



EUROPEAN GENERAL PRACTICE  
RESEARCH NETWORK



---

## **Abstract Book**

---

**11 - 14 May 2023**

**[www.egprn.org](http://www.egprn.org)**

# COLOPHON

Abstract Book of the 96th European General Practice Research Network Meeting  
Split, Croatia 11 - 14 May 2023

## Editor-in-Chief:

Prof. Dr. Lieve Peremans - Belgium

## Editors:

- Dr. Tiny van Merode - The Netherlands
- Prof. Dr. Thomas Frese - Germany
- Prof. Dr. Ana Luisa Neves - Portugal
- Prof. Dr. Radost Assenova - Bulgaria
- Prof. Dr. Pemra C. Unalan - Turkey
- Prof. Dr. Ayse Caylan - Turkey
- Prof. Dr. Jean Yves Le Reste - France

## Scientific Committee:

- Chair: Prof. Dr. Lieve Peremans - Belgium
- Prof. Dr. Hans Thulesius
- Assoc. Prof. Venija Cerovečki
- Prof. Dr. Jean Yves Le Reste
- Prof. Dr. Bohumil Seifert
- Assoc. Prof. Goranka Petricek

## Editorial Office:

- Mrs. Mine Kaya Bezgin, EGPRN Secretary, e-mail: [office@egprn.org](mailto:office@egprn.org)
- Mr. Burak Usgurlu, EGPRN IT Manager, e-mail: [burak@uskur.com.tr](mailto:burak@uskur.com.tr)

ISBN 978-90-833732-1-8

First Published: 22 September 2023

This book is available on the EGPRN website: [www.egprn.org](http://www.egprn.org)

## Table of Contents

<b>Colophon</b> .....	2	.....	33
Colophon .....	2	Correlation between obstructive sleep apnea and depression, anxiety, affective temperaments and lifestyle factors.....	34
<b>Foreword</b> .....	7	Increased fracture risk among children and adolescents with celiac disease: a nationwide cohort study.....	35
Foreword .....	7	The Relationship Between Social Media Addiction and Orthorexia Nervosa in Adult Individuals Admitted to Obesity Polyclinic .....	36
<b>Programme Overview</b> .....	8	An in-depth look at family-centred care in the primary care consultation.....	37
Programme Overview .....	8	Development of a tailored intervention responding to the needs expressed by caregivers of persons living with dementia.....	38
<b>Programme</b> .....	11	How to Overcome Barriers to Information and Communication on HPV Vaccination? A Swot Analysis Based on the Opinions of Practicing Clinicians .....	39
Thursday, 11 May 2023.....	11	Imposter Syndrome Amongst Medical Students and Resident Doctors in Croatia .....	40
Friday, 12 May 2023.....	12	Patients lists: a tricky balance .....	41
Saturday, 13 May 2023 .....	15	Present and future of Home Care by GPs in the Province of Modena (Italy): a descriptive study with a qualitative insert, the MAGMA Home Study....	42
Sunday, 14 May 2023.....	19	Social Prescribing in Primary Care across Europe.....	43
<b>Keynotes</b> .....	20	Study Protocol for Treatment of Insomnia in Primary Care Study (TIP Study) .....	44
International Keynote Lecture .....	20	The Introduction of Green Prescription into Family Medicine Practices in Croatia.....	45
Local Keynote Lecture .....	21	Validating a toolkit to guide the implementation of high-quality virtual primary care: an international eDelphi study .....	46
<b>Abstracts</b> .....	22	How the COVID-19 pandemic affected the total annual time spent by family physicians managing common diagnoses.....	47
European general practitioners'/family physicians' attitudes towards person-centered care and factors that influence its implementation in everyday practice-preliminary results .....	22	Views about COVID-19 vaccination in Europe: results from a general population survey (the PuV-CoVa study).....	48
Lowering long-term use of benzodiazepine receptor agonists: a primary care perspective .....	23	Maltreatment of older people: challenges for patient-centred care in general practice.....	49
Person centered care for patients with long covid .....	24	The role of health professionals in providing patient-centered and equitable care to LGBTIQ+ patients: translation, cultural adaptation and validation of the Greek version of Lesbian, Gay, Bisexual and Transgender Development of Clinical Skills Scale .....	50
Evaluating teaching quality in family medicine practice: A medical student perspective in Switzerland.....	25	Using a QR-Code on a poster in primary care waiting rooms as a medium to screen for intimate partner violence .....	51
Health-related quality of life during the pandemic in Germany: a web-based longitudinal study.....	26	Longitudinal Web-Based Study on Psychological Outcomes Amongst General Practitioners and Psychiatrists in Croatia and Effects of Intervention in a Cohort Group.....	52
Mental health of general practitioners and family medicine specialists two years after the beginning of the COVID-19 pandemic: results from a European survey.....	27	Patients with Medically Unexplained Symptoms in Primary Care: Perception of the Patients and their Doctors	
Demographic and behavioral characteristics of populations vaccinated against Covid-19 with and without prior influenza vaccines, aged 65 and above: a combined cross-sectional and survey study.....	28		
Intermediate care in caring for dementia, the point of view of general practitioners: A key informant survey across Europe .....	29		
What is the prevalence of anxiety and depression in internally and externally displaced Ukrainian refugees? A European survey.....	30		
An e-learning course on the patient-centred approach to colorectal cancer screening: GPs first choice!.....	31		
Innovative population-based strategies for primary prevention of cardiovascular disease: A 2-year randomised control trial (RCT) evaluating behavioral change led by community champions versus brief advice. ....	32		
Psychological determinants of vaccination behavior against COVID-19 and influenza of chronically ill in German primary care – a cross-sectional survey			

..... 53	Bridging the gap between theory and practice in general medicine..... 76
Psychological Safety and Team Performance in Primary Care..... 54	Clinical Rotation at the Primary Level of Care for First-Year Medical and Dental Medicine Students.....77
A virtual community of practice to improve the empowerment of people with ischaemic heart disease: a randomized controlled trial..... 55	Is there any change in the Career Perceptions of Family Medicine Residents After Working in COVID-19 Clinics During the Pandemic? ..... 78
Screening Elderly For Risks Associated With Falls and Acute Health Incidences..... 56	Medical deserts and disparities in population health within the European Union ..... 79
Structured telephone intervention to improve the self-management in COPD patients in primary level of health care ..... 57	Photovoice-inspired qualitative analysis of photographs from family physicians' practice in Italy: a pilot study ..... 80
The treatment results of hypercholesterolemia and costs of care for prediabetics compared with type 2 diabetics in Southwest Finland..... 58	The peculiarities of primary healthcare at the vulnerable areas of Ukraine ..... 81
Eurodata Study: Covid-19 Vaccination Pathway and the Role of Primary Care in 27 European Countries..... 59	Digital Health applications (DiGA) to support psychological wellbeing – A systematic review protocol..... 82
Long-COVID psychological and neuropsychological symptoms ..... 60	Digital TRANSition and dlgiTal resilience in ONcology..... 83
Post-COVID-19 brain fog assessment in family medicine, a pilot study ..... 61	Fracture Incidence in 1233 Elderly Women and Risk Factors for Hip Fracture. A 20-year Population Based Follow-Up Study in Primary Care in Sweden..... 84
PRICOV-19 study Hungarian Results..... 62	Impact of digital-first technologies on quality and safety of care ..... 85
Primary health care during the COVID 19 pandemic in Croatia..... 63	Patient and Public Involvement (PPI) in research: Concept of a cross-indication patient advisory board in primary care - an example from Germany..... 86
Vaccine hesitancy in poorer people: A qualitative study on attitudes, behaviors, and barriers to COVID-19 vaccination among beneficiaries of a social supermarket of a Greek island community..... 64	Patient and Public Involvement in General Practice Research: Concepts of patient and public involvement applied in the Networks of the Initiative of German Practice-Based Research Networks - DESAM-ForNet ..... 87
Diabetes control in the community, under the management of a diabetes-clinic nurse specialist, and the effect of a parallel diabetologist advice ..... 65	Diagnostic value of screening tests: Questionnaires, Peak flow-meter and Microspirometer in early detection of individuals with chronic obstructive pulmonary disease in primary health care in North Macedonia ..... 88
Interrelation of psychosocial and clinical-pathogenetic changes in obese patients ..... 66	Exploration of the course of control in domestic violence against women, from its establishment of the influence to its awareness..... 89
Perceiving financial hardship: mental health outcomes and lifestyles choices ..... 67	Facele study ..... 90
Perceptions of illness in patients diagnosed with type 2 diabetes mellitus..... 68	Mammography screening - motivational factors and obstacles among women in primary care..... 91
Problematic continuity of care for diabetic patients in family medicine – can education of patients help?..... 69	The Frequency of Depression Among the General ICPC-2 Coding of Internally Displaced Patients Appeals to Uzhgorod “Interfamily” Clinic in Ukraine..... 92
General Practitioners' prescription of psychotropic drugs among youth in Belgium..... 70	What cancer screening programmes are there in different European countries, and how are General Practitioners involved in them? A European survey... 93
Patient-Centred Deprescribing of Potentially Inadequate Medication in Patients with Polypharmacy (PARTNER) – study protocol of a cluster randomized trial..... 71	Development and evaluation of a mix-method intervention involving training and a new consultation model for patients with palliative care needs in primary care – Before-After Study ..... 94
Polypharmacy in the elderly with multimorbidity and the manifestation of cognitive impairments and functional deficit ..... 72	Pilot implications for system implementation of motivational interviewing based alcohol screening
Self-medication practices to prevent or treat COVID-19 during the pandemic. The case of a rural region of central Greece..... 73	
Self-reported data on medication adherence regarding lipid lowering drugs, antihypertensives and glucose lowering drugs in family medicine in Croatia 74	
Training needs of primary health care professionals on perinatal grief ..... 75	

and brief intervention in primary health care in Slovenia	95
.....	95
Turkish Validity and Reliability Study of the "Scale for BioPsychoSocial Dimension of Family Physician' Work" .....	96
Changes in work tasks and organization of general practice in Norway during the COVID-19 pandemic: results from the Pricov-19 study .....	97
Organizing outreach work for vulnerable patients in general practice during COVID-19: results from the cross-sectional PRICOV-19 study in 38 countries.....	98
Social participation and mental health of immunocompromised individuals during the COVID-19 pandemic – Results of a longitudinal observational study over three time points.....	99
Trapped in a double cage: Building resilience in cancer caregivers endangered by the COVID-19 pandemic.....	100
Cocreating a person-centred integrated care for people of low socio-economic status. ....	101
Exploring the general practitioners' point of view about clinical scores: a qualitative study.....	102
Patient-centred interprofessional collaboration and integration in primary care. A qualitative study.	103
A COVID-19 Conundrum – Can the reported skin manifestations of COVID-19 be explained by re- activation of herpes virus?.....	104
An IMP to "take care" of COPD! .....	105
Arterial stiffness and lower extremities arterial disease – cross-sectional study of general practice patients .....	106
<b>Author Index</b> .....	107



## Foreword

### Person-centred care and its outcomes in primary care

Dear colleagues and members of EGPRN,

The theme “Person-centred care and its outcomes in primary care” is reflecting the importance of applying person-centred care in everyday practice, but also of measuring the objective outcomes of that care.

Person-centred care (PCC) has been associated with many positive outcomes of care: patients' emotional state, satisfaction and empowerment, medication adherence, reduction of malpractice, complaints and improvements in physician satisfaction and consultation time. Regardless of the specific context of care that is highly dependent on the patient, physician and healthcare system characteristics, PCC represents a core value of family medicine that should be implemented in family physicians' everyday work across Europe. Yet despite growing recognition of the importance of PCC, as well as evidence of its effectiveness in contributing to other system goals such as efficiency and effectiveness, the nation's health care system falls short of achieving it. Further more, data from national and international studies indicate that patients often rate hospitals and medical care providers highly, but report significant problems in gaining access to critical information, understanding treatment options, getting explanations regarding medications, and receiving responsive, compassionate service from their health care professionals.

Covid-19 has challenged nearly everything about health care delivery, including the experiences of patients and families and health care professionals. In the midst of Covid-19, patient trust is on the line, virtual care has been embraced as never before. Nearly everything has become virtual; families visit with each other over Skype given visitation restrictions, and barriers to virtual reimbursement and accessibility have come down, at least temporarily. Post-Covid-19, with the virtual platforms and apps that have been stood up between clinicians and the patient, we often don't even have to touch a patient anymore, physically or emotionally. It may interfere with collection of psychosocial and emotional information, and therefore may interfere with development of supportive, healing relationships. On the other hand, patient access to the electronic health record and messaging functions may improve communication, patient empowerment, engagement, and self-management.

Redesigning patient experience measurement and assessing our organizations' readiness to deliver on the promise of patient centredness will empower the health care professionals to deliver not just care, but actual caring. There was substantial evidence that physicians' beliefs and attitudes were demonstrated as significant physician-related factors influencing patient participation in medical decisions. Although researchers used different approaches to implement PCC interventions, there has been no comparison of patient centredness and its outcomes in different European countries. Therefore, we need good large databases and interventional studies on population level.

### Host Organising Committee

- Assoc. prof. Goranka Petriček  
MD, PhD, Croatia, Department of Family Medicine, School of Medicine University of Zagreb, national representative EGPRN
- Assoc. prof. Marion Tomičić  
MD, PhD, Head of Department of Family Medicine, School of Medicine University of Split
- Assoc. prof. Venija Cerovečki  
MD, PhD, Head of Department of Family Medicine, School of Medicine University of Zagreb; national keynote on research In Croatia
- Assoc. prof. Zlata Ožvačić Adžić  
MD, PhD, Department of Family Medicine, School of Medicine University of Zagreb
- Marko Rađa  
MD, GP, Department of Family Medicine, School of Medicine University of Split
- Maja Vrebalov Cindro  
MD, GP, Department of Family Medicine, School of Medicine University of Split
- Sanja Žužić Furlan  
MD, GP Department of Family Medicine, School of Medicine University of Split

# Programme Overview

## THURSDAY, 11TH MAY 2023

Time	School Hall (Building A)	B103 (Building B)	A115 ( Building A)	A101 (Building A)	A102 (Building A)	A020 (Building A)
9:30	Executive Board Meeting 09:30-13:00					
10:00						
11:00						
12:00						
13:00	<b>Lunch Break</b> (Price is not included in the conference fee. You may purchase lunch at the Student Restaurant&Cafe)					Collaborative Study Group Meeting: Digital TRANSition and dIgiTal resllience in Oncology 13:00-15:00
14:00		Council Meeting 14:00-17:00	Collaborative Study Group Meeting: PuV-CoVa 14:00-16:00			
14:30						
15:00						
15:30				Workshop 1 How to Integrate Implementation Science into your Research 15:30-18:00	Workshop 2 GRADE Methodology and Its Application in Clinical Practice Guidelines 15:30-18:00	
16:00						
17:00		Research Strategy Committee 17:00-18:00	Educational Committee 17:00-18:00			PR & Communication Committee 17:00-18:00
17:30						
18:00-19:30	<b>Welcome Reception and Opening Cocktail</b> Location: Ground Floor (Building B)					



<b>FRIDAY, 12TH MAY 2023</b>	
08:00-08:30	Registration - 1st floor (Building B)
08:30-08:45	<b>B100 (1st floor, Building B)</b>
	Opening of the Meeting by EGPRN Chairperson Dr. Tiny van Merode
	Welcome by Local Host Assoc. Prof. Dr. Goranka Petricek
	International Keynote Lecture Prof. Dr. Igor Švab
	Plenary Session - Theme Papers
11:10-11:40	Coffee Break - For regular attenders Foyer (Ground floor and first floor, Building B)
11:10-11:40	Blue Dot Coffee Break - For the first time attenders Student Cafe
11:40-13:10	<b>B100 (1st floor, Building B)</b>
	Parallel Session A - Freestanding Papers: Quality in Practice and Personal Life
11:40-13:10	<b>B104 (Ground floor, Building B)</b>
	Parallel Session B - Freestanding Papers: Care for Vulnerable Populations
13:10-14:10	Lunch - Foyer (Ground floor and first floor, Building B)
13:10-14:10	<b>A020 (Building A)</b>
	Elevator Pitch - (Lunch boxes available) Join us to share your research ideas - or learn about other people's research ideas! If you have a new research idea, and haven't sent an abstract to present it at the Split EGPRN, why not present it to us as an 'elevator pitch'?
14:10-15:40	<b>B100 (1st floor, Building B)</b>
	Parallel Session C - Theme Papers: Prevention
14:10-15:40	<b>B104 (Ground floor, Building B)</b>
	Parallel Session D - Freestanding Papers: Correlation Studies
15:40-16:00	Coffee Break - Foyer (Ground floor and first floor, Building B)
16:00-17:30	Parallel Session E - One Slide Five Minute Presentations
16:00-17:30	Parallel Session F - Freestanding Papers: COVID-19
17:30-17:40	Summary of the day Prof. Dr. Igor Švab
17:50-18:50	<b>A101 (Building A)</b>
	EGPRN Collaborative Study Group Meeting: PHC-Eurodata-Covid19
17:50-18:50	<b>A102 (Building A)</b>
	EGPRN Collaborative Study Group Meeting: Örenäs
18:00	<b>Practice Visits</b>
	Location: 3 different options. Online pre-registration required, space is limited. The groups will leave from the conference venue.

<b>SATURDAY, 13TH MAY 2023</b>			
<b>08:30-09:10</b>	<b>B100 (1st floor, Building B)</b>		
	National Keynote Lecture Prof. Venija Cerovečki		
<b>09:10-10:40</b>	<b>B100 (1st floor, Building B)</b>		<b>B104 (Ground floor, Building B)</b>
	Parallel Session G - Theme Papers: Vulnerable People	Parallel Session H - Web Based Research Course Presentations	
<b>10:40-11:00</b>	Coffee Break - Foyer (Ground floor and first floor, Building B)		
<b>11:00-12:30</b>	<b>Poster Sessions (Ground, 1st and 2nd floor of Building B)</b>		
	Poster Session 1: Cardiovascular and Pulmonary Diseases	Poster Session 2: COVID-19	Poster Session 3: Metabolic Diseases and Life Style Prevention
	Poster Session 4: Treatment and Safety of Care	Poster Session 5: Organisation of General Practice	Poster Session 6: Research Methodology
	Poster Session 7: Screening and Diagnosis		
<b>12:30-13:30</b>	Lunch - Foyer (Ground floor and first floor, Building B)		<b>A116 (Building A)</b> 13:00 - 13:30 EGPRN Collaborative Study Group Meeting: Person- Centered Primary Care
<b>13:30-15:30</b>	<b>B100 (1st floor, Building B)</b>		<b>B104 (Ground floor, Building B)</b>
	Parallel Session I - Theme Papers	Parallel Session J - Freestanding papers: COVID-19	
<b>15:30-15:50</b>	Coffee Break - Foