**



*It is my privilege to welcome doctors, nurses, students and other healthcare professionals to 10th EURIPA Rural Health Forum which is held for the first time in Poland in Siedlce on 23-25 September 2021.*

*Over the last 30 years Poland underwent huge political and economic changes. It transformed from communist state towards democracy and market economy. There were big changes in primary care as well and state owned medical centers were replaced by privately owned medical practices which work within public healthcare system. During the conference we would like to share our experiences with colleagues from other countries and provide examples of good practice.*

*Providing of high level medical care to rural places remains a challenge in many countries. The situation is aggravated by younger generation migration to cities leaving elderly population without care that traditionally was provided by the closest family members. New developments such as telemedicine, electronic prescriptions, new medications that are easier to deliver and monitor give us a chance to provide modern medicine even when there are scarce numbers of medical professionals.*

***Prof. Slawomir Chlabicz***

*The chair of the Scientific Committee*

*Medical University of Białystok, Poland*

Type of session	Lecture	Workshop
	Moderated discussion	
	Abstract presentations	



## Programme:

### Thursday, September 23rd, 2021

MAIN HALL                      ROOM 1                      ROOM 2                      ROOM 3

13:00 Lunch

### X EURIPA Rural Health Forum

14:00 Official Opening of X EURIPA Rural Health Forum

Dr Adam Niedzielski Minister of Health in Poland

Prof. Sławomir Chlabicz- The chair of the Scientific Committee (Medial University of Białystok, Poland)

Jean Pierre Jacquet– Prezydent EURIPA President

Prof. Shlomo Vinker, WONCA Europe President

Prof. Mirosław Minkina - Dean of the Siedlce University of Natural Science and Humanities

Paweł Żuk –EURIPA Polska President

14:30 **I PLENARY SESSION**

**Moderator Ferdinando Petrazzuoli**

**1. Inaugural lecture**

**14:30-15:00**

“Learning and teaching general practice/family medicine at rural and urban settings - are the challenges and opportunities the

same?" -

**Prof. Adam Windak**,  
Department of Family  
Medicine, Jagiellonian  
University – Collegium  
Medicum, Cracow,  
Poland

2. **15.00-15.30** Abstract  
4: "Dermatology in  
family medicine" **Anna  
Malewska-Woźniak**

15:30 Coffee break

16:00 **II PLENARY SESSION**

**Moderator Donata  
Kurpas**

1. **16.00-16.25**

Telemedicine – **Patient's**  
perspective– **Szymon  
Chrostowski**, „Wygrajmy  
Zdrowie" Patient  
Foundation (Poland)

2. **16:25 – 16:45** WHO  
guideline on health  
workforce in rural and  
remote areas- **Margrieta  
Langins**, World Health  
Organization

16:45 Coffee Break

17:00 Joint Workshop

Abstract **21: Marta  
Duda-Sikuła** et al:  
Healthcare Provider &  
Care partner dyads in  
chronic disease  
prevention  
and

Abstract 17: **Kateřina  
Javorská** et al: Screening  
programs in rural  
European areas

OC1 REMOTE

**Moderator: Miriam Dolan**

Abstract **1: Margarida  
Guilherme** et al: Research  
proposal on how patients  
with a diagnosis of  
Abusive Alcohol  
Consumption can be  
managed in rural primary  
care - Quality  
Improvement  
Intervention

Workshop

Abstract **29: Oleg V.  
Kravtchenko** et al: When it  
Really Matters -  
Emergency in Rural  
Practice



Abstract 27: **Mohammed Morad**: A decade of action to improve patient safety in rural areas

18:15 End of the first day of the Forum

20.00 Welcome Drink - Place: Kuchnia Ogińskiej, Konarski 2 St., 08-110 Siedlce

\*10.30 – 13.00 (The Council Chamber, 1st Floor) - Joint meeting EURIPA Executive Committee and International Advisory Board

## Friday, September 24<sup>th</sup>, 2021

### X EURIPA Rural Health Forum

09:00 Study visits to Rural Clinics

13:00 Lunch

### X EURIPA Rural Health Forum

14:00 **III PLENARY SESSION**

**Moderator Jane Randall-Smith**

**14:00-14:30 Social** prescribing **Prof. Joyce Kenkre**, Emeritus Professor University of South Wales

Q&A – 15 min

14:45 Coffee Break

15:00	Workshop Abstract 16: <b>Jean-Pierre Jaquet</b> et al: Evaluation and accreditation of CPD in rural/urban general practice	Workshop Abstract 44: <b>Victoria I Tkachenko</b> et al: LONG-COVID (POST-COVID-19 SYNDROME): identification and management	Workshop Abstract 42: <b>Sody Naimer</b> : Vulnerability is courage: coping in crisis according to shame resilience theory	Workshop Abstract 20: <b>Marcin Straburzyński</b> : Management of headache disorders in rural general practice
-------	---	--	---	---

16:15 Coffee Break

16:45	Workshop  Abstract <b>10: Ozden Gokdemir</b> et al: Burnout and Suicides Identification	OC 2 REMOTE  <b>Moderator: Cristina Vasilica Barbu</b>  Abstract <b>28: Nuno Rodrigues</b> et al: "Consultadoria" – a link between Psychiatrists and General Practitioners on a rural setting  Abstract <b>32: Pier Mario Perrone</b> et al: Long COVID: how to deal with this new syndrome?  Abstract <b>13: Joana Gomes da Silva</b> et al: Education as a predictor factor for COVID-19 knowledge in a mainland district of Portugal  Abstract <b>30: Oleg V. Kravtchenko</b> : COVID-19 - What have we learned so far?	OC 3 REMOTE  <b>Moderator: Victoria Tkachenko</b>  Abstract <b>34: Andrea Posocco</b> et al: Comprehensive Primary Health Care in a rural context of Italy  Abstract <b>36: Raisa Álvarez Paniagua</b> et al: Pulmonary ultrasound in Post covid-patients with persistent dyspnoea in Primary Care  Abstract <b>37: Raisa Álvarez Paniagua</b> et al: Study on the degree of control of Type 2 Diabetes Mellitus after confinement by COVID-19 in a rural quota  Abstract <b>40: Sílvia Almeida</b> et al: Successful treatment of Hidradenitis Suppurativa – Case Report  Abstract <b>41: Sílvia Almeida</b> et al: With eyes set on the rheumatic fever
-------	---	--	---

18:00 End of the second day of the Forum

\*18.15 – 19.15 (The Council Chamber, 1st Floor) - EURIPA Annual General Meeting 2021 – only for EURIPA members

20:00 Rural Dinner- Place: Dwór Moscibrody, Mościbrody 52, 08-112 Wiśniew

Saturday, September 25<sup>th</sup>, 2021

X EURIPA Rural Health Forum & I Forum EURIPA Polska

09.00

RURAL Café

The Rural Frontier during  
Pandemics - Our  
Experiences and the Way  
to Go

**Oleg V. Kravtchenko**

10:00 **IV PLENARY SESSION**

**Moderator Slawomir  
Chlabicz**

**10:00-10:30**

„Polypharmacy in older  
patients – from a  
problem to solutions” -

**Prof. Przemysław Kardas,**  
Department of Family  
Medicine, Medical  
University of Lodz,  
Poland

Q&A – 15 min

10:45 Coffee Break

11:15

**Moderator: Marit  
Karlsen**

Best 5 posters

OC 4 REMOTE

**Moderator: Brian Norton**

Abstract **2: Anette Fosse**  
et al: Medical education  
to recruit rural doctors - a  
systematic review

Abstract **7: Cristina  
Vasilica Barbu** et al: The  
experiences of general  
practitioners in Romania  
with Covid 19 vaccination

Abstract **11: Genco Gorgu**  
et al: Being a Family  
Physician on an Island

Abstract **19: Louise  
Wilson:** COVID-19 and  
remote and rural islands

Abstract **25: Michał  
Korman** et al: Rural  
patients' awareness of  
myocardial infarction's  
risk factors

Workshop

Abstract **12: Joyce Kenkre**  
et al: Getting started: The  
potential for  
implementation of Social  
Prescribing in your  
community

12:30 Coffee Break

12:40 Closing Ceremony

**Jean-Pierre Jaquet**

The XI Euripa Forum in  
Sicily, Italy, October  
2022

**Slawomir Chlabicz and  
Ferdinando Petrazzuoli:**  
best abstract awards

13:00 Lunch

---

---

## Programme

Thursday September 23rd

**13h00-14h00**

Lunch

**14h00-14h30**

Official Opening of X EURIPA Rural Health Forum

*Dr Adam Niedzielski Minister of Health in Poland*

*Prof. Sławomir Chlabicz- The chair of the Scientific Committee (Medical University of Białystok, Poland)*

*Jean Pierre Jacquet- Prezydent EURIPA President*

*Prof. Shlomo Vinker, WONCA Europe President*

*Prof. Mirosław Minkina - Dean of the Siedlce University of Natural Science and Humanities*

*Paweł Żuk –EURIPA Polska President*

**14h30-15h30**

I PLENARY SESSION

*Prof. Adam Windak, Anna Malewska-Woźniak*

*Moderator: **Ferdinando Petrazzuoli***

**15h30-16h**

Coffee-break

**16h-16h45**

II PLENARY SESSION

*Szymon Chrostowski, Margrieta Langins*

*Moderator: **Donata Kurpas***

**16h45-17h00**

Coffee-break

**17h00-18h15**

Joint Workshop

[Healthcare Provider & Care partner dyads in chronic disease prevention \*\*Marta Duda-Sikuła et al\*\*](#)

[Screening programs in rural European areas \*\*Kateřina Javorská et al\*\*](#)

**OC1 Remote**

*Moderator: **Miriam Dolan***

[Research proposal on how patients with a diagnosis of Abusive Alcohol Consumption can be managed in rural primary care - Quality Improvement Intervention \*\*Margarida Guilherme et al\*\*](#)

[A decade of action to improve patient safety in rural areas \*\*Mohammed Morad\*\*](#)

**Workshop**

[When it Really Matters - Emergency in Rural Practice \*\*Oleg V. Kravtchenko et al\*\*](#)

**18h15-19h00**

End of the first day of the Forum

**20h00**

Welcome Drink

---

Friday September 24th

**9h00-13h00**

Study visits to Rural Clinics

**13h00-14h00**

Lunch

**14h00-14h45**

III PLENARY SESSION:

*Prof. Joyce Kenkre*

Moderator: **Jane Randall-Smith**

**14h45-15h00**

Coffee Break

**15h00-16h15**

**Workshop**

[Evaluation and accreditation of CPD in rural/urban general practice \*\*Jean-Pierre Jacquet et al.\*\*](#)

**Workshop**

[LONG-COVID \(POST-COVID-19 SYNDROME\): identification and management \*\*Victoria I Tkachenko et al.\*\*](#)

**Workshop**

[Vulnerability is courage: coping in crisis according to shame resilience theory \*\*Sody Naimer\*\*](#)

**Workshop**

[Management of headache disorders in rural general practice \*\*Marcin Straburzyński\*\*](#)

**16h15-16h45**

Coffe Break

---

**16h45-18h00**

**Workshop**

[Burnout And Suicides Identification \*\*Ozden Gokdemir et al\*\*](#)

**OC 2 Remote**

Moderator: **Cristina Vasilica Barbu**

["Consultadoria" – a link between Psychiatrists and General Practitioners on a rural setting \*\*Nuno Rodrigues et al.\*\*](#)

[Long COVID: how to deal with this new syndrome? \*\*Pier Mario Perrone et al.\*\*](#)

[Education as a predictor factor for COVID-19 knowledge in a mainland district of Portugal \*\*Joana Gomes da Silva et al.\*\*](#)

[COVID-19 - What have we learned so far? \*\*Oleg V. Kravtchenko\*\*](#)

[COVID-19 - What have we learned so far? \*\*Oleg V. Kravtchenko\*\*](#)

## OC 3 Remote

Moderator: **Victoria Tkachenko**

[Comprehensive Primary Health Care in a rural context of Italy \*\*Andrea Posocco et al.\*\*](#)

[Pulmonary ultrasound in Post covid-patients with persistent dyspnoea in Primary Care \*\*Raisa Álvarez Paniagua et al.\*\*](#)

[Study on the degree of control of Type 2 Diabetes Mellitus after confinement by COVID-19 in a rural quota \*\*Raisa Álvarez Paniagua et al.\*\*](#)

[Successful treatment of Hidradenitis Suppurativa – Case Report \*\*Silvia Almeida et al\*\*](#)

[With eyes set on the rheumatic fever \*\*Sílvia Almeida et al.\*\*](#)

**18h00-20h00**

End of the second day of the Forum

**20h00**

Rural Dinner

Saturday September 25th

**9h00-10h00**

RURAL Café: The Rural Frontier during Pandemics - Our Experiences and the Way to Go  
**Oleg Kravtchenko**

**10h-10h45**

### IV PLENARY SESSION

Moderator: **Slawomir Chlabicz**

Prof. Przemysław Kardas

**10h45-11h15**

Coffee-break

**10h-10h45**

Poster Session: Best 5 Posters

Moderator: **Marit Karlsen**

## OC 4 REMOTE

Moderator: **Brian Norton**

[Medical education to recruit rural doctors - a systematic review \*\*Anette Fosse et al\*\*](#)

[The experiences of general practitioners in Romania with Covid 19 vaccination \*\*Cristina Vasilica Barbu et al\*\*](#)

[Being a Family Physician on an Island \*\*Genco Gorgu et al.\*\*](#)

[COVID-19 and remote and rural islands \*\*Louise Wilson\*\*](#)

[Rural patients' awareness of myocardial infarction's risk factors \*\*Michał Korman et al.\*\*](#)

## Workshop

[Getting started: The potential for implementation of Social Prescribing in your community](#)

[\*\*Joyce Kenkre et al.\*\*](#)

**12h30-12h40**

Coffee-break

**12h40-13h00**

**Closing Ceremony**

***Jean-Pierre Jaquet***

*The XI Euripa Forum in Sicily, Italy, October 2022*

**Best Abstract Awards**

*Moderator: **Slawomir Chlabicz and Ferdinando Petrazzuoli***

**13h00**

**Lunch**



## Workshops

**Workshop 1** Healthcare Provider & Care partner dyads in chronic disease prevention

**Workshop 2** Screening programs in rural European areas

**Workshop 3** When it Really Matters - Emergency in Rural Practice

**Workshop 4** Evaluation and accreditation of CPD in rural/urban general practice

**Workshop 5** LONG-COVID (POST-COVID-19 SYNDROME): identification and management

**Workshop 6** Vulnerability is courage: coping in crisis according to shame resilience theory

**Workshop 7** Management of headache disorders in rural general practice

**Workshop 8: Abstract 10** Burnout And Suicides Identification

**Workshop 9 : Abstract 12** Getting started: The potential for implementation of Social Prescribing in your community

**Workshop 1: Abstract 21** Healthcare Provider & Care partner dyads in chronic disease prevention  
[Healthcare Provider & Care partner dyads in chronic disease prevention Marta Duda-Sikuła et al](#)

Marta Duda-Sikuła<sup>1</sup>, Dorota Stefanicka-Wojtas<sup>2</sup>, Donata Kurpas<sup>3</sup>

<sup>1</sup> Clinical Trial's Department, Wrocław Medical University, Wrocław, Poland

<sup>2</sup> Clinical Trial's Department, Wrocław Medical University, Wrocław, Poland

<sup>3</sup> Family Medicine Department, Wrocław Medical University, Wrocław, Poland

corresponding author e-mail: [martadudasikula@gmail.com](mailto:martadudasikula@gmail.com)

### Background

Chronically ill patients' visits account for 80% of primary care consultations. Approximately 15%-38% of patients have three or more chronic diseases and 30% of hospitalizations result from the deteriorating clinical condition of these patients. The burden of chronic disease and multimorbidity is increasing, in combination with the growing population of elderly people. Many interventions found to be effective in health services research studies fail to translate into meaningful patient care outcomes across multiple contexts. With the growing burden of chronic disease, the healthcare providers, the health policymakers, and other stakeholders of the healthcare system are re-examining their strategies and opportunities for more effective prevention and clinical interventions. The increasing role of the dyads: Healthcare provider & Care partner is noticed in the patient journey toward better life quality.

The psychological competencies of these dyads play a significant role in patient empowerment capabilities and his/her recovery process.

Personalised medicine (PM) is one way of implementing the effective implementation. It is a treatment tailored to the patient's characteristics, needs, and preferences. Personalized medicine (PM) is beginning to overcome the limitations of traditional medicine, adapt medical treatment to the individual patient, however it is extremely

important to be aware of the barriers and facilitators of the intervention implementation process at the level of all stakeholders - healthcare providers, care partners and the patients' themselves.

### **Aim of the workshop**

The overall goal of this workshop is to answer the question of how the cooperation between a professional healthcare provider and a care partner who support the patients in their journey to chronic disease prevention, influences the effectiveness of the interventions.

We want to understand and discuss experiences in implementing chronic disease prevention interventions, especially:

- 1) barriers and facilitators of the implementation of the intervention - what influences implementation effectiveness?
- 2) indicate actions aimed at removing barriers during the implementation of personalised medicine at micro-, meso- and macro- regional levels.
- 3) identify best practices used in European countries supporting PM implementation to healthcare systems at micro-, meso- and macro- regional levels

### **Participants**

- group of 15-20 people
- preceded by a short lecture/presentation
- 1) updated statistics
- 2) the role of the healthcare providers and caregiver's cooperation in the intervention implementation
- 3) personalized medicine challenges;
- focus group discussion and summary
- role play and feedback
- summary

### **Methodology**

active participation- focus group discussion, questionnaires, group discussion, role play

### **Expected Outcomes**

- the practical knowledge about psychological aspects of intervention implementation
- practical skills about the effective communication strategies

**Key words:** personalised medicine, chronic disease prevention, healthcare providers, care partners

## **Workshop 2: Abstract 17**

### [Screening programs in rural European areas \*Kateřina Javorská et al\*](#)

*Kateřina Javorská<sup>1,2,3</sup>, Beata Blahov<sup>4,5</sup>, Rosario Falanga<sup>6</sup>, Donata Kurpas<sup>7,8</sup>, Marit Karlsen<sup>9,10</sup>, Ana Kareli<sup>11</sup>, Brian Norton<sup>12</sup> Victoria Tkachenko<sup>13</sup>*

<sup>1</sup>Working Group on Rural Practice of the Czech GP Society

<sup>2</sup>Department of Preventive Medicine, Faculty of Medicine in Hradec Krlov, Charles University, Czech Republic

<sup>3</sup>Praktick lkař Javorsk s.r.o., Nov Msto nad Metuj, Czech Republic

<sup>4</sup>Department of Public Health, Slovak Medical University, Bratislava, Slovak Republic

<sup>5</sup>Slovak Society of General Practitioners, Slovak Republic

<sup>6</sup>Department of Primary Care, Local Health Authority, Pordenone, Italy

<sup>7</sup>Chair of EURIPA IAB

<sup>8</sup>Family Medicine Department, Wroclaw Medical University, Poland

<sup>9</sup>Group on rural practice of the Norwegian GP Society

<sup>10</sup> Project Group of GPs, Kautokeino

<sup>11</sup> Georgian Family Medicine Association, Tbilisi State Medical University, Tbilisi, Georgia

contacting author's e-mail: [k1.javorska@gmail.com](mailto:k1.javorska@gmail.com)

## Background

Primary health care in rural areas in many European countries needs programs which would broaden the delivery of potentially life-saving preventative measures.

Rural general practitioners deal with specific health care needs of their communities.

There is a need to pay more attention to effective screening programs and strategies to maintain and improve healthcare in rural medicine.

## Aim of the workshop

Are there any strategies within European countries that are effective in supporting screening programs in rural areas?

Which primary healthcare professionals other than GPs are involved in screening?

How are the screening programs financed?

In what circumstances do we need more support?

Are there any age limits in European countries?

How are we going to organise screening during the next wave of covid-19?

To what extent are the strategies implemented in European countries?

Are there any universal tools to support the implementation, and if so, what are they?

How could the situation be improved?

## Participants

General Practitioners

## Methods

Information from national representatives about screening program strategies in their countries.

Collecting ideas and setting up priorities in screening strategies for European countries in general via interactive communication methods.

## Expected outcomes of the workshop

Identifying three most important needs for screening programs to be implemented in rural areas.

Identifying three most important health conditions to focus on in a screening program.

## Conclusions

Conclusions of the workshop could become a basis for further profound research in screening programs strategies of delivering quality of healthcare in EURIPA representing European countries.

**Keywords:** rural medicine, screening programs, health care, prevention

**Workshop 3: Abstract 29** When it Really Matters - Emergency in Rural Practice

[When it Really Matters - Emergency in Rural Practice Oleg V. Kravtchenko et al](#)

Oleg V. Kravtchenko<sup>1</sup>, Elena Klusova Noguina<sup>2</sup>

<sup>1</sup> GP, EURIPA Vice-President, Dr. Odinaka's Clinic, Bodoe, Nordland, Norway

<sup>2</sup> GP, EURIPA IAB Member, Balearic Islands, Spain

corresponding author e-mail: [ovkdoc@yahoo.no](mailto:ovkdoc@yahoo.no)

## Background:

One of the reasons for the obvious difficulties to recruit and retain GPs in rural areas could be the challenge of everyday emergencies and, quite often, the uncertainty of many rural practitioners if they could manage it. This is especially crucial in modern rural communities with a quite common lack of collegial support and

an increasing proportion of elderly, frail and challenged parts of the rural population. Therefore it is important to train and update rural physicians in the necessary skills for the most common emergency situations in their daily practice, the task the authors began to address a couple of years ago. We are planning to have several such workshops on different emergency situations in future.

### **Aim of the workshop**

- To check the existing preparedness level in the audience and to encourage discussion on what Emergency Skills are essential for rural practitioners.
- To prepare a system of Emergency Skills Modules (ESM) to be employed in training and updating of rural GPs and other healthcare professionals. This is a work in progress.

### **Participants**

GPs/Family medicine practitioners.

### **Methodology**

Delegates will be given short presentations on different medical emergency situations. After a mini-Quiz and by working together, the workshop can develop a plan of further action that can be taken forward in collaboration and contribute to the European rural medical education agenda.

### **Expected Outcomes**

Workshop participants will learn:

- to assess variable emergency situations and how to deal with these in rural medical practice;
- to improve their medical emergency skills;
- to manage everyday rural medical practice in a better way with better outcomes for their patients.

**Key words:** Medical emergency, skills, rural, education

## **Workshop 4 Abstract 16**

### [Evaluation and accreditation of CPD in rural/urban general practice Jean-Pierre Jacquet et al.](#)

*Jean-Pierre Jacquet<sup>1</sup>, Patrick Ouvrard<sup>2</sup>, Ferdinando Petrazzuoli<sup>3</sup>*

<sup>1</sup>*Collège de la Médecine Générale France, EURIPA*

<sup>2</sup>*Collège de la Médecine Générale France, UEMO, EURIPA*

<sup>3</sup>*Department of Clinical Sciences in Malmö, Centre for Primary Health Care Research, Lund University, Malmö, Sweden, EURIPA*

**corresponding author e-mail:** [jpc.jacquet@wanadoo.fr](mailto:jpc.jacquet@wanadoo.fr)

### **Background**

Continuing Professional Development (CPD) implementation and accreditation for General Practitioners (GPs)/Family Medicine (FM) in rural and urban practices. Various situations exist in Europe regarding CPD, and there is no regulation or mutual recognition of the cursus, this can induce disruption and inequities between GPs/FM, and subsequently impact on the quality of care to the patients.

### **Aim of the workshop**

Respecting national obligations, the objective of the workshop is to run a pre-statement to organise a specific accreditation for European GPs.

### **Participants**

A face to face and virtual panel consisting of rural and urban GPs/FM

### **Methodology**

Attendees will be invited to discuss their experiences and issues, after a short presentation of a tool dedicated to CPD

- mains ethics and qualities criteria for CPD.
- mains barriers to implement
- opportunities allowed by new technologies and skills
- urban/rural inequities in CPD

### Expected Outcomes

Workshop participants will propose a pre-statement which will be sent to all the potential stakeholders.

**Key words:** Accreditation, CPD, rural General practice

**Workshop 5** LONG-COVID (POST-COVID-19 SYNDROME): identification and management

[LONG-COVID \(POST-COVID-19 SYNDROME\): identification and management Victoria I Tkachenko et al:](#)

Victoria I Tkachenko<sup>1</sup>, Claudio Colosio<sup>2</sup>, Donata Kurpas<sup>3</sup>, Sody A Naimer<sup>4</sup>

<sup>1</sup> *Family Medicine Department, Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine; Chair of European WWPWF, EURIPA IAB member*

<sup>2</sup> *Department of Health Sciences of the University of Milano and Occupational Health Unit, International Centre for Rural Health of the Santi Paolo e Carlo Hospital, Milan, Italy. EURIPA IAB member*

<sup>3</sup> *Family Medicine Department, Wroclaw Medical University, Poland; Chair of EURIPA IAB*

<sup>4</sup> *Faculty of Health Sciences, Ben-Gurion University, Beersheva, Israel*

**Corresponding author e-mail:** [witk@ukr.net](mailto:witk@ukr.net)

### Background

Many patients who have recovered from COVID-19 are still experiencing symptoms that are distinguished by the WHO as 'post-COVID-19 condition' or 'long-COVID'. Long-COVID is a range of symptoms that can last weeks or months after first being infected with the COVID19 virus and can appear weeks after infection. The most common symptoms are shortness of breath, cognitive dysfunction, fatigue, mental disorders, muscles aches etc. The list includes more than 200 symptoms that have been reported. There is no specific treatment because the cause of Long-COVID is not identified. There are WHO recommendations for a clinical pathway that recommends a multidisciplinary team approach, which would be often not available in rural areas.

**Aim of the workshop** is to discuss and share experiences with participants on what the common Long-COVID symptoms are that are reported to GPs, how patients with these symptoms are managed in rural areas in the various European countries and especially what the challenges are for GPs, who is involved in the multidisciplinary approach and what rural GPs would need to improve the situation.

### Participants

Family medicine doctors.

### Methodology

The short presentations are followed by a guided panel discussion with representation of different countries. The results of the interactive discussion based on shared clinical cases and brainstorming will be analyzed and compiled in a summarising document.

### Expected Outcomes

The workshop will help participants to better understand Long-COVID syndrome; which symptoms are common in different countries, how to manage them based on experiences of foreign colleagues and existing guidelines. A summarising document highlighting the challenges and suggested recommendations for rural

primary care will be developed. The outcomes could be the foundation for an EURIPA document on enhancing the quality of care for patients with Long-Covid syndrome or could form the basis for research on the prevalence of different Long-Covid symptoms, its duration and gaps in management in rural primary care in European countries.

### **Keywords**

Long-COVID, post-COVID-19 conditions, rural medicine, challenges

**Workshop 6: Abstract 42:** Vulnerability is courage: coping in crisis according to shame resilience theory

[Vulnerability is courage: coping in crisis according to shame resilience theory Sody Naimer](#)

Sody Naimer

Ben Gurion University of the Negev, Beersheva, Israel. Eilon Moreh Family Health Center, Shomron, Israel.

corresponding author e-mail: [sodynaster@gmail.com](mailto:sodynaster@gmail.com)

### **Background:**

The theory of shame resilience was introduced over 10 years ago and recently has been disseminated through social media and bestselling literature. None of this has been applied to the medical profession where it is so needed. Family physicians are torn between personal and organizational demands on a regular basis. These domains include sacrificing emotional integrity, personal leisure and comfort for a dedicated profession, alongside paying the price of immense torment, carrying the burden of others' anguish and suffering. While being exposed to charged patient challenges, misfortune and grief, the organizations within which we work continuously bombard us by demanding optimal performance and function with minimal absence alongside managing a tight-rope balance between financial and service availability constraints, quality measures versus endless patients' requests for high quality care and attention here and now. From a majestic position of the superior status of the legendary physician we feel cramped into a corner of near doom, often fostering frustration and defeat. Some alleviation of the strains and stresses of this predicament is expected from this session.

### **Aim of the workshop**

The objective of this activity is to expose participants to the principles of this theory and develop awareness of the enormous potential benefits of applying this knowledge to team work with medical staff and incorporation into the doctor patient encounter.

### **Participants**

Work in small groups to discuss and elaborate elements of the theory and present before all participants how the principles of the resilience analysis can assist us in our work environment.

### **Methodology**

A concise summary of the work of five-time best seller author: Brene Brown, a Doctor of Social Work a renowned researcher and storyteller who has explored the intricacies of struggle, uncertainty and shame is presented. We will experience the revelation of her uncovered secrets of vulnerability as a vital ingredient to courage. Small groups will each partake in debate and exchange of ideas each on a separate aspect of recognition and reinforcement of shame resilience. The domains challenging each of the work will include: emotional involvement with patients, stresses between medical team members at the clinic, conflict between academic or clinical strive for excellence and fear of failure, drained out by demands of system leading to burnout. The groups will present a summary of their discussions to the forum. The session ends with a brief video on E M P A T H Y capturing the rich concepts of the founder of the theory in the authors original words.

## Expected Outcomes

The content presented is aimed to provide uplifting acknowledgement of underlying currents and processes on both personal interpersonal communicative levels. It is assumed that such recognition will create a more wholehearted human, physician and prevent burnout.

**Key words:** vulnerability, shame, coping, adaptation

**Workshop 7** Management of headache disorders in rural general practice

[Vulnerability is courage: coping in crisis according to shame resilience theory Sody Naimer](#)

Marcin Straburzyński<sup>1</sup> <https://orcid.org/0000-0002-9811-3526>

<sup>1</sup>General Practice. Orzyny. Poland

**corresponding author e-mail:** [marcinstraburzynski@gmail.com](mailto:marcinstraburzynski@gmail.com)

## Background

Headache disorders are one of the most prevalent causes of disability. Nevertheless, headache, and especially migraine, is underdiagnosed and undertreated all around the world. Addressing this issue requires the involvement of primary care, as this is where the vast majority of headache disorders can and should be effectively managed.

## Aim of the workshop

The aim of this workshop is to provide the attendees with the knowledge and skills necessary for diagnosing and treating common headache disorders according to the current European Headache Federation guidelines.

## Participants

General practitioners

## Methodology

The workshop will cover:

- the clinical picture of most common headache disorders
- diagnostic challenges
- red flags requiring immediate workup
- referral criteria for specialist consultation
- management recommendations
- clinical case discussion

## Expected Outcomes

After the workshop participants should feel better equipped to diagnose and manage the most common types of headache disorders which consequently could reduce the number of unnecessary diagnostic procedures, referrals for specialist assessment and missed malignant cases. It will make the care for patients suffering with a headache disorder more comprehensive, self-reliant and cost-effective.

**Key words:** headache, migraine, primary care, cephalalgia, tension-type headache

## Funding

This workshop received no funding

## Declaration of conflicting interests

In the last 36 months, the author of this workshop received lecture fees from Novartis Poland Sp. z o.o. and Teva Pharmaceuticals Polska Sp. z o.o.

[Burnout And Suicides Identification Ozden Gokdemir et al](#)

Dr Ozden Gokdemir<sup>1</sup>, Dr Donata Kurpas<sup>2</sup>, Dr. Oleg V. Kravtchenko<sup>3</sup>, Dr Natasa Mrduljaš – Đujić<sup>4</sup>, Dr Rosario Falanga<sup>5</sup>, Dr Genco Gorgu<sup>6</sup>, Dr Victoria Tkachenko<sup>7</sup>, Marta Duda-Sikula<sup>8</sup>, Dr Dragica Shuleva<sup>9</sup>, Jane Randall-Smith<sup>10</sup>

<sup>1</sup> Izmir University of Economics, Faculty of Medicine, Turkey, VdGM Mental Health SIG, International Advisory Board member at EURIPA  
Family Medicine Department, Wroclaw Medical University, Poland; Chair of EURIPA IAB  
M.D., EURIPA Vice-President, Dr. Odina's Clinic, P.B. 1196, 8001 BODOE, Norway.  
European Rural and Isolated Practitioner Association (EURIPA); KoHOM (Croatia) delegate,  
Department of Family Medicine, University of Split, School of Medicine, Croatia, Specialist practice in family medicine Postira, Island of Brac.  
Family Doctor, Department of Primary Care, Azienda Sanitaria Friuli Occidentale, Pordenone, Italy,  
Tutor Family Medicine, University of Udine, International Advisory Board member at EURIPA  
Marmara District State Hospital Family Medicine Clinic, Balikesir, Turkey  
Shupyk National Healthcare University of Ukraine, Family Medicine Department, Kyiv, Ukraine,  
International Advisory Board member at EURIPA  
PhD candidate, Wroclaw Medical University, Poland.  
SW Health Center Bar  
EURIPA, Secretariat, Montgomery, United Kingdom

corresponding author email: [gokdemirozden@gmail.com](mailto:gokdemirozden@gmail.com)

**Background:**

According to some studies, FPs/ GPs are more vulnerable to burnout than doctors in most other specialties. COVID-19 syndemics have negative effects on the solutions of burn-out, job-satisfaction but positive effects on the increasing rate of bullying, mobbing, and even suicides.

**Aim of the workshop:**

The wellness of physicians is a key factor for not only themselves but also for their community. Understanding the situation in different countries is one of the aims of this workshop. We also aim to develop a response strategy to inform about suicide/burnout prevention for physicians and individuals across Europe.

Participants: FPs/GPs, trainees

**Methodology:**

- Icebreaker: The session will start with an interactive user quiz - 'What do you know about burnout? - How can we prevent suicide amongst physicians/individuals?'
- Introduction: A presentation of current data and research findings
- Group work: Small group discussion of a fictional case.  
Group feedback on the issues raised.
- Live-action roleplay: Simulated consultation exploring the specific challenges and opportunities of caring for colleagues with suicidal ideation (communication skills, stigmatization, challenges, support groups).
- Group discussion: the Wider exploration of the issues raised, including primary and secondary prevention.

**Expected Outcomes:**

1. To improve awareness about burnout amongst physicians / individuals
2. To improve awareness about suicide amongst physicians / individuals
3. To discuss the relevance of research findings on physician suicide to different national contexts
3. To develop a response strategy to inform suicide/burnout prevention for physicians and individuals across Europe (using the expertise of WONCA members)

**Keywords:** Burnout, suicide identification, prevention, family medicine



[Getting started: The potential for implementation of Social Prescribing in your community](#)  
[Joyce Kenkre et al.](#)

Professor Joyce Kenkre<sup>1</sup>, Jo Robins<sup>2</sup>, Jane Randall-Smith<sup>3</sup>, Natasa Mrduljaš - Đujić<sup>4</sup>, Donata Kurpas<sup>5</sup>, Ferdinando Petrazzuoli<sup>6</sup>, Miriam Dolan<sup>7</sup>

<sup>1</sup> Emeritus Professor of Primary Care at the University of South Wales; Council Member WONCA Working Party on Rural practice

<sup>2</sup> Consultant in Public Health, Shropshire

<sup>3</sup> EURIPA; Rural Forum, Royal College of General Practitioners

<sup>4</sup> Department of Family Medicine, University of Split, School of Medicine, Croatia; Specialist practice in family medicine Postira, Island of Brac.

<sup>5</sup> Family Medicine Department, Wroclaw Medical University, Poland; Chair of EURIPA IAB

<sup>6</sup> Department of Clinical Sciences in Malmö, Centre for Primary Health Care Research, Lund University, Malmö, Sweden; Chair of EURIPA Scientific Board

<sup>7</sup> Maple Healthcare, Lisnaskea, Northern Ireland

Corresponding author e-mail: [Jane@montgomery-powys.co.uk](mailto:Jane@montgomery-powys.co.uk)

## Background

Social Prescribing is becoming increasingly important to GPs in rural communities and offers an opportunity to reduce their workload but still bring patient benefits especially when resources are getting fewer. For rural GPs it is important, as isolation and loneliness is frequently identified as an issue in terms of patients' wellbeing and social prescribing offers a non-medical solution. In rural areas challenges also include the capacity and sustainability of the voluntary/charity sector in the community to support Social Prescribing initiatives.

## Aim of the workshop

To elicit the different issues on progressing the development, implementation and impact of social prescribing in rural communities in Europe.

## Participants

Family medicine doctors and their primary care colleagues.

## Methodology

Initially a short description of what social prescribing and community orientation is and short presentations from different countries at different stages of Social Prescribing will be presented. This will be followed by a presentation of a matrix approach that could be used for the development of social prescribing. Delegates will then be split into groups to brainstorm ideas. Each group will report back prior to open discussion on the issues presented and consider ways of developing a service/programme or project.

We would like delegates to come to the workshop with knowledge of, interest in or with future ideas for the implementation of social prescribing within their communities locally and nationally. We would like them to discuss ideas on developing initiatives, behavioural change in partners, barriers to and facilitators for social prescribing in community orientation

### **Expected Outcomes**

To have a group of delegates willing to take social prescribing and community orientation forward to develop a Special Interest Group within WONCA Europe supported by EURIPA. To start to gather information that can be used towards developing a future framework to support those starting to be involved in social prescribing to achieving fully established systems within communities that demonstrate benefits to the community, patients, and GP practices.

**Key words:** Social prescribing, strategy, framework, community health, wellbeing

## Oral Communications

**Oral Communication 1: Abstract 1** Research proposal on how patients with a diagnosis of Abusive Alcohol Consumption can be managed in rural primary care - Quality Improvement Intervention

**Oral Communication 3: Abstract 27** A decade of action to improve patient safety in rural areas

**Oral Communication 4: Abstract 28** "Consultadoria" – a link between Psychiatrists and General Practitioners on a rural setting

**Oral Communication 5: Abstract 32** Long COVID: how to deal with this new syndrome?

**Oral Communication 6: Abstract 13** Education as a predictor factor for COVID-19 knowledge in a mainland district of Portugal

**Oral Communication 7: Abstract 30** COVID-19 - What have we learned so far?

**Oral Communication 8: Abstract 34** Comprehensive Primary Health Care in a rural context of Italy

**Oral Communication 9: Abstract 36:** Pulmonary ultrasound in Post covid-patients with persistent dyspnoea in Primary Care

**Oral Communication 10: Abstract 37** Study on the degree of control of Type 2 Diabetes Mellitus after confinement by COVID-19 in a rural quota

**Oral Communication 11: Abstract 40:** Successful treatment of Hidradenitis Suppurativa – Case Report

**Oral Communication 12: Abstract 41** With eyes set on the rheumatic fever

**Oral Communication 13: Abstract 2** Medical education to recruit rural doctors - a systematic review

**Oral Communication 14: Abstract 7** The experiences of general practitioners in Romania with Covid 19 vaccination

**Oral Communication 15: Abstract 11:** Being a Family Physician on an Island

**Oral Communication 16: Abstract 19:** COVID-19 and remote and rural islands

**Oral Communication 17: Abstract 25:** Rural patients' awareness of myocardial infarction's risk factors

**Oral Communication 1: Abstract 1** Research proposal on how patients with a diagnosis of Abusive Alcohol Consumption can be managed in rural primary care - Quality Improvement Intervention

[Research proposal on how patients with a diagnosis of Abusive Alcohol Consumption can be managed in rural primary care - Quality Improvement Intervention](#) **Margarida Guilherme et al**

Margarida Guilherme<sup>1,2</sup>, Joana Cunha Santos<sup>1,3</sup>, Cristina Neiva Moreira<sup>1,3</sup>, António Carvalho<sup>1,4</sup>, Maria João Maia Marques<sup>1,5</sup>, Marina Pires<sup>1,6</sup>

<sup>1</sup>USF Trilhos Dueça, ACeS Pinhal Interior Norte, ARS Centro, Portugal

<sup>2</sup> 1<sup>st</sup> Year General Practice Trainee  
<sup>3</sup> 4<sup>th</sup> Year General Practice Trainee  
<sup>4</sup> 3<sup>rd</sup> Year General Practice Trainee  
<sup>5</sup> 2<sup>nd</sup> Year General Practice Trainee  
<sup>6</sup> General Practice Specialist

corresponding author e-mail: AMGuilherme@arscentro.min-saude.pt

## Background

Alcohol abuse was the seventh leading cause of death worldwide in 2016. In 2019 in Portugal alcohol was implicated in all causes of death: neoplasms, infections, gastric or cardiovascular disease and accidents. Alcohol is also related to an increased number of Years Lived with a Disability and generates a considerable financial burden to the state. The World Health Organisation has set the objective to reduce harmful use of alcohol by 10% by 2025. Studies have shown that primary care interventions are at least as effective at reducing harmful alcohol use compared to specialised care.

## Aim of the study

Improving the quality of care of patients diagnosed with Alcohol Abuse in a Portuguese rural health centre.

## Methodology

It is proposed that at the end of 2021 a search will be conducted to identify patients aged 18 or over with a diagnosis of Chronic Alcohol Abuse (P15) or Acute Alcohol Abuse (P16) between January to March 2021. P15 and P16 are the ICPC2 codifications. It is envisioned the identified cohort will have their health records reviewed on correct codification in the last 3 years and to see if they have received specialised follow-up in a secondary or tertiary centre. The health centre physicians will attend an educational session on Alcohol Abuse. Patients without codification, assessment or specialised follow-up, will be called in for review to reassess their alcohol consumption habits, using the AUDIT tool if necessary, documenting the findings and using correct codes. The findings of a second search in January 2022 will show if the care of patients with Alcohol Abuse has improved.

## Results

The results will be available in January 2022.

It is however anticipated that because of the COVID-19 pandemic patients might not feel safe to come to the health centre to be reassessed for a "non-urgent" matter. Furthermore, some patients may be reluctant to share real consumption quantities. The ICPC2 coding system has drawbacks as well as it is at times not specific enough, missing intermediate diagnosis like risky alcohol consumption. It is nevertheless anticipated that there will be beneficial outcomes in addition to improved quality of care for patients with Abusive Alcohol intake as it will bring this issue to the forefront.

## Conclusions

This study has the potential to show that an initiative within rural general practice, which incorporates educating professionals and communities, correctly diagnosing alcohol abuse and closely following and managing diagnosed patients, can improve the quality of care for patients with Alcohol Abuse.

**Key words:** Alcoholism, Alcohol Abuse

**Oral Communication 3: Abstract 27** A decade of action to improve patient safety in rural areas

[\*A decade of action to improve patient safety in rural areas\*](#) **Mohammed Morad**

Mohammed Morad

Ben Gurion University of the Negev, Community Health Division, Family Medicine Department,  
Beer Sheva, Israel

corresponding author e-mail: morad62@gmail.com

**Background:** A decade has elapsed since EURIPA published its first systematic review on patient safety in rural health and adopted the Manchester framework for rural medicine. The WHO curriculum has seen the light and the action for more globally orchestrated research and application of the evidence to the practice of rural hospitals and clinics. All these ignited the global project, and one of its goals was to conduct more research and allocate more resources for patient safety in remote areas.

**Aim of the study:** The presentation will look at the topics studied in the field of patient safety in rural areas according to published materials in PubMed and elsewhere. The light will be shed on the significant findings in mapping errors, adverse events, adverse incidents, handover issues, and the factors increasing or decreasing the incidence of medical harm.

One of the goals would be to focus on areas of significant concern, not covered by research and the relevant intervention.

**Methodology:** A search of PubMed will assist exploration of this area as reflected in the published medical literature based on the use of the following keywords: patient safety, rural health or medicine, remote regions, adverse events, errors, hospitals, clinics, primary and secondary care, teamwork, handover, disability, minorities, children, women, elderly, telehealth, transition and care and patient safety culture.

**Results:** A quantitative graphic presentation of published papers according to year and topic will be the skeleton, while a summary of significant findings of studies would accompany it. A mapping of areas of concern will follow, and rural health-related to patient safety issues will be covered. A brief description of successful interventions will dominate the final part of the presentation.

**Conclusions:** The presentation will include recommendations for the short- and long-term research and practice of rural medicine.

**Keywords:** Patient safety, medical errors, adverse events and incidents, handover, telehealth, rural health and medicine.

**Oral Communication 4: Abstract 28** "Consultadoria" – a link between Psychiatrists and General Practitioners on a rural setting

["Consultadoria" – a link between Psychiatrists and General Practitioners on a rural setting](#)  
[Nuno Rodrigues et al.](#)

Nuno Rodrigues<sup>1</sup>, Sofia Costa e Silva<sup>2</sup>, Elisabete Frade<sup>1</sup>

<sup>1</sup>*Clínica 6/Cintra – Centro Hospitalar Psiquiátrico de Lisboa, Lisbon, Portugal*

<sup>2</sup>*USF Vasco da Gama – ACES Lisboa Central, Lisbon, Portugal*

corresponding author e-mail: [nunorodrigues@chpl.min-saude.pt](mailto:nunorodrigues@chpl.min-saude.pt)

## **Background**

Nowadays, in many clinical situations, interdisciplinary meetings between physicians from different fields of Medicine (as well as other health professionals) are essential to take adequate clinical decisions. The case is no different in rural areas. However, the scarcity of medical specialties in these areas often puts general practitioners (GP's) under pressure.

## **Aim of the study**

With the present work and through a practical example, the authors intend to demonstrate the usefulness of interdisciplinary meetings between family doctors and a mental health team in a rural setting in Portugal.

## **Methodology**

Description of the interdisciplinary meetings ("Consultadoria") which take place between GP's and the Mental Health Team in Sintra, Portugal, a rural area.

## Results

The municipality of Sintra (Lisbon, Portugal) has a vast rural area and is located about 30 kilometers from the Portuguese capital. Despite looking close, much of this area is located more than an hour drive from the city of Lisbon, and about 2 to 4 hours in public transport. In this context, the population of many areas of this county have characteristics similar to a typically rural population. And, despite being integrated into the National Health Service, the distance and the poor supply of public transport hinder the population's access to health care. As such, in these areas, the family doctor plays an even more prominent role. More than 20 years ago, the Mental Health Team of Hospital Miguel Bombarda (a former psychiatric hospital in Lisbon) started attending a monthly meeting with the local Health team. Both teams were (and still are) formed by doctors, psychologists and nurses. They called these meetings "Consultadoria" (perhaps better translated as "Consultancy"), Today, these meetings still take place and their purposes are to discuss clinical cases, manage difficult cases that need intervention of both sides, clarify doubts, take conjunction decisions concerning patients, among others.

## Conclusions

This meeting has proved to be a success, facilitating the work of both parties. All purposes have been achieved in recent years. Furthermore, it should be added that the success of this monthly meeting has contributed to the emergence of a familiar atmosphere with the creation of various links of communication (some informal), which contributes to a better relationship between professionals and consequently better care of patients.

## Key words

Interdisciplinary meetings, Psychiatry, Cooperation

**Oral Communication 5: Abstract 32** Long COVID: how to deal with this new syndrome?

[Long COVID: how to deal with this new syndrome? Pier Mario Perrone et al.](#)

*P.M. Perrone<sup>1</sup>, S. De Matteis<sup>2</sup>, C. Colosio<sup>3</sup>*

*1 Department of Biomedical Sciences for Health, University of Milan, Milan, Italy*

*2 Department of Medical Sciences and Public Health, University of Cagliari, Cagliari, Italy*

*3 Department of Health Sciences of the University of Milano and Occupational Health Unit, International Centre for Rural Health of the Santi Paolo e Carlo Hospital, Milan, Italy.*

**corresponding author e-mail: [piermario.perrone@unimi.it](mailto:piermario.perrone@unimi.it)**

## Background

Since 2019 a new respiratory virus, Sars-CoV-2, causing a clinical syndrome called COVID-19, has spread around the world causing hundreds of millions of infections and over four million deaths. COVID-19 clinically presents like influenza, with mainly respiratory and gastrointestinal symptoms, in addition to systemic symptoms like fever and muscular aches.

It is reported that some patients experience symptoms for months, including symptoms related to the nervous, respiratory and circulatory systems. This condition, which can in some cases be associated with a persistent positive SARS-CoV-2 PCR test, is called secondary COVID-19 or long-COVID. Long-COVID is not characterised by a specific pattern of symptoms. Most patients experience chronic fatigue and some impairment of the nervous, respiratory and circulatory system. Long Covid can affect the ability to work and impacts on people's social lives. The gold standard for confirming Sars-CoV-2 infection is a PCR test, but this test can in some cases be negative. The diagnosis of Long-COVID is mainly clinical with the symptoms being present for at least 12 weeks. The risk of developing Long-COVID is often associated with the severity of the initial disease, but there are exceptions. Furthermore, most of the studies on long-COVID-19 were based on hospitalised or intubated COVID-19 patients, only a minority of studies have focused on a-/pauci-symptomatic COVID-19 cases.

According to the WHO recommendations on the management of long-COVID syndrome and to effectively deal with the non-characteristic clinical presentation of long-COVID, a multidisciplinary approach is suggested,

involving specialists of different disciplines. Patients with long-COVID are only seldomly hospitalised, therefore it is the primary healthcare/community care team that is mainly involved in the care of these patients.

### **Aim of the study**

This study reports on the contribution of an Occupational Health Department in a large Tertiary Hospital in Milan, Italy, in the setting up and implementing of a care pathway for a cohort of health care workers who developed Long-COVID, based on the clinical presentation of this syndrome. It is proposed that the findings could be used to inform primary care networks to develop and implement care pathways for patients with Long-COVID in primary care with an emphasis on the incorporation of Occupational Health assessment and interventions to improve patients' outcomes.

### **Methodology**

Within our Occupational Health (OH) Department we found that among the over 900 Health Care Workers (HCW) who were infected by Sars-Cov-2 5.6% suffered long-COVID. In most cases symptoms did not fully affect their ability to work, but in some cases the symptoms persisted and affected their ability to work for up to 6 months.

As per recommendation a tiered approach was followed which included initial blood investigations, chest imaging and a cardiological assessment performed with the 6-minute walking test (6MWT). Based on the clinical presentation a functional lung assessment was carried out. Second-Tier (ST) investigations were performed, which could include a Computed Tomography, Electromyography (EMG) among others, again based on the clinical assessment.

### **Results**

As the proportion of long-COVID in the health care workers identified by our tiered assessment approach was so high a special Outpatient Unit was opened to deal with this cohort. It was developed in collaboration with other specialists of our Hospital, in particular pulmonologists, cardiologists and neurologists. Due to the frequent important psychological impact of Covid 19 infection, the hospital psychologists were also included in the care pathway.

### **Conclusions**

Long-COVID can be a disabling syndrome seldomly requiring hospitalisation. The primary health care system is best placed to deal with patients with long-COVID. Our experiences within a Tertiary centre dealing with a large cohort of Healthcare Workers with Lon-Covid syndrome shows how a multidisciplinary and holistic care pathway can be developed.

### **Key words**

Long COVID, Occupational medicine, General Practitioner

**Oral Communication 6: Abstract 13** Education as a predictor factor for COVID-19 knowledge in a mainland district of Portugal

[Long COVID: how to deal with this new syndrome? Pier Mario Perrone et al.](#)

Joana Gomes da Silva<sup>1</sup>, Carla Silva<sup>2</sup>, Bárbara Alexandre<sup>3</sup>, Pedro Morgado<sup>4,5</sup>

<sup>1</sup> *Unidade de Cuidados de Saúde Personalizados Mirandela II, Unidade Local de Saúde do Nordeste, Mirandela, Portugal*

<sup>2</sup> *Alumni Mathematics' Department of University of Minho, University of Minho, Braga, Portugal*

<sup>3</sup> *Unidade de Cuidados de Saúde Personalizados Mirandela II, Unidade Local de Saúde do Nordeste, Mirandela, Portugal*

<sup>4</sup> *Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal*

<sup>5</sup> *ICVS/3B's, PT Government Associate Laboratory, Braga/Guimarães, Portugal.*

corresponding author e-mail: [joana.g.silva@ulsne.min-saude.pt](mailto:joana.g.silva@ulsne.min-saude.pt)

## Background

In March 2020, the World Health Organization (WHO) declared a state of pandemic due to COVID-19. For several months, there wasn't any specific medication and/or vaccine to this major problem, which revealed the major importance of the compliance with the preventive measures and with Health Literacy ("Health Literacy implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions. Thus, Health Literacy means more than being able to read pamphlets and make appointments. By improving people's access to health information, and their capacity to use it effectively, Health Literacy is critical to empowerment." - Health Promotion Glossary). Therefore, Health Literacy is associated with community empowerment and this adoption of preventive measures. In mainland regions, there are several problems regarding communication with the population, mostly because of isolation and difficulty in accessing information.

## Aim of the study

This work aims to understand possible predictors of COVID-19's HL - functional domain - regarding variables "age", "gender", "education", "risk factor for COVID-19" and its importance for the population of a mainland county.

## Methodology

We designed a questionnaire "COVID-19's Questionnaire" in Portuguese, by consensus of the authors, and it was applied using the online platform. Data collection (epidemiological data - age, gender, education level and risk factor (s) for COVID-19 codified by International Classification of Primary Care - version 2 -; and answers to COVID-19's Questionnaire) occurred between April 23 to June 23, 2020. Before answering the questionnaire, individuals gave their free and informed consent. We've constructed an Index of Health Knowledge of COVID-19 Questionnaire (IHK-COV19) as a continuous variable summing the points accordingly with the answers given - correct answer: 2 points, unknown concept (e.g. "I don't know"): 1 point; incorrect answer/misconception: 0 points. For questions with an open answer, a system of "stated" vs. "unstated" was adopted.

We performed a multivariate analysis to understand if a variable was considered a predictor or not. The level of significance was set at p-value <0.05.

## Results

We obtained a sample of 864, with a median age of 44.33 years old; 71.53% female and 28.47% male. >50% were graduates and 30.79% presented at least one risk factor for COVID-19.

Our sample presented an adequate level of IHK-COV19 and an association between IHK-COV19 and variables "Education", "Age" and "Risk Factor for COVID-19", with variable "Education" having a stronger association. The Graduate Group presented an increase of 8.23 in the IHK-COV19 when compared with the Undergraduate Group.

## Conclusions

The functional domain of Health Literacy regarding COVID-19 is associated with the level of education, which can have a strong impact in mainland regions, due to inequality of access and opportunities to education especially in older individuals. Health Literacy campaigns and programmes should take into consideration the different variables, mainly the education level of individuals.

This work was previously submitted and accepted for publication in *Frontiers in Public Health*.

## Key words

Health Literacy, COVID-19, mainland, primary care, education

**Oral Communication 7: Abstract 30** COVID-19 - What have we learned so far?

[Long COVID: how to deal with this new syndrome? Pier Mario Perrone et al.](#)

Oleg V. Kravtchenko<sup>1</sup>

<sup>1</sup>GP, EURIPA Vice-President, Dr. Odinaka's Clinic, Bodoe, Nordland, Norway



**corresponding author e-mail: [ovkdoc@yahoo.no](mailto:ovkdoc@yahoo.no)**

### **Background**

The current situation in the world after more than 1.5 years of the COVID-19 pandemic requires constant updating of the strategy and tactics needed to survive and prevail for mankind, emerging from the ordeal in better shape than we were before it.

### **Aim of the study**

To provide a concise overview of what we have learned of COVID-19 until now and what could be the most convenient strategy in putting the pandemic under control.

### **Methodology**

The author is going to describe and discuss different strategies of diagnostics, treatment and prevention of the COVID-19 in different countries/regions of the world, especially in rural locations, where the pandemic could be even more challenging than in urban areas.

### **Results**

An updated literature review on the subject and preliminary results of certain observations during the pandemic, made by peers, the author and his colleagues.

### **Conclusions**

The participants could have an update on the current situation in the COVID-19 pandemic. GP/Rural Practice could benefit from the common strategy and tactics in fighting the pandemic. EURIPA could become a front runner and unifying force for all the rural European GPs facing the numerous challenges of COVID-19.

### **Key words**

COVID-19, epidemiology, treatment, prevention

**Oral Communication 8: Abstract 34** Comprehensive Primary Health Care in a rural context of Italy

[Comprehensive Primary Health Care in a rural context of Italy](#) [Andrea Posocco et al.](#)

Andrea Posocco<sup>1</sup>, Cinzia Chiaradia<sup>2</sup>

<sup>1</sup>GP in AULSS (Azienda Unità Locale Socio Sanitaria 2) Treviso, Italy

<sup>2</sup>nurse in AULSS 2 Treviso, University of Verona, Italy

**corresponding author e mail:** [posoccoandrea@gmail.com](mailto:posoccoandrea@gmail.com)

### **Background**

The demographic, social and epidemiological changes present challenging problems to all Western world health systems especially in rural areas. In the small hilly town of Tarzo (Treviso, Italy) the average age is high and many elderly people present common problems: solitude, low education, poverty and often a past history of emigration. Many patients suffer from more than one chronic condition.

### **Aim of the study**

In this context we have tried to introduce a comprehensive primary health care approach that focuses on patients' needs and includes their family and their social relationships. This approach requires the involvement of the community and of a multi-professional team.

## Methodology

The first step is to identify the health needs of our population. This is achieved in different ways: analysing the demographic distribution of patients with specific problems throughout the territory; studying the family and social relationship through genograms and ecomaps; using the active role of the community through meetings with local associations and neighbourhood representatives. We developed a multi-professional micro-team which includes a general practitioner, a secretary and a nurse; this team is in close contact with the municipal administration, social services and other community actors.

## Results

Preliminary results show that this approach has improved several outcomes: outcomes of chronic diseases, in particular diabetes (utilizing advice on the lifestyle performed by nurses and teleconsultations with specialists), and vaccination rate. Social problems and barriers to care equity appear to be properly addressed: free transport service, home visits by volunteers, a psychological support front office, preventive medicine. In the next phase we will evaluate patients and health/social workers satisfaction.

## Conclusions

A comprehensive primary health care approach with GPs' teamwork and an enlarged network can help identify people's needs and improve social and health outcomes, especially in a disadvantaged rural environment.

## Key words

Comprehensive primary health care, Health needs mapping, Multi-professional team, Proactive medicine

**Oral Communication 9: Abstract 36:** Pulmonary ultrasound in Post covid-patients with persistent dyspnoea in Primary Care

[\*Pulmonary ultrasound in Post covid-patients with persistent dyspnoea in Primary Care\*](#) **Raisa Álvarez Paniagua et al.**

Raisa Álvarez Paniagua<sup>1</sup>, Ángela María Arévalo Pardal<sup>2</sup>, María Jaime Azuara<sup>3</sup>, Ana Ramos Rodríguez<sup>2</sup>, Irene Pérez Arévalo<sup>4</sup>.

1. CS. Nava de la Asunción, Segovia, Spain

2. Hospital Universitario Río Hortega, Valladolid, Spain

3. CS. Cuellar, Segovia, Spain

4. Hospital Comarcal Benavente, Zamora, Spain

corresponding author e-mail: [raisa.alvarez90@gmail.com](mailto:raisa.alvarez90@gmail.com)

## Background

Ultrasound is a harmless, non-radiating, dynamic and easily reproducible technique. It allows obtaining images at the patient's bedside, home or ambulance quickly, giving us clinical information about the patient's condition in real time. Many patients with COVID-19 stay at home, which makes it difficult to know the exact extent of their disease. The use of pulmonary ultrasound in COVID patients is of great help to know the extent and severity over time.

## Aim of the study

This small study tries to find out the most frequent pulmonary lesions in COVID-19 patients with dyspnea after a negative PCR.

## Methodology

-Study design: retrospective analytical.

-Target population: population assigned to a rural area, with a confirmed diagnosis of COVID-19 with mild-moderate effort dyspnea after a negative PCR.

- Selection of subjects: consecutive sampling on the base population, with acceptance of the inclusion of the study patients through verbal informed consent.

-Variables: gender; age; time since diagnosis; ultrasound images founded; Basal oxygen saturation; Heart rate; Respiratory rate; Ultrasound duration

## Results

Between November 2020 and February 2021, pulmonary ultrasound was performed on 17 patients (quota of 1489 patients), of which 11 were men, 6 women; mean age: 48.24 years; mean days from the onset of symptoms:32.47; no evidence of tachycardia or tachypnoea, mean oxygen saturation: 97%. Average scan duration: 18.6 minutes. Findings: 2 ultrasounds without lesions; 4 with images of patchy hypogenic and hyperechoic areas; 5 with images of lines A and lines B; 6 with lines A

## Conclusions

Dyspnea is a relatively common persistent symptom in COVID patients.

Performing lung ultrasounds allows us to detect pulmonary involvement due to the disease, being able to start treatment and to control the evolution if necessary.

This study concludes that performing pulmonary ultrasound in post-COVID patients could be useful in the follow-up of those who do not clinically evolve as expected.

## Key words

Pulmonary Ultrasound; COVID, Dyspnea

**Oral Communication 10: Abstract 37** Study on the degree of control of Type 2 Diabetes Mellitus after confinement by COVID-19 in a rural quota

[Study on the degree of control of Type 2 Diabetes Mellitus after confinement by COVID-19 in a rural quota](#) **Raisa Álvarez Paniagua et al.**

*Raisa Álvarez Paniagua<sup>1</sup>, Ángela María Arévalo Pardo<sup>2</sup>, María Jaime Azuara<sup>3</sup>, Ana Ramos Rodríguez<sup>2</sup>, Irene Pérez Arévalo<sup>4</sup>, Celia Blanco Fraile<sup>2</sup>.*

*1. CS. Nava de la Asunción, Segovia, Spain*

*2. Hospital Universitario Río Hortega, Valladolid, Spain*

*3. CS. Cuellar, Segovia, Spain*

*4. Hospital Comarcal Benavente, Zamora, Spain*

**corresponding author e-mail: raisa.alvarez90 @gmail.com**

## Background

Diabetes Mellitus Type 2 (DM2) is one of the most frequent pathologies in Primary Care, and one of the most important cardiovascular risk factors. Control of these diseases provides patients with great benefit, without requiring sophisticated materials that are often absent in rural areas.

## Aim of the study

To know the degree of control of patients with DM2 in a Rural Primary Care Consultation after confinement for COVID-19 and the most used treatments.

## Methodology

\* Design: Retrospective observational study.

\* Scope: Primary Care, rural area: Consultorio Aldemayor de San Martín.

\* Population: subjects of a quota with DM2.

\* Study variables: age, sex, pre and post-pandemic HbA1c figures, associated cardiovascular risk factors (obesity, smoking, cholesterol, arterial hypertension, chronic renal failure), treatment received.

## Results

\*DM2 Prevalence:6.3%.

\*Males:54.25%, Females:45.75%; Average age:69.78; Smokers:27.66%; BMI: normal:8.5%; overweight:39.36%; obesity:50%.

\*Associated diseases: HT:78.72%; Cholesterolemia:72.34%; CRI: G1:28.72%; G2:46.80%; G3A:13.83%; G3B:4.3%; G4:3.19%. Other associated pathologies (cancer, rheumatological diseases, autoimmune, etc):34.04%.

\*Patients with worsening HbA1c during the onset of the pandemic > 0.5:31.91%. With improvement > 0.5:7.45%. With similar figures:35.53%

\*Treatments: Diet:6.4%; Metformin:80.85%; Sulfonylureas:7.45%; Glicazide:4.26%; iDPP4:36.17%; SGLT2:26.6%; GLP1:14.89%; Basal-insulin:2.25%; Fast-insulin:6.38%; Mixed-insulin:1%.

\*Use of drugs: 1Drug family:30.85%; 2Drug families:36.17%; 3Drug families:4.45%; 4 Drug families:9.57%; 5 Drug families:1.06%

\*Drugs Combinations: Metformin+Sulfonylureas:2.13%; IDPP4+Insulin:1.06%; Metformin+ DDP4:14.89%; Metformin+SGLT2:11.7%; Metformin+GLP1:2.13%; IDPP4+SGLT2:1.06%; Sulfonylureas+IDPP4:1.06%; Metformin+Sulfonylureas+ IDPP4:3.19%; Metformin+IDPP4+GLP1:2.13%; Metformin+ IDPP4+Mixed Insulin:1.06%; Metformin+IDPP4+ SGLT2:1.06%;SGLT2+GLP1+Insulin:1.06%; Metformin+Sulfonylureas+IDPP4+SGLT2:2.13%; Metformin+Glycazide+SGLT2+Insulin+GLP1:1.06%; Metformin+IDPP4+SGLT2 +GLP1:3.19%; Metformin+SGLT2+GLP1+Insulin:2.13%; Metformin+Glycazide+IDPP4+GLP1:1.06%; Metformin+IDPP4+GLP1+Insulin:1.06%

## Conclusions

According to [Di@bet.es](#) study (redGDPs), the DM2 prevalence in Spain is 13.8%, which would indicate that it is underdiagnosed in the studied quota. It is more frequent in males.

There is a huge variety of drug combinations, which follows the Spanish guides' recommendations of individualizing the treatments in order to achieve the best HbA1c control.

This type of analysis is very useful in Primary Care in order to improve the glycemic control of our diabetic patients as well as prevent future complications.

## Key words

Diabetes Mellitus; Treatments; Combined Modality Therapy

**Oral Communication 11: Abstract 40:** Successful treatment of Hidradenitis Suppurativa – Case Report

[Successful treatment of Hidradenitis Suppurativa – Case Report Silvia Almeida et al](#)

*Silvia Almeida, Maria do Carmo Gonçalves, Hugo Medeiros, Tiago Marabujo  
Community Health Center of Marinha Grande, Portugal*

corresponding author e-mail: [sigaalmeida29@gmail.com](mailto:sigaalmeida29@gmail.com)

## Background

Hidradenitis suppurativa is a chronic inflammatory disease with great physical and psychological impact characterized by chronic deep-seated nodules, abscesses, fistulae, sinus tracts, and scars in the axilla, inguinal area, mammary folds, and perianal area. This disfiguring condition is accompanied by pain, embarrassment, and a significantly decreased quality of life. The diagnosis is clinical and most of these are late - the average period of diagnosis is seven years.

## Aim of the case report

Draw attention to this rare disease so that it is more quickly identified and treated by family doctors.

## Case Report

Although conservative treatments may be effective in mild forms of the disease, extensive surgical resection and reconstruction are necessary in more severe forms of the disease. We present the case of a 32 years old female sent by the attending physician for Hurley type III bilateral inguinal hidradenitis, extending to the vulvar introitus (major labia) and gluteal folds to plastic surgery. She has had a year of continuous medical therapy in dermatology (clindamycin + minocycline), without clinical response. She refused immunosuppression. She

underwent bloc excision of hidradenitis lesions and reconstruction with advancement flaps from the inner surface of the thighs. The cosmetic outcome is acceptable and mobility wasn't compromised.

### **Conclusions**

The timely diagnosis of hidradenitis suppurativa is essential and family physicians have a privileged position for the initial approach and timely referral.

### **Key words**

Hidradenitis suppurativa, skin graft, plastic surgery.

**Oral Communication 12: Abstract 41** With eyes set on the rheumatic fever

*With eyes set on the rheumatic fever* **Sílvia Almeida et al.**

*Sílvia Almeida<sup>1</sup>, Ricardo de Albuquerque<sup>2</sup>, Francisco Soares<sup>3</sup>, Mariana Carvalho<sup>3</sup>, Maria do Carmo Gonçalves<sup>1</sup>, Tiago Marabujo<sup>1</sup>*

<sup>1</sup> *Community Health Center of Marinha Grande, Portugal*

<sup>2</sup> *Community Health Center of Caldas da Rainha, Portugal*

<sup>3</sup> *Cardiology Service of Leiria Hospital Center, Portugal*

**corresponding author e-mail:** [sigalmeida29@gmail.com](mailto:sigalmeida29@gmail.com)

### **Background**

Although uncommon, cases of rheumatic fever do exist in Europe and should not be a disease considered extinct in developed countries.

### **Aim of the case report**

Our rare case intends to draw attention to this much-forgotten disease.

### **Case Report**

We present a case of a 23 year old woman who went to her ophthalmologist for a routine checkup. She had no relevant medical history except recurring tonsillitis. She was diagnosed with retinal edema and was advised to undergo a full medical checkup with her family physician (FP). The FP requested an echocardiogram which revealed severe rheumatic mitral stenosis, NYHA Class II-III with orthopnea and dyspnea on exertion. She underwent balloon valvuloplasty with symptomatic (NYHA class I) and echocardiography success. Status after rheumatic mitral valvuloplasty: mild stenosis plus mild regurgitation.

### **Conclusions**

Our case report creates an awareness to the importance of antistreptococcal prophylaxis and to emphasize the need of earlier diagnosis, thus avoiding many of the latter stages of the disease. The Family Doctor should not forget to diagnose rheumatic fever in young patients in Europe, avoiding the cardiac complications.

### **Key words**

Rheumatic heart disease. Rheumatic fever. Mitral stenosis. Percutaneous mitral balloon valvuloplasty

Anette Fosse<sup>1</sup>, Birgit Abelsen<sup>1</sup>, Margrete Gaski<sup>1</sup>, Hilde Grimstad<sup>2</sup>

<sup>1</sup>National Center for Rural Medicine at ISM, UiT – The Arctic University of Norway, 9037 Tromsø, Norway

<sup>2</sup>Faculty of Medicine and Health Sciences, Department of Public Health and Nursing, Box 8905, N-7491 Trondheim, Norway

**Corresponding author e-mail: [anette.fosse@uit.no](mailto:anette.fosse@uit.no)**

## **Background**

Recruiting doctors to rural areas is challenging. Various educational measures to provide rural doctors have been developed in many countries, for example establishing medical schools in rural areas (“whole school”), sending students to practise in rural settings or recruiting students from rural and remote areas.

## **Aim of the study**

The aim of this study was to gather knowledge about which measures in undergraduate medical education of doctors have shown to contribute to recruiting doctors to rural practice.

## **Methodology**

Systematic search in the databases Cinahl, Eric, Medline and PsycInfo with the keywords rural, remote, workforce, physicians, recruitment and retention. We included articles that met the following criteria: educational measure(s) were clearly described, the study population had graduated from undergraduate education in medicine, outcome measures included workplace (rural/ non-rural) after completing undergraduate medical education.

## **Results**

The analysis included 67 articles about educational measures in Australia, USA, Canada, Norway, Thailand, New Zealand, the Philippines, Japan, Congo and Brazil. The educational measures were of five main types and often occurred in combinations: preferential admission from rural areas, curriculum with rural-relevant learning objectives, regionalised education, learning by practising in rural settings and contractual obligation to work in rural areas after graduation. Most studies showed a positive correlation between educational measures and doctors' workplaces in rural areas.

## **Conclusions**

It may be a possibility for the recruitment of doctors to rural areas to increase the focus in medical education towards the development of knowledge, skills and teaching arenas that make doctors competent to work in rural settings.

## **Key words**

Undergraduate medical education, rural and remote, recruitment, systematic review

**Oral Communication 14: Abstract 7** The experiences of general practitioners in Romania with Covid 19 vaccination

[The experiences of general practitioners in Romania with Covid 19 vaccination](#) **Cristina Vasilica Barbu et al**

CRISTINA VASILICA BARBU(1), GINDROVEL GHEORGHE DUMITRA( 2)

1. General Practitioner, Member Immunization Working Group Romanian National Society of Family Medicine
2. , General Practitioner, President Immunization Working Group , Vice President Romanian National Society of Family Medicine

corresponding author e-mail: [cris\\_barbu@hotmail.com](mailto:cris_barbu@hotmail.com)

## **Background**

COVID 19 Vaccination is a public health measure. The primary benefit of vaccination is protection against illness from COVID-19, and in particular protection against severe illness and death. Population-level immunity to the virus increases over time following widespread uptake of vaccination.

## **Aim of the study**

Romanian General Practitioners (GPs), who have already made a very significant positive contribution to efforts to manage this public health crisis since the outbreak of COVID-19 in the spring of 2020, are playing a key role in the delivery of the vaccination programme in accordance with the agreed national vaccination schedule.

The aim is to show how Romanian GPs organised themselves to react to the challenge of delivering the COVID 19 vaccination programme.

## **Methodology**

Outline of what GPs in few vaccination centers done with regards the delivery of the CV19-vaccination programme.

## **Results**

The Romanian GPs were involved in the COVID 19 vaccination programme from the very beginning -from January 2021. The vaccination programme was delivered in various types of centers: fixed, mobile and drive through. From May 2021 onwards the GPs began to give COVID 19 vaccinations, including JANSSEN/JOHNSON&JOHNSON and then COMIRNATY-PFIZER from their own practices.

## **Conclusions**

Delivering the Covid19 vaccination programme by General practitioners and their teams is most likely the most efficient way especially in rural areas. People prefer to get the vaccine close to home and after consulting a doctor with whom they have a trusted relationship.

**Key words:** Romania, General Practitioner, Covid 19, Vaccination

[Being a Family Physician on an Island](#) **Genco Gorgu et al.**

Dr Genco Gorgu <sup>1</sup>, Dr Ozden Gokdemir<sup>2</sup>

<sup>1</sup>Marmara District State Hospital Family Medicine Clinic, Balıkesir, Turkey, VdGM Mental Health SIG

<sup>2</sup>Izmir University of Economics, Faculty of Medicine, Turkey, VdGM Mental Health SIG, International Advisory Board member at EURIPA

**Corresponding author email:** [gokdemirozden@gmail.com](mailto:gokdemirozden@gmail.com)

**Background:**

Family physicians are at the forefront of the global health crisis caused by the COVID-19 pandemic. In particular, they play a key role with their holistic perspective and problem-solving skills as expert generalists. When it comes to rural areas and especially an isolated island, much more than the role played by the city awaits family physicians.

**Aim of the case report:**

The purpose of this case report is to summarize the struggle of family physicians as community health pioneers in limited opportunities and challenging conditions, through an experience in isolated archipelagos during the pandemic period.

**Case report:**

Marmara Island, as the administrative center of an archipelago consisting of 4 islands, is the center of the health service organization in the group of islands. After the start of the COVID-19 epidemic, health services were restructured under the leadership of family physicians.

The first event in which the effects of geographical barriers were felt occurred during the filiation studies of patients living in the archipelago. In order to overcome this problem, the patients were reached by phone and the on-duty teams of nurses and physicians were provided to reach the islands via small boats. Not only the ministry of health; boats belonging to the army and the ministry of interior are also included in the process through public diplomacy. The patient, who was found to be PCR positive, was reached within a maximum of 3 hours.

In the later stages of the epidemic, the new goal of family physicians was to reach vaccination targets. Family physicians formed a network and identified elderly and seriously ill individuals who could not leave their homes through electronic medical records and vaccinated them together with mobile vaccination teams. Logistics plans were made in order to ensure the cold chain in the island group without land connection, and a stock management was carried out taking into account the weather and sea conditions. Family physicians took part in the training of all personnel who do not have experience in vaccination, cold chain and stock management.

With the removal of restrictions in the summer season, the islands have been flooded with tourists. Due to the loss of physicians assigned to the central units fighting the epidemic; family physicians this time played a role in emergency health services. They started to work in the emergency room during off-hours shifts. In a wide maritime geography, after the first intervention; they are trying to ensure that the right patient is selected and transferred to the upper center by fast sea vehicles.

A few family physicians in the Island with an elderly local population are preparing to follow up the chronic diseases of their target populations completely, within the framework of the national disease management platform in the country, when the burden of emergency health services decreases after the summer period, of course, again by overcoming geographical barriers.

**Conclusion:**

Family physicians will continue to be key partners in solving local and global health problems with their lifelong professional learning skills and interdisciplinary working ideas, regardless of time, place and type of task.

Keywords: COVID-19, island, primary care



[COVID-19 and remote and rural islands](#) [Louise Wilson](#)

*Dr Louise Wilson*

*Department of Public Health, NHS Orkney, Kirkwall, Scotland*

**corresponding author e-mail: [louise.wilson2@nhs.scot](mailto:louise.wilson2@nhs.scot)**

### **Background**

Staff working in remote and rural island populations face specific challenges with the delivery of public health coronavirus services as well as primary care services.

### **Aim of the study**

Our aim was to link NHS Orkney with a range of English speaking island communities to share learning in the management of the pandemic and provide practitioner support. Orkney is an archipelago of 70 islands of which around 20 are inhabited, with a total population of 22,400. Remote island issues are not always readily recognised when working with mainland Scottish health boards, and practitioners can feel isolated.

### **Methodology**

Public health departments in the north of Scotland have an established network, and additional public health staff working in island settings were invited to join meetings. The benefits for NHS Orkney were then considered.

### **Results**

A number of benefits were identified for staff in Orkney of the group interaction. It was felt helpful to be able to discuss island issues, and have peer support. Local concerns around port health could be shared as some complex outbreaks had occurred on vessels. The issue of travel to the islands was a key concern for the local population. Promotion of testing using lateral flow devices prior to coming to the islands was felt to support safer travel. Health boards had to work with local authorities when visitors were unable to return to the mainland due to isolation requirements. Confidentiality can be difficult to preserve in island settings, but is vital to ensure people come forward when symptomatic for COVID-19 testing. Initial local social media responses to factual reporting of cases would sometimes blame particular groups of people travelling for the importation of COVID-19. Close working with Orkney primary care practices on the more remote islands of the archipelago was required to enable COVID-19 vaccinations to be delivered.

### **Conclusions**

Practitioner isolation in Orkney was reduced through being able to share experiences with other practitioners in a similar setting. The delivery of key COVID-19 programmes such as vaccination strengthened working practices across islands within Orkney. It will be important to build on these relationships as the pandemic progresses, and also share learning in addressing issues of renewal post-pandemic.

### **Key words**

COVID-19, rural health, islands, public health

*Rural patients' awareness of myocardial infarction's risk factors* *Michał Korman et al.*

*Michał Korman*<sup>1, †</sup>, *Dominik Felkle*<sup>1, †</sup>, *Tomasz Korman*<sup>2</sup>

<sup>1</sup>*Students' Scientific Group at the Second Department of Cardiology, Jagiellonian University Medical College, Cracow, Poland*

<sup>2</sup>*Family Medicine Practice, Łapanów, Poland*

<sup>†</sup>*These authors contributed equally and are shared first authors.*

**corresponding author e-mail:** [michal.korman@student.uj.edu.pl](mailto:michal.korman@student.uj.edu.pl)

## **Background**

Mortality from myocardial infarction (MI) may be reduced by better control of risk factors. This can be achieved by improving patient's awareness of MI risk factors prompting them to consciously change their lifestyle.

## **Aim of the study**

The aim of the study was to investigate rural patients' awareness of MI risk factors.

## **Methodology**

An anonymous and voluntary survey was conducted among 194 patients and their caregivers with median age 68 years at a rural healthcare facility in Poland. The response rate was 91%.

## **Results**

Only 26.3% were able to recognise all suggested MI risk factors. Most respondents (90.2%) indicated smoking as a risk factor, followed by overweight and obesity (89.6%), hypertension (85.0%), lack of physical activity (83.4%), and history of heart disease (80.3%). Diabetes, history of MI in family and hypercholesterolemia were the least recognised risk factors (67.4%, 54.9% and 52.8% respectively). 44.8% did not know whether they are at risk of MI. Furthermore, 78% of respondents who had at least three MI risk factors were unaware of being at risk. Better risk factor awareness was associated with the declaration of being at risk of MI (yes: median=8/9, interquartile range: [7.75, 9.00], no: 8/9 [5.25, 8.00], I do not know: 7/9 [5.00, 8.00],  $p < 0.001$ ). Yet, exposure to specific risk factors did not increase patients' awareness.

## **Conclusions**

An alarmingly high proportion of rural adults are not aware of being at risk of MI despite having numerous risk factors. To improve MI prevention doctors who diagnose and treat conditions affecting CVD risk should actively inform the patients in the cardiovascular risk group and of associated consequences.

## **Key words**

myocardial infarction, heart disease risk factors, patient participation, rural population

## Posters

[Abstract 3P: Expenditures on health care in rural municipalities' budgets](#)

[Abstract 8P: Identification of Existing Barriers and Facilitators in the Field of Personalised Medicine Across Europe.](#)

[Abstract 9P: D vitamin level and the risk of developing arterial hypertension.](#)

[Abstract 15P: Rural GPs core values, changes post pandemic](#)

[Abstract 18P: Observational study “SOLIS”: Arterial Hypertensive patients' evaluation assessing therapy, risks, compliance.](#)

[Abstract 22P: The importance of medical staff competencies in patient care in rural areas](#)

[Abstract 23P: Can medical staff competencies influence the efficiency of patient care?](#)

[Abstract 24P: Rural areas patient care efficiency in PHC– original indices concept](#)

[Abstract 26P: Rural patients' awareness of myocardial infarction's management in the COVID-19 era](#)

[Abstract 31P: The General Practitioner and the anthroozoonosis encountered in Europe](#)

[Abstract 33P: An unusual long-COVID-19 case?](#)

[Abstract 35P: Study on the degree of control of arterial hypertension in diabetic patients after confinement by COVID-19 in a rural group](#)

[Abstract 38P: Growing our Greenspace-Polytunnels and Plots](#)

[Abstract 39P: Intermittent fasting may decrease the risk of cardiovascular disease?](#)

[Abstract 43P: Clinical Significance of the Maxillary Frenulum](#)

[Abstract 45P: Medicine in a village in the interior of Portugal](#)

[Abstract 46P: Proximity Medicine: The Portuguese example](#)

[Abstract 47P: The telephone load in primary care practices during a pandemic](#)

[Abstract 48P: Adjustment of primary care during the first phase of the COVID-19 pandemic](#)

[Abstract 49P: The scope of services provided in the setting of pharmaceutical care](#)

[Abstract 50P: The role and importance of the pharmaceutical patient questionnaire](#)

[Abstract 51P: Pharmaceutical care as an important element of a coordinated care process](#)

[Abstract 52P: Independence of vaccination coverage from the DEGURBA classification](#)

[Abstract 53P: Stress and the impact of the Covid19-pandemic on obesity progression](#)

[Abstract 3P: Expenditures on health care in rural municipalities' budgets](#)

Expenditures on health care in rural municipalities' budgets

Anna Owczarczyk<sup>1</sup>

<sup>1</sup>University of Natural Sciences and Humanities in Siedlce, Faculty of Social Sciences, Poland

corresponding author e-mail: [anna.owczarczyk@uph.edu.pl](mailto:anna.owczarczyk@uph.edu.pl)

## Background

The system of financing health care in Poland is based on three main sources: mandatory health contributions, transfers from the state budget and transfers made by local governments.

The level of local government expenditure on healthcare is the lowest among public expenditure in this area. The share of local government units in financing healthcare amounts to 5%-6% and actually has not changed considerably since 2010. Analyses conducted on a nationwide scale show that the largest healthcare expenditure is incurred by powiats (27% of healthcare expenditure incurred by all territorial government units) and powiat cities (30%), then voivodeships (26%). The smallest expenditure is made by municipalities (17%).

## Aim of the study

The aim of the research was to present the money spent on health care in Polish municipalities, especially in rural areas, in 2010 – 2020.

## Methodology

The research covered all municipalities of Poland. The comparison of expenditures on health care was made among rural, urban and rural-urban municipalities.

## Results

Detailed analysis of municipal budgets showed:

- The lowest sums of money on health care were spent by rural municipalities.
- The highest health care expenditure per capita was in urban municipalities, whereas the lowest - in rural governments. It is due to the low sums of money spent on health care, and the high number of citizens living in rural areas.
- The health care expenditures in rural municipalities were lower than 1% of total budget spending and stayed far behind the expenditures on education or the investment in road transport tasks.
- Circa 80% of the expenditures on health care were spent on current issues, such as: salaries, or purchase of materials and services.
- The highest sums of money spent on health care in rural areas are dedicated to counteract alcoholism (about 71%-91% in the analysed period).

## Conclusions

Research shows that spending on health care in Polish municipalities is very low. This fact is important especially in rural municipalities due to: the population density and difficulties in access to healthcare services.

## Key words

health care expenditure, municipalities, local budgets

## Identification of Existing Barriers and Facilitators in the Field of Personalised Medicine Across Europe

*Dorota Stefanicka-Wojtas*<sup>1</sup>, *Marta Duda-Sikula*<sup>2</sup>, *Donata Kurpas*<sup>3</sup>

<sup>1</sup> *Clinical Trial's Department, Wroclaw Medical University, Wroclaw, Poland*

<sup>2</sup> *Clinical Trial's Department, Wroclaw Medical University, Wroclaw, Poland*

<sup>3</sup> *Family Medicine Department, Wroclaw Medical University, Wroclaw, Poland*

**corresponding author e-mail: [dorota.stefanicka-wojtas@umed.wroc.pl](mailto:dorota.stefanicka-wojtas@umed.wroc.pl)**

### **Background**

Personalised medicine (PM) is the adaptation of medical treatment to an individual patient. More importantly, PM offers the potential to detect diseases earlier when it is easier to treat them effectively. There is a considerable number of barriers and factors facilitating the adoption of PM in policy and practice

### **Aim of the study**

The project in progress will focus on potential benefits of PM and barriers to its implementation, which will help to indicate best practice applied in European countries to support the implementation of PM at the micro-, meso- and macro-regional level in the Polish healthcare system

### **Methodology**

The main method is the analysis of the existing literature and national regulations as well as individual opinions of stakeholders on PM solutions from their respective countries. The method of desk based research enabled extraction of information in the form of published material, online databases, available literature and documents. Qualitative research will be carried out and it will involve surveys, individual in-depth interviews and focus group interviews.

### **Results**

The results of the research will provide data for discussing the limitations and benefits of introducing PM in Poland. The results of the study can be used in the daily practice of Polish healthcare system stakeholders by identifying best practice of PM in Europe and then implemented in Poland at the micro-, meso- and macro-regional level.

### **Conclusions**

The study will help in developing recommendations for reducing barriers during implementation of PM; it will also help in disseminating knowledge of research results.

### **Key words**

personalised medicine, regional policies, interregional cooperation

EU grant

Regions4PerMed project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 82 5812

## Abstract 9P: D vitamin level and the risk of developing arterial hypertension.

D vitamin level and the risk of developing arterial hypertension

Anatolijs Pozarskis<sup>1</sup>, Dana Gurenko<sup>2</sup>, Rita Pozarska<sup>3</sup>, Lubova Baranovska<sup>4</sup>

<sup>1</sup> Daugavpils University, Associate Professor, Daugavpils, Latvia

<sup>2</sup> LUC Clinic, Family Physician, Daugavpils, Latvia

<sup>3</sup> Riga Sradins University, 3<sup>th</sup> years student, Riga, Latvia

<sup>4</sup> Family Physician, Family Physician's Practice, Daugavpils, Latvia

corresponding author e-mail: [drpozarskis@inbox.lv](mailto:drpozarskis@inbox.lv)

### **Background**

In recent years, evidence of vitamin D involvement in cardiovascular disease (CVD) pathogenesis has been growing. Thus, there was an interest in studying and identifying the association between 25 (OH) D levels and the risks of arterial hypertension in the family doctor's practice.

### **Aim of the study**

To determine whether Professor's A. Požarsky's family doctor practice patients has an association between 25 (OH) D levels and the risk of developing arterial hypertension.

### **Methodology**

The study included patients from the family practice of A. Požarsky, who gave a laboratory based blood test to assess the level of vitamin D in the blood. Data from the patient's outpatient card was analyzed: gender, age, body mass index (BMI), glomerular filtration rate (GFR), AH history. Data was analysed by using MS Excel and SPSS 20.

### **Results**

268 participants participated in the study. The average patient's age was 54.1 years. 74.6% were women. The average level of vitamin D in the study population is 25 ng/ml. OR in hypertension was not inversely related to increasing vitamin D levels. In multi-factor analyzes, adapting age, gender, BMI and renal filtration covariates, OR also had no statistically significant increase. The relevant hypertension ORs were 1.8 (0.4 - 7.5), 1.1 (0.3 - 4.5), 1.7 (0.4 - 7.2) and 0.7 (0.1 - 4.8) 30 ng / ml to 45 ng / ml, 20 to 29 ng / ml, 10 to 19 ng / ml, and <10 ng / ml compared to the group  $\geq 45$  ng/ml.

### **Conclusions**

There is no association between 25 (OH) D levels and the risk of developing arterial hypertension in our study.

### **Key words**

Arterial hypertension, Vitamin D, Family doctor practice

## Abstract 15P: Rural GPs core values, changes post pandemic

Rural GPs core values, changes post pandemic

Jean-Pierre Jacquet<sup>1</sup>Patrick Ouvrard<sup>2</sup>,

<sup>1</sup> Collège de la Médecine Générale, France /EURIPA

<sup>2</sup> Collège de la Médecine Générale, France /UEMO

corresponding author e-mail: [jpc.jacquet@wanadoo.fr](mailto:jpc.jacquet@wanadoo.fr)

## Background

Has the Covid 19 pandemic changed rural GPs skills, patients relationship's, and stakeholders relationships's? In 2019 before the pandemic, the EURIPA network was asked by WONCA Europe to ask to this question. At this moment in time the answer is that the rural GPs core values have not changed.

## Aim of the study

The aim of the study protocol is to investigate whether rural GPs/FM core values have changed post pandemic? Taken aback by the sudden pandemic, rural GPs have proudly responded to this new situation. Today we are still facing the pandemic, but in the next coming months, we will try to analyse the changes if any have occurred. We propose to ask European rural GPs/FM and stakeholders through a questionnaire, centered on core values (see WONCA tree) if these changes need to be used to modify our core values or not.

## Methodology

A questionnaire will be established by a panel, not only by GPs/FM but all the stakeholders, including patients, and lead by validated consensus method. The population of the study will be potentially rural European GPs/FM and stakeholders invited to fulfill the questionnaire

## Results

The analysis of data provided by the questionnaire will answer to the question: Has there been a change or not in rural GPs/FM core values?

## Conclusions

Will extreme circumstances change core values of GPs/FM, this question could also be asked in the future due to the climate change.

## Key words

Rural core values, change, protocol

[Abstract 18P: Observational study “SOLIS”: Arterial Hypertensive patients’ evaluation assessing therapy, risks, compliance.](#)

Observational study “SOLIS”: Arterial Hypertensive patients’ evaluation assessing therapy, risks, compliance.

*Dr. Ainis Dzalbs<sup>1,2</sup>, Dr. Līga Kozlovska<sup>1,2</sup>, Dr. Maija Kozlovska<sup>1,2</sup>, Dr. Sabine Feldmane<sup>1,2</sup>, Dr. Elīna Kapteine<sup>1,2</sup>*

<sup>1</sup> *Rural Family Doctors Association of Latvia*

<sup>2</sup> *Riga Stradins University*

**corresponding author e-mail:** [liga\\_kozlovska@inbox.lv](mailto:liga_kozlovska@inbox.lv)

## Background

Cardiovascular diseases are taking an estimated 3, 9 million lives each year in the EU, and the prevalence of arterial hypertension [AH] is growing annually. The European Society of Cardiology emphasises that combined therapy is recommended. Thus this study gathers and explores information about effectiveness of AH therapy in a variety of patients.

## Aim of the study

The purpose of the study was to assess patients using the SCORE cardiovascular risk chart, evaluate different combinations of antihypertensive therapy preferably in one pill as opposed to mono-therapy, and evaluate the impact of patient compliance.

## Methodology

The epidemiological study involved 185 family medicine practices, including 2472 patients (1084 male, 1388 female) aged 30 – 97, by a specific questionnaire. Patients were observed for six months. In this period of time three separate visits were held and necessary treatment adjustments were made. After the third visit patients' compliance was evaluated using a scale from 1 to 10. Statistical nonparametric methods were used, suitable for descriptive purposes, such as Kolmogorov-Smirnov, Mann-Whitney U test and ANOVA. The result was considered as significant if significance < 0.05.

## Results

Differences between blood pressure [BP] measurements were noted as significant between three separate visits. Average BP during the first visit was 157, 5825 SBP and 93, 1985 DBP. The average blood pressure during the first visit was 159, 2270 SBP and 90, 7833 DBP, whereas 131, 0967 SBP and 80,4521 DBP in the third visit in all male patients. It was found that systolic BP is significantly impacted by several factors: patient body weight (sig.=0.035), education level (sig.=0.001), duration of AH (sig.=0.006), duration of therapy (sig.=0.021), family history (sig.=0.008), usage of combined therapy (sig.=0.006) and one pill combined therapy (sig.=0.036), lipid levels (sig.=0.041) and patient compliance (sig.=0.000).

## Conclusions

It was concluded that combined antihypertensive therapy is more efficient. Cardiovascular risk factors as well as patient compliance have a significant impact on patient blood pressure.

## Key words

arterial hypertension, family medicine

## [Abstract 22P: The importance of medical staff competencies in patient care in rural areas](#)

### The importance of medical staff competencies in patient care in rural areas

Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Guzek Marika<sup>1</sup>, Szafraniec Sylwia<sup>2</sup>, Sabina Karczmarz<sup>1</sup>, Bogdan Magdalena<sup>3</sup>

1. Medical and Diagnostical Center in Siedlce

2. Department of Pharmacoeconomics, Institute of Mother and Child, Poland

3. Department of Social Medicine and Public Health, Medical University of Warsaw

Corresponding author e-mail: [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)

## Background

Limited financial and infrastructure resources, but above all, lack of staff, and at the same time increasing need and patients' awareness is the leading problem that the health care sector in Poland is facing. The scientific findings show that efficient and effective patient care depends largely on the scope and the level of medical staff competencies.

## Aim of the study

This research investigates the issue of assessing the competences of medical staff. These competences were determined by their scope, systematisation, core, and the role they might play in patient care especially in rural areas.

## Methodology

The research methodology is based on literature analysis and systematic review. The search and analysis were carried out in electronic databases to identify published studies on medical staff competencies and



specific patient care in rural areas. Considering the practical and widely discussed nature of the subject, the Internet search was performed as a supplementary strategy of identifying articles.

## Results

In the research and analysis process concerning the subject of medical staff competencies in rural areas, it was discovered that skills and knowledge are the most vital among other competences. For this research investigation knowledge is depicted by understanding of theories, facts, and procedures connected to a particular professional post or job. And the skills are understood as operational efficiency rooted mostly in soft skills, communication skills and empathy. In rural areas, among willingness and adaptation of the medical staff in the light of underemployment, is proper coordination of the healthcare offered to patients. The analysis also showed that both knowledge and skills are reinforced by qualifications and experience.

## Conclusions

Identification and reinforcement of mentioned competences may have a crucial influence on the quality and effectiveness of patient care, having its roots in adequate medical staff management at the medical facilities located in rural areas.

**Key words:** *medical staff, competencies, patient care, rural areas*

### [Abstract 23P: Can medical staff competencies influence the efficiency of patient care?](#)

## Can medical staff competencies influence the efficiency of patient care?

*Bogdan Magdalena<sup>1</sup>, Prusaczyk Artur<sup>2</sup>, Żuk Paweł<sup>2</sup>, Guzek Marika<sup>2</sup>, Szafraniec Sylwia<sup>3</sup>, Sabina Karczmarz<sup>2</sup>*

*1. Department of Social Medicine and Public Health, Medical University of Warsaw, Poland*

*2. Medical and Diagnostical Center in Siedlce, Poland*

*3. Department of Pharmacoeconomics, Institute of Mother and Child, Poland*

**Corresponding author e-mail:** [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)

## Background

The essence of management is the productive management of staff knowledge and competence. The correlation between medical staff competencies and patient care effectiveness is a complex issue. Existing research focuses primarily on the efficiency of entire healthcare organisations without paying special attention to the effectiveness of the people performing the different medical jobs, despite the fact that the effectiveness of healthcare facilities is the total sum of the effectiveness of individual staff members.

## Aim of the study

The aim of the study was to verify the correlation between medical staff competences and the effectiveness of patient care in PHC.

## Methodology

It was a pilot study. The population studied were PHC physicians employed at the Medical and Diagnostic Center (MDC) in Siedlce. Medical care offered by MDC especially concentrates on the patients from rural areas. Physicians' social competences were measured by the Social Competence Profile (PROKOS) tool. As there are no measures of the effectiveness of treatment at the individual workplaces level, the original concept was adopted, and 11 indexes were developed.

## Results

The research results show that social competences in MDC were insignificantly lower than the competencies of the doctors surveyed in the standardisation study. The factor analysis performed for 11 original indexes of

effectiveness showed that the 5 original indexes created a very reliable scale. These are: Complex Visits Effectiveness, Key Visits Effectiveness, Complex Visits Number Effectiveness, Average Patient Life-span Effectiveness, Patient Population Coverage.

## Conclusions

The selection of a strong scale consisting of five original effectiveness indexes is a step towards the development of a uniform index of the effectiveness of patient care in PHC, which will be a significant contribution to science. Further and future research on a wider sample must be conducted. It will enable indices and scale verification, and also show potential correlation.

**Key words:** *medical staff competencies, patient care efficiency, rural areas*

[Abstract 24P: Rural areas patient care efficiency in PHC– original indices concept](#)

## Rural areas patient care efficiency in PHC– original indices concept

Żuk Paweł<sup>1</sup>, Prusaczyk Artur<sup>1</sup>, Guzek Marika<sup>1</sup>, Szafraniec Sylwia<sup>2</sup>, Sabina Karczmarz<sup>1</sup>, Bogdan Magdalena<sup>3</sup>

1. *Medical and Diagnostical Center in Siedlce*

2. *Department of Pharmacoconomics, Institute of Mother and Child, Poland*

3. *Department of Social Medicine and Public Health, Medical University of Warsaw*

**Corresponding author e-mail:** [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)

## Background

Ever-increasing needs and demands of patients, development of new treatments and health services together with limited financial, infrastructural and human resources require increasing the efficiency of health care while optimising the cost of this process. Raising cost-effectiveness at the level of individual physicians is a response to the limitations of healthcare resources and high physician involvement in choice of diagnostics and treatment methods.

## Aim of the study

The aim of the study was to create, measure and evaluate a set of the original efficiency indices in PHC patient care, which could be implemented in medical facilities located in rural areas.

## Methodology

Following the pilot study in Medical and Diagnostic Center in Siedlce, Poland, 11 original efficiency indices were developed. The indices were based on Data Envelopment Analysis (DEA) methodology and focused on three operational areas: structure, process and outcome.

## Results

The authors were able to distinguish 1 index in the field of quality of the structure (patient population coverage), 7 indices in quality of the process area (efficiency of working time, efficiency of key appointments, efficiency of comprehensive medical consultations, efficiency of the number of basic and extended check-ups, percentage of pap smear tests, percentage of mammography screening tests, percentage of prophylactic cardiovascular screening tests) and 3 indices in the area of quality of the outcome (efficiency of the performance of health care plan, efficiency of the number of issued DILo cards, average years of life). Quality and reliability of the indices were tested on a group of PHC physicians.

## Conclusions

Identification of original efficiency indices may have a crucial influence on the quality and effectiveness of patient care in PHC in rural areas. It is an innovative and important management tool, but further research enabling future indices verification must be conducted.

**Key words:** *patient care, efficiency, original indices, rural areas*

### [Abstract 26P: Rural patients' awareness of myocardial infarction's management in the COVID-19 era](#)

Rural patients' awareness of myocardial infarction's management in the COVID-19 era

*Michał Korman<sup>1, †</sup>, Dominik Felkle<sup>1, †</sup>, Tomasz Korman<sup>2</sup>*

<sup>1</sup>*Students' Scientific Group at the Second Department of Cardiology, Jagiellonian University Medical College, Cracow, Poland*

<sup>2</sup>*Family Medicine Practice, Łapanów, Poland*

<sup>†</sup>*These authors contributed equally and are shared first authors.*

**corresponding author e-mail:** [michal.korman@student.uj.edu.pl](mailto:michal.korman@student.uj.edu.pl)

## Background

Mortality from myocardial infarction (MI) is determined by patients' ability to call an ambulance in case of its occurrence. During the COVID-19 pandemic a significant decrease in the amount of PCI procedures on patients with MI has been observed and the time from symptom onset to treatment has increased. There is scarce data on rural populations' awareness of proper reaction to MI symptoms, even though they are disadvantaged in access to medical emergency services.

## Aim of the study

The aim of the study was to investigate rural patients' awareness of the necessity to call an ambulance in response to MI symptoms during the COVID-19 pandemic.

## Methodology

An anonymous and voluntary survey was conducted among 194 patients and their caregivers with median age 68 years at a rural healthcare facility in Poland. The response rate was 91%.

## Results

91.8% of respondents are aware that MI is a condition requiring immediate medical action. Yet, only 76.2% of respondents would call an ambulance in the event of chest pain experienced, while 80% of them could provide an emergency call number. 4.7% would go to hospital on their own. Moreover, among respondents who declared they would not call an ambulance or go to hospital, 38.7% were afraid of in-hospital COVID-19 infection or healthcare system collapse.

## Conclusions

The fear of COVID-19 pandemic renders patients reluctant to contact healthcare providers. This causes a significant increase in time from symptom onset to treatment leading to worsening of patients' prognosis. These challenges need to be tackled - an education campaign and routine advice from the doctor or the nurse at the local level could be a solution.

## Key words

myocardial infarction, COVID-19, rural population, patient participation

The General Practitioner and the anthroozoonosis encountered in Europe

Patrick OUVRARD<sup>1</sup>, Florence Ayra<sup>2</sup>,

<sup>1</sup>CMG : Collège de la Médecine Générale Paris, UEMO : Union Européenne Médecine Omnipraticienne, Brussel.

<sup>2</sup> VetAgro Plus, France

**corresponding author e-mail: patrick.ouvrard@gmail.com**

### **Background**

Anthroozoonoses are frequent, both in rural and urban areas. The domestic animal is the interface vector between wild animal and man. Certain professions are more exposed, certain hobbies are at risk, from direct or indirect contact with domestic or wild animals.

3 pathologies dominate: toxoplasmosis, alveolar echinococcosis and leptospirosis. In a "One health" context, collaboration with veterinarians could lead to better prevention and better control, or even the disappearance of these diseases.

The Covid 19 pandemic is here to remind us of the role of the human / animal interface in its possible genesis. Other pathologies are frequent, but often underdiagnosed, such as cryptosporidiosis, often found in transplant recipients, as well as babesiosis.

The interview of our patients does not always take into account the risk of exposure (domestic animal, profession, leisure), favouring diagnostic error and the increased risk in our fragile patients, including immunosuppressed and transplant recipients.

### **Aim of the study**

- 1) Learn more about Anthroozoonoses;
- 2) Modify the patient interview in order to identify risk factors for exposure;
- 3) Develop a constructive partnership between GP and veterinarians to improve the prevention, especially in rural areas;
- 4) Know how to think about these diseases in transplants and immunosuppressed

### **Methodology**

Realisation of a joint doctor / veterinarian thesis co-directed by dr OUVRARD (GP) and Dr AYRAL (veterinarian), listing the anthroozoonoses encountered in the different European countries, and a relevant interview methodology, as well as proposals for a coherent MG / Veterinary. During the EURIPA Forum GPs will be asked to register to participate in this thesis.

### **Results**

Listing the anthroozoonoses encountered in the different European countries,  
Elaboration of a relevant interview methodology,  
Proposals for a coherent MG / Veterinary

### **Conclusions**

This work should allow better and earlier recognition and management of anthroozoonoses encountered in Europe, in particular with regard to Toxoplasmosis, Leptospirosis, echinococcosis and cryptosporidiosis.

### **Key words**

Anthroozoonoses, prevention, interview, risk factors

## An unusual long-COVID-19 case?

S. De Matteis<sup>1</sup>, P.M. Perrone<sup>2</sup>, C. Colosio<sup>3</sup>

*1 Department of Medical Sciences and Public Health, University of Cagliari, Cagliari, Italy*

*2 Department of Biomedical Sciences for Health, University of Milan, Milan, Italy*

*3 Department of Health Sciences of the University of Milano and Occupational Health Unit, International Centre for Rural Health of the Santi Paolo e Carlo Hospital, Milan, Italy.*

**corresponding author e-mail: [piermario.perrone@unimi.it](mailto:piermario.perrone@unimi.it)**

### Background

Severe acute respiratory syndrome virus 2 (SARS-CoV-2) infection can be asymptomatic or lead to coronavirus 2019 disease (COVID-19) with a broad range of systemic involvement and severity. Similarly, COVID-19 survivors can experience a rapid recovery or a persistence of a wide variety of symptoms varying in severity and duration case by case.

The persistence of one or more symptoms post-COVID-19 for more than 12 weeks has been defined as 'long-COVID-19 syndrome'.

Most of the studies on long-COVID-19 have included hospitalised or intubated COVID-19 patients, but only a few have focused on a-/pauci-symptomatic COVID-19 cases.

### Aim of the study

The aim of the study is to describe an highly interesting case of Long Covid encountered in the Occupational Medicine Service in a Large Hospital of Cagliari, Italy.

### Methodology

As an occupational health (OH) service of a large hospital in Cagliari city, Italy, we set up a preventive programme for COVID-19 including screening testing by nasopharyngeal swab, contact tracing, and health surveillance to protect our healthcare workers (HCWs) from the start of the COVID-19 pandemic. Most of the HCWs who developed COVID-19 were a-/pauci-symptomatic. Nevertheless we decided to continue to closely follow them up to evaluate any sequelae improving our understanding of long-COVID.

### Results

Among the 141 COVID-19 cases diagnosed up to June 2021 among our HCWs, all recovered without sequelae, but one. She was a 50 year old female healthcare assistant working in the intensive care unit, who came to our attention on 22<sup>nd</sup> Dec 2020 because of symptoms compatible with SARS-Cov-2 infection (i.e. anosmia, faryngodynia, cough, fever, and fatigue). She had a normal weight, never smoked, and had nothing relevant in her past medical history. She tested positive using a SARS-Cov-2 PCR molecular test, she self-isolated for 10 days at home, and she returned to work after testing negative (PCR test) following the Italian regulations. On 12 Jan 2021 she was seen in our OH service to evaluate her fitness to work, and at the consultation she explained that most of her COVID-19 symptoms disappeared by the 31<sup>st</sup> Dec 2020, but that she was still experiencing dyspnoea on light exertion such as walking up a hill (MRC Dyspnoea Scale: 2). Chest clinical examination was normal, routine blood tests were normal, but her lung function test (LFT) and lung diffusion capacity for carbon monoxide (DLCO) showed a slight obstructive respiratory pattern associated with moderate DLCO decrease (64%, z-score -2.38). Bronchial reversibility wasn't tested. On 21 Jan 2021 she underwent an echocardiogram to evaluate a cardiac cause for her dyspnoea which showed just a mild diastolic dysfunction of the left ventricle; and a 6-minute walking test on the treadmill showed desaturation to 89% after 1 minute at the end of the physical exertion. She underwent a lung scintigraphy perfusion computer-tomography (CT) scan to evaluate a potential thromboembolic event, which was normal, but showed an irregular subsegmental defect at the medial lung lobe. On 9<sup>th</sup> Feb 2021 she requested to be seen at our OH service for the persistence of the dyspnoea at strenuous exercise (MRC scale: 1). LFT and DLCO tests were repeated and were substantially unchanged (63%, z-score -2.45); a 'wait-and-see' approach was taken. At a follow up visit on 29<sup>th</sup> Jun 2021, LFT and DLCO test again obstruction and a slightly worsened DLCO (64%, z-score -2.73), but, interestingly, she mentioned that her dyspnoea had completely disappeared, and

she even went back to physical workout. From the point of view of the OH management she was judged fit to work without any limitations, but a closer 3-month lung function follow up was scheduled.

## Conclusions

The available literature has reported decreased DLCO (<80%predicted), even isolated, in COVID-19 survivors after 3 months from infection. However, most of the studies only included severe hospitalised COVID-19 cases, complicated with pneumonia or respiratory failure, and intubation. The case reported here had a pauci-symptomatic COVID-19 infection, and did not have any underlying medical conditions that could explain the moderate DLCO decrease. Interestingly an obstructive, and not restrictive respiratory pattern was found, and the dyspnoea spontaneously resolved.

The potential underlying etiopathogenetic mechanisms of post-COVID-19 DLCO impairment are still debated. It has been hypothesised that lung alveolar inflammation and subsequent local damage possibly complicated by interstitial fibrosis could be involved; others have proposed as key determinant a diffuse alveolar capillary microthrombosis.

HCWs have been the most severely affected by the COVID19 pandemic, both mentally and physically, so it is expected that a large proportion of patients with 'long-COVID-19' will be HCWs. To protect the health services from collapsing due to health issues induced by the long term effects of COVID19 it is essential we develop a better understanding of how COVID19 has affected the health of this cohort.

It is proposed that larger prospective studies are needed. Ideally, the role of sex, age, previous comorbidities, COVID-19 severity should be evaluated. From a clinical perspective, multi-disciplinary teams, including specifically OH services, are crucial to develop effective and efficient preventive measures, rehabilitation techniques, and clinical management strategies to avoid the subsequent public health burden in terms of morbidity and disability.

## Key words

Long Covid, Occupational Medicine, Long Covid Management

[Abstract 35P: Study on the degree of control of arterial hypertension in diabetic patients after confinement by COVID-19 in a rural group](#)

Study on the degree of control of arterial hypertension in diabetic patients after confinement by COVID-19 in a rural group

*Raisa Álvarez Paniagua<sup>1</sup>, Ángela María Arévalo Pardal<sup>2</sup>, María Jaime Azuara<sup>3</sup>, Ana Ramos Rodríguez<sup>2</sup>, Irene Pérez Arévalo<sup>4</sup>, Celia Blanco Fraile<sup>2</sup>*

*1. CS. Nava de la Asunción, Segovia, Spain*

*2. Hospital Universitario Río Hortega, Valladolid, Spain*

*3. CS. Cuellar, Segovia, Spain*

*4. Hospital Comarcal Benavente, Zamora, Spain*

**corresponding author e-mail: [raisa.alvarez90mail.com](mailto:raisa.alvarez90mail.com)**

## Background

Diabetes Mellitus Type 2 (DM2) is one of the most frequent pathologies in Primary Care, and one of the most important cardiovascular risk factors. It is usually associated to Arterial Hypertension (AHT), which is a risk factor for cardiovascular events. The control of these diseases provides great benefit for our patients.

## Aim of the study

Knowing the degree of control of arterial hypertension in diabetic patients in a Rural Primary Care Consultation after confinement for COVID-19 and the treatments used.

## Methodology

\* Design: Retrospective observational study.

- \* Scope: Rural Primary Care: Consultorio Aldemayor de San Martín.
- \* Population: subjects of a diabetic group with a diagnosis of AHT.
- \* Variables under study: age, sex, pre- and post-pandemic systolic and diastolic blood pressure figures, associated cardiovascular risk factors (obesity, smoking, cholesterol, chronic kidney failure), treatment received.

## Results

AHT prevalence in patients with DM2:78.72%.

\*Males:50%, Females:50%; Average age:70.87; Smokers:29.73%; BMI: normal:5.4%; Obesity:55.4%; Overweight:37.84%

\*Associated diseases: Cholesterolaemia:79.73%; CRI: G1:27.03%; G2:44.59 %%; G3A:13.51%; G3B:5.4%; G4:4.05%. Other associated pathologies:33.78%.

\*Patients with worsening BP during the onset of the pandemic:21.62%. With improvement:13.51%. With similar figures:22.97%

\*Treatments: Diet + exercise:82.43%; ACEI:29.74%; ARA-II:44.59%; B-Blockers:21.62%; Calcium-antagonists:27.03%; Doxazosin:8.11%; Asa Diuretics:17.57%; Thiazides 55.4%

\*Drug use: 5 drug families:1.35%; 4 families of drugs:5.41%; 3 families of drugs:29.73%; 2 families of drugs:36.49%.

## Conclusions

According to [Di@bet.es](https://www.redgdp.es) study (redGDPs), the hypertension prevalence in patients who are diabetic is around 83%, which would indicate that it is underdiagnosed in the studied group. In our study, its prevalence is similar in both men and women.

Only 62.16% of the diabetic patients had their blood pressure tested. 17.39% of these patients were not on target.

24.32% had monotherapy: when hygienic-dietary measures fail, it is recommended to start with double therapy: AIIIRA/ACEi+Calcium-antagonists/Diuretic.

This type of analysis is very useful in primary care in order to critically analyze what has been done so far and change the things which can be improved.

## Key words

Hypertension; Blood Pressure; Drug therapy; Combined Modality Therapy

### [Abstract 38P: Growing our Greenspace-Polytunnels and Plots](#)

Growing our Greenspace-Polytunnels and Plots

*Ms Rebekah Burman<sup>1</sup>, Dr Louise Wilson<sup>1</sup>*

<sup>1</sup>Public Health Department, NHS Orkney, Kirkwall, Scotland

**corresponding author e-mail: [Rebekah.burman2@nhs.scot](mailto:Rebekah.burman2@nhs.scot)**

## Background

The Covid-19 pandemic has highlighted the importance of being outdoors and accessing greenspace. Greenspace exposure can enhance all aspects of health (physical, mental and social) and has been associated with a greater psychological connection to the natural world, which encourages pro-environmental behaviour.

## Aim of the study

To enhance an area of greenspace by the construction of three polytunnels which will deliver better outcomes for individuals health and wellbeing, deliver on public health priorities, provide opportunities to use greenspace in personalised care plans, drive forward NHS Orkney's sustainability agenda, promote Isles-based activity that supports green and inclusive exemplar practices and supports our ambitions as an anchor institution.

## Methodology

The inclusive polytunnel facility will be constructed using durable and sustainable materials that supports local procurement. We will engage widely with staff, patients and the community across the rural Orkney Islands to

promote the facility. Furthermore, positive discussions between staff and patients around using the facility in an individual's care plan will be encouraged. We intend to conduct qualitative interviews with users to evaluate its success and impact.

## Results

The facility will provide a safe and inclusive greenspace area in hospital grounds. It will promote population health and wellbeing and aspires to help reduce health inequalities across Orkney. We intend to use the facility to provide opportunities for social prescribing initiatives or therapeutic treatment for NHS Orkney patients and the wider community. In addition, the project will contribute to reducing NHS Orkney's carbon footprint and educating users on the importance of the environment and its direct links to health.

## Conclusions

In conclusion, this project will enhance a greenspace on the NHS Orkney estate and increase the potential for it to deliver better health and environmental outcomes to the rural population of Orkney. We anticipate the project will be a leading example to other health boards and rural European settings.

## Key words

Greenspace, Sustainable Development, Islands

### [Abstract 39P: Intermittent fasting may decrease the risk of cardiovascular disease?](#)

Intermittent fasting may decrease the risk of cardiovascular disease?

*Sílvia Gomes de Almeida<sup>1</sup>, Maria do Carmo Gonçalves<sup>1</sup>, Oksana Halamay<sup>2</sup>,*

*<sup>1</sup> Community Health Center of Marinha Grande, Portugal*

*<sup>2</sup> Community Health Center of Batalha, Portugal*

**corresponding author e-mail: [sigaalmeida29@gmail.com](mailto:sigaalmeida29@gmail.com)**

## Background

Cardiovascular disease (CVD) is the leading cause of death worldwide. Lifestyle changes are at the forefront of preventing the disease. Intermittent fasting (IF) is a popular dietary plan involving restricting caloric intake to certain days in the week such as alternate day fasting and periodic fasting, and restricting intake to a number of hours in a given day, otherwise known as time-restricted feeding. IF is being researched for its benefits and many randomised controlled trials have looked at its benefits in preventing CVD.

## Aim of the study

To determine the role of Intermittent fasting in preventing and reducing the risk of CVD in people with or without prior documented CVD.

## Methodology

An evidence-based review was performed. Literature search of systematic reviews, meta-analyses and evidence based reviews, guidelines, randomized controlled trials, original articles published in the last 5 years in Portuguese and English in the databases: PubMed/The Cochrane Library/Canadian Medical Association Practice Guidelines InfoBase containing the **MeSH terms: intermittent fasting AND cardiovascular**. The SORT scale was used to assess the quality of the studies and assign strengths of recommendation. Fifteen articles were found and twelve articles were excluded.

## Results

Three articles were included in the review: “**Intermittent fasting for the prevention of cardiovascular disease**”: IF may be effective in reducing weight when compared to ad libitum feeding and may be as effective as continuous energy restriction. Despite this, these changes appear to be



clinically insignificant at short-term follow-up; **“Effect of alternate-day fasting (ADF) on obesity and cardiometabolic risk”**: There was no difference between ADF and continuous energy restriction, time-restricted feeding, or control with regard to lean body mass. Current evidence suggests that ADF effectively lowers body mass index, bodyweight, body fat mass and total cholesterol in adults with overweight within 6 months compared to the control; **“Intermittent Fasting in Cardiovascular Disorders - An Overview”**: decreases body mass and has a positive influence on lipid profile parameters, reduces the concentration of total cholesterol, triglycerides, and LDL cholesterol. Intermittent fasting inhibits the development of atherosclerotic plaque by reducing the concentration of inflammatory markers.

## Conclusions

Intermittent Fasting can be used as an effective non-pharmacological treatment to reduce the risk of cardiovascular disease. However, individuals' current health and situation should be considered before initiating this diet and further research is needed to know the long-term outcomes.

## Key words

Intermittent fasting, cardiovascular disease.

## [Abstract 43P: Clinical Significance of the Maxillary Frenulum](#)

### Clinical Significance of the Maxillary Frenulum

Sody Naimer <sup>1</sup>, Aviezer Gabbay <sup>2</sup>,

<sup>1</sup> Sody Naimer, Ben gurion University of the Negev, Beersheva, Israel

<sup>2</sup> Department of Family Medicine, Clalit Health Services, Jerusalem, Israel

**corresponding author e-mail:** [sodynaster@gmail.com](mailto:sodynaster@gmail.com)

## Background

Ongoing debate exists over the clinical significance of the maxillary frenulum. Many times we have received contradicting recommendations on whether intervention is necessary when a "tight" maxillary frenulum is diagnosed. The evidence of whether this finding will ever bear any significance regarding breastfeeding, speech, dental health or otherwise is crucial in order to determine whether intervention to remove this taut tissue band is justified. Since various degrees of maxillary frenula exist in 85-95% of neonates, we are commonly asked this question. An exhaustive literature search fails to disclose any previous research shedding light on this topic.

## Aim of the study

Does the existence of a short maxillary frenulum bear any clinical significance in those so diagnosed?

## Methodology

The research cohort comprised a convenience sample of 71 infants arriving at our rural clinic for various reasons that were identified as presenting with the most advanced form of the maxillary frenulum. Ten of the 71 children originally recruited for the study were excluded from the prospective follow-up. Four were excluded because they had undergone surgical intervention. As far as we know the basis for this decision had nothing to do with symptoms, but mostly leaning towards an opportunity to prevent 'claimed' future suffering if the condition was left as it is. Six were excluded either because they could not be located or parental consent could not be obtained. In the final analysis, 61 infants were included in the study group and 66 in the comparative group.

## Results

The results showed that surprisingly, more mothers from the compared group (47.0%) in comparison to the study group (24.6%) recalled painful nipples or other discomfort during breastfeeding ( $p=0.01$ ). Among all other clinical variables there were no differences between the groups.

## Conclusions

This is a preliminary observational research study of infants with an advanced form of maxillary frenulum without symptoms. These outcomes diminish its clinical importance, thus calling into question the need to intervene upon the infant presenting with this finding without associated symptoms

## Key words

maxillary frenulum, breastfeeding, oral anatomy, dentition

## [Abstract 45P: Medicine in a village in the interior of Portugal](#)

Medicine in a village in the interior of Portugal

*Alexandra Soares<sup>1</sup>, Jorge Bruno Pereira<sup>1</sup>, Róman Marquez de La Peña<sup>1</sup>*

<sup>1</sup> UCSP S. Miguel / ULS Castelo Branco, Castelo Branco, Portugal

corresponding author e-mail: [xana.m.soares@gmail.com](mailto:xana.m.soares@gmail.com)

## Background

In Portugal, the accentuation of regional asymmetries is undeniable.

The depopulation and desertification of the interior of the country is an increasingly present reality, which, associated with the aging and impoverishment of the population, causes major problems in terms of access to healthcare. It is therefore essential to create mechanisms to reach the entire population.

## Aim of the study

Almaceda is a village (with 9 attached villages), 35 km from the city of Castelo Branco. It has a population of 511 inhabitants spread over an area of 72.19 km<sup>2</sup>, which is equivalent to a population density of 7.1 inhabitants/km<sup>2</sup>. The Health Centre Extension located in this village seeks to respond to the health needs of this population.

## Methodology

Activities description

## Results

The authors describe the different activities carried out by Doctors and Nurses at the Almaceda Health Centre Extension.

## Conclusions

General practice and Rural practice

## Key words

Rural populations; Regional asymmetries; Desertification; Health Centre Extension

## Abstract 46P: Proximity Medicine: The Portuguese example

Proximity Medicine: The Portuguese example

*Alexandra Soares<sup>1</sup>, Jorge Bruno Pereira<sup>1</sup>, Róman Marquez de La Peña<sup>1</sup>*

<sup>1</sup> *UCSP S. Miguel / ULS Castelo Branco, Castelo Branco, Portugal*

**corresponding author e-mail: [xana.m.soares@gmail.com](mailto:xana.m.soares@gmail.com)**

### **Background**

Even with a large population concentration in large urban centres, most of the Portuguese population still resides in rural communities that demand adequate medical care for the context in which they live. Due to its distance from large urban centers and its poor and aging population, rural populations face difficulties in accessing health services. These factors can lead to an increased risk of becoming ill and dying, particularly for the most vulnerable groups such as the elderly and children.

### **Aim of the case report**

The existence of Health Extensions at the Primary Care Centres, as well as the Home Medical Consultation services, seeks to respond to the health needs of these populations.

### **Case report/Conclusions**

The authors describe 3 cases of patients observed in Home Medical Consultations with the aim of exemplifying the proximity health services provided to rural populations.

### **Key words**

Proximity Medicine; Rural communities; Portugal; Home Medical Consultations

## Abstract 47P: The telephone load in primary care practices during a pandemic

The telephone load in primary care practices during a pandemic

*Guzek Marika<sup>1</sup>, Szafraniec-Buryło Sylwia<sup>2</sup>, Klepacka Małgorzata<sup>1</sup>, Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Bielak Jolanta<sup>1</sup>, Bogdan Magdalena<sup>3</sup>, Bukato Grzegorz<sup>1</sup>*

<sup>1</sup> *Medical and Diagnostics Center, Siedlce, Poland*

<sup>2</sup> *Department of Pharmacoeconomics, Institute of Mother and Child, Warsaw, Poland*

<sup>3</sup> *Department of Social Medicine and Public Health, Medical University of Warsaw, Poland*

**corresponding author Sylwia Szafraniec-Buryło, e-mail: [sylwia.szafraniec@imid.med.pl](mailto:sylwia.szafraniec@imid.med.pl)**

### **Background**

Usually, patients from large cities generate a much higher number of calls to primary care practices than people from small towns, who prefer direct contact in clinics, as they mostly live in the same town, and a personal visit to the clinic is for seniors an opportunity to interact other people.

### **Aim of the study**

To collect data on PHC phone load in 2020 and the first half of 2021 in order to enable the prediction of the future load in case of the next wave of the COVID-19 pandemic.

### **Methodology**

Medical Diagnostic Centre in Siedlce (CMD) is a coordinated care organization operating in Eastern Mazovia region in (Poland), mainly in rural areas, providing primary and specialized ambulatory care for approximately 100,000 patients. During the COVID-19 pandemic a permanent call centre team consisting of 9 FTEs,

supported by other staff (2 FTEs) was involved. Additional phone operators could work homebased. The monthly number of incoming, received and missed calls was measured from January 1, 2020 to July 31, 2021.

## Results

On average, an operator picked up 20-25 calls per hour, each lasting on average 1-1.5 minutes. In 2020, the number of callers was the highest in January-March and October-November, which was related to the number of COVID-19 cases in the region and entire Poland. The number of calls received dropped from 68% in January 2020 to 44% in October 2020. In January 2021, only 34% of calls were received, reverting to the non-pandemic level (69%) in July 2021.

## Conclusions

Knowledge of the anticipated number of phone calls allows assignment of appropriate staff without disrupting the work of the medical practice. To adjust to the expected increase in the number of infections in the second half of September 2021, additional call center staff should be assigned and trained.

## Key words

telephone load, primary care, rural areas, pandemic

### [Abstract 48P: Adjustment of primary care during the first phase of the COVID-19 pandemic](#)

Adjustment of primary care during the first phase of the COVID-19 pandemic

*Guzek Marika<sup>1</sup>, Szafraniec-Buryło Sylwia<sup>2</sup>, Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Bogdan Magdalena<sup>3</sup>, Bukato Grzegorz<sup>1</sup>*

<sup>1</sup> *Medical and Diagnostical Center, Siedlce, Poland*

<sup>2</sup> *Department of Pharmacoeconomics, Institute of Mother and Child, Warsaw, Poland*

<sup>3</sup> *Department of Social Medicine and Public Health, Medical University of Warsaw, Poland*

**corresponding author Sylwia Szafraniec-Buryło e-mail: [sylwia.szafraniec@imid.med.pl](mailto:sylwia.szafraniec@imid.med.pl)**

## Background

The COVID-19 pandemic limited access to services and forced changes in many areas of medicine.

## Aim of the study

To investigate the impact of the pandemic on numbers of health services provided in primary health care organizations.

## Methodology

Medical Diagnostic Centre in Siedlce (CMD) is a coordinated care organization operating in Eastern Mazovia (Poland), mainly in rural areas, providing primary and specialized ambulatory care for approximately 100,000 patients. The monthly number and type of primary and specialist care visits was from March 2020 to July 2020 and compared with the same months in 2019.

## Results

1. CMD maintained the continuity of care for patients in the first phase of the COVID-19 epidemic. In the period of March-July 2019, the total number of visits was 132,552; compared to 118,164 in 2020 -, which is a drop of 11% only.
2. The month with the highest decrease in the number of services (25%) was April 2020.
3. April 2020 was also the month with the highest ratio of remote visits which amounted to 87%, decreasing to 57% in July 2020.
4. The ratio of remote to personal visits in specialist care in April 2020 was the highest and amounted to: 66%, while in July it was only 27%.
5. Specialistic care visits in the period of March-July 2020 dropped only by 9% (54,091 visits vs. 59,152 in 2019).
6. The use of e-prescriptions facilitated the care of the elderly and chronically ill patients.

## Conclusions

The pandemic had a limited impact on the number and type of medical services in PHC. The pandemic increased the share of remote medical advice, however, the staff trained in coordinated care who knew how to use e-health, made provision of services at a level that differed little from the previous year possible.

## Key words

adjustment, primary care, rural areas, pandemic

### [Abstract 49P: The scope of services provided in the setting of pharmaceutical care](#)

#### The scope of services provided in the setting of pharmaceutical care

*Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Guzek Marika<sup>1</sup>, Szafraniec Sylwia<sup>2</sup>, Sabina Karczmarz<sup>1</sup>, Jurewicz Błażej<sup>1</sup>, Bogdan Magdalena<sup>3</sup>*

1. *Medical and Diagnostics Center in Siedlce, Poland*
2. *Department of Pharmacoeconomics, Institute of Mother and Child, Poland*
3. *Department of Social Medicine and Public Health, Medical University of Warsaw, Poland*

**Corresponding author e-mail: [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)**

## Background

Pharmaceutical care is currently an increasingly common tool facilitating optimisation of pharmacology. Implementation of pharmaceutical care in collaboration with health care, especially the PHC, will result in better integration of the medical and pharmaceutical professions, resulting in tangential benefits for the patient. Due to this innovative approach, the scope of health care services provided by pharmacists has not been thoroughly researched.

## Aim of the study

This research investigates the issue of assessing the scope of the services provided in the setting of pharmaceutical care especially in rural areas. The paper shows an original concept created by Medical and Diagnostics Center in Siedlce, Poland (MDC).

## Methodology

The research methodology started with the literature analysis and systematic review. The second stage was brainstorming based on the current practical experiences of the MDC. The research and literature analysis were carried out in electronic databases to identify published studies on the scope of services provided in the setting of pharmaceutical care especially in rural areas. Considering the practical and widely discussed nature of the subject, the Internet search was performed as a supplementary strategy to identify articles. Then the results have been analysed and brainstormed with the managing staff in MDC.

## Results

In the research and analysis process the authors found, named, and stated six types of pharmaceutical services. These services are: drug overview, drug assistance, pharmaceutical assistance, intervention visits, digitalisation of the patient and internal consultation of the pharmacist and the doctor. The above services, together, comprise a coordinated pharmaceutical care process for the patient. It has been tested in MDC and is now in the next phase.

## Conclusions

Identification and reinforcement of the scope of the services provided in the setting of pharmaceutical care may especially have a crucial influence on the quality and effectiveness of patient care. This care is provided by the pharmacy in close cooperation with the medical facilities located in rural areas.

**Key words:** *pharmaceutical care, pharmaceutical services, patient care at rural areas*

## Abstract 50P: The role and importance of the pharmaceutical patient questionnaire

### The role and importance of the pharmaceutical patient questionnaire

Jurewicz Błażej<sup>1</sup>, Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Guzek Marika<sup>1</sup>, Szafraniec Sylwia<sup>2</sup>, Sabina Karczmarz<sup>1</sup>, Bogdan Magdalena<sup>3</sup>

1. *Medical and Diagnostical Center in Siedlce, Poland*

2. *Department of Pharmacoeconomics, Institute of Mother and Child, Poland*

3. *Department of Social Medicine and Public Health, Medical University of Warsaw, Poland*

**Corresponding author e-mail:** [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)

## Background

In pharmaceutical care the pharmacist cooperates with other representatives of the medical professions and caters for the patient with holistic care. The pharmacist concentrates on identifying and solving drug problems. The tool that makes the process feasible is the pharmaceutical patient questionnaire. Introducing this pharmaceutical patient questionnaire is the main goal of the paper.

## Aim of the study

This research investigates the issue of defining and creating a pharmaceutical patient questionnaire, which can be used in a coordinated pharmaceutical care process dedicated to patients from rural areas in Poland. The paper shows an original concept created by Medical and Diagnostical Center in Siedlce, Poland (MDC).

## Methodology

The research methodology started with literature analysis and systematic review. The second stage was brainstorming based on the current practical experiences of the MDC. The research and literature analysis were carried out in the electronic databases to identify published studies on the types and scope of pharmaceutical patient questionnaires. Considering the practical and widely discussed nature of the subject, the Internet search was performed as a supplementary strategy in identifying articles. Then the results were analysed and brainstormed with managing staff in the MDC.

## Results

In the research and analysis process the authors of the study have created an original concept of a pharmaceutical patient questionnaire, which can be used in a coordinated pharmaceutical care process dedicated to patients from rural areas in Poland. The pharmaceutical patient questionnaire comprises the following information: patient's personal data, patient's subjective feelings concerning his health, different illnesses, allergies, vaccinations, preventive medical examinations and other basic medical indicators or parameters. At the core of the pharmaceutical patient questionnaire is the information on the type of medicine being taken by the patient, the name of the medicine, the doses, effectiveness of the therapy, side effects and the patient's own medicine supplies. This tool also comprises information on the pharmacist-patient interview, the pharmacist's recommendation and other concerning information.

## Conclusions

Identification and reinforcement of the scope of information provided in the context of the pharmaceutical patient questionnaire may have a crucial influence on implementing and conducting coordinated pharmaceutical care dedicated especially for the patients from rural areas.

**Key words:** *pharmaceutical care, pharmaceutical patient questionnaire, patient care in rural areas*

### [Abstract 51P: Pharmaceutical care as an important element of a coordinated care process](#)

## Pharmaceutical care as an important element of a coordinated care process

Bogdan Magdalena<sup>1</sup>, Prusaczyk Artur<sup>2</sup>, Żuk Paweł<sup>2</sup>, Guzek Marika<sup>2</sup>, Szafraniec Sylwia<sup>3</sup>, Sabina Karczmarz<sup>2</sup>, Jurewicz Błażej<sup>2</sup>

1. Department of Social Medicine and Public Health, Medical University of Warsaw, Poland
2. Medical and Diagnostical Center in Siedlce, Poland
3. Department of Pharmacoeconomics, Institute of Mother and Child, Poland

**Corresponding author e-mail:** [mbogdan@wum.edu.pl](mailto:mbogdan@wum.edu.pl)

## Background

Coordinated care is among the most vital determinants shaping highly prosperous health care which in consequences adds to its value. The coordination process maximises the value of services offered to the patient by facilitating access to effective, safe, and high-quality services. This results in improvement of health care results. To coordinate the health care process, cooperation of health care units is necessary just like the presence of other actors, such as pharmacists.

## Aim of the study

This research investigates the issue of analysing the solutions and international experiences in the implementation of pharmaceutical care as an important element of coordinated care especially in rural areas.

## Methodology

The research methodology is based on literature analysis and systematic review. The research and analysis were carried out in electronic databases to identify published studies on pharmaceutical care and specifics of the coordinated care process typical for the rural areas. Considering the practical and widely discussed nature of the subject, the Internet search was performed as a supplementary strategy in identifying articles.

## Results

In the research and analysis process concerning the subject of pharmaceutical care as an important element of coordinated care especially in rural areas, it was discovered that – in an effective coordinated health care process, the pharmacist should also be incorporated. The examples of the United States, the Netherlands and also Great Britain show that the immediate effect of pharmacists' involvement in the health care process is in terms of better health care results and improvement of compliance with therapeutic instructions. International experience proves that the pharmacists, by performing different health care services, generate savings in health care in general.

## Conclusions

Identification and reinforcement of pharmaceutical care as an important aspect of coordinated care may have crucial influence on the quality and effectiveness of patients' care provided in medical facilities located in rural areas.

**Key words:** *pharmaceutical care, coordinated care, rural areas*

## Abstract 52P: Independence of vaccination coverage from the DEGURBA classification

Independence of vaccination coverage from the DEGURBA classification

Guzek Marika<sup>1</sup>, Szafraniec-Buryło Sylwia<sup>2</sup>, Kordowska Anna<sup>1</sup>, Prusaczyk Artur<sup>1</sup>, Żuk Paweł<sup>1</sup>, Bogdan Magdalena<sup>3</sup>, Bukato Grzegorz<sup>1</sup>

<sup>1</sup> Medical and Diagnostics Center, Siedlce, Poland

<sup>2</sup> Department of Pharmacoeconomics, Institute of Mother and Child, Warsaw, Poland

<sup>3</sup> Department of Social Medicine and Public Health, Medical University of Warsaw, Poland

corresponding author Sylwia Szafraniec-Buryło, e-mail: [sylwia.szafraniec@imid.med.pl](mailto:sylwia.szafraniec@imid.med.pl)

### **Background**

In Poland, the vaccination rate against COVID-19 varies significantly depending on the region of the country, with the lowest values in the east of the country.

### **Aim of the study**

To investigate whether the vaccination rate against COVID-19 in the eastern regions of Poland differs in relation with the DEGURBA (Degree of Urbanisation) classification of a given center.

### **Methodology**

Medical Diagnostic Centre in Siedlce (CMD) is located in Eastern Mazovia region in Poland, mainly in rural areas with DEGURBA 3 classification. Vaccination rate according to age (10-years intervals) was recorded for 18 centers belonging to CMD as of 24<sup>th</sup> July 2021.

### **Results**

Out of 18 centers, 14 were classified as DEGURBA 3, 1 was classified as DEGURBA 2 and 3 were classified as DEGURBA 1. The average vaccination coverage in the population over 12 years of age in 18 centers was 43%. In patients 75+ the average vaccination rate was 57%. The vaccination coverage in every age group and the average immunization coverage of the population over 12 years of age in a given center differed to a very small extent (40%-55%) between centers, except for two centers classified as DEGURBA 3, where both the average immunization coverage of the population and, in particular, immunization coverage among people aged 75+ was significantly lower than in other centers (19%; 34% and 15%; 44%, accordingly).

### **Conclusions**

The influence on vaccination coverage depends on many factors, including local and social factors. The 2 centers with lower immunization coverage were located close to 14 other centers classified as DEGURBA 3, that were part of the same organization (CMD) and following similar standards of care. The reasons for the significant difference in immunization coverage require further research, not only on the basis of distance from major centers or population in a given area.

### **Key words**

vaccination coverage, DEGURBA, rural areas, COVID-19 pandemic

## Abstract 53P: Stress and the impact of the Covid19-pandemic on obesity progression

### **Stress and the impact of the Covid19-pandemic on obesity progression**

Victoria I Tkachenko<sup>1</sup>, Taisia O Bagro<sup>2</sup>

<sup>1</sup> Professor of Family Medicine Department, Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine; Chair of European WWPWF, EURIPA IAB member, [witk@ukr.net](mailto:witk@ukr.net)

<sup>2</sup> PhD-student of Family Medicine Department, Shupyk National Healthcare University of Ukraine, Kyiv

Corresponding author's email: [witk@ukr.net](mailto:witk@ukr.net)

**Background:** Obesity is reaching the scale of a pandemic and is growing progressively every year. Due to quarantine and lockdown measures associated with the COVID-19 pandemic a large number of patients are in a state of constant stress, hypodynamics, hypoxemia, contributing to the increase in prevalence of this



nosology. A detailed analysis to examine the impact of stress and other factors on the development and progression of obesity during the pandemic will be instrumental to find effective new approaches to obesity prevention in primary care.

**Aim** of the study is to analyse the influence of stress and other factors of the pandemic on the development and progression of obesity, its pathogenic interconnection and to find effective approaches of obesity prevention in primary care.

**Methodology:** To begin with a systematic review of the literature in the field of obesity, stress and its pathogenetics was conducted for the period of 2015-2020 using specific keywords: pathogenesis of obesity, overweight, stress, hypothalamic-pituitary-adrenal system, orexin, and serotonin. Two databases, PubMed and Cochrane were searched. A systematic analysis methodology was used. The proposed next step of the study is to conduct a survey and cohort study to collect clinical and laboratory data on the relationship between stress induced by the pandemic and obesity.

**Results:** 58131 publications were found using the specific keywords, from which 29 were selected as being relevant, including 16 systematic reviews, 2 meta-analyses, 3 multicenter studies and 8 cohort studies. The review showed that the central link in the pathogenesis of obesity is the hypothalamus as it regulates eating behaviour, contains the centres for hunger, satiety as well as thermoregulation, sleep/vitality, stress reactions, fertility and the production of orexins (hypocretins) and serotonin. Stress increases orexin production, which causes hyperphagia, hypertension, addictions, mental disorders and inhibits  $\alpha$ -melanocyte-stimulating hormone ( $\alpha$ -MSH), which in turn activates the saturation centre. Stress also induces wakefulness and leads to sleep disorders, which deepens hormonal disorders related to obesity. The restrictions during quarantine, fear caused by the pandemic, anti-terrorist acts, economic crisis, and so on, caused a lot of stress, increasing the stress hormones and decreasing serotonin. The impact of these changes and its consequences for obese patients will be examined in the next stage of our study.

**Conclusions.** This review of the literature showed that the increase of stress during the pandemic, its effect on the hypothalamus, which is key in the metabolic and somatoform pathogenic changes, and how this affects the development and progression of obesity could be key to develop new, effective preventive approaches to obesity.

**Keywords:** obesity, pandemic, stress, hypothalamic-pituitary-adrenal system, orexin, serotonin

# EURIPA XI Rural Health Forum, 6- 8 October 2022, Sicily, Italy

Theme:

What have we learnt in rural practice to prepare for the next crisis?  
The changes in rural primary care after the pandemic.



**EURIPA XI Rural Health Forum**

**6- 8 October 2022, Sicily, Italy**

**Theme**

**What have we learnt in rural practice to prepare for the next crisis?  
The changes in rural primary care after the pandemic.**

**Ferdinando Petrazzuoli MD, PhD (IT);  
EURIPA Forum Scientific Committee**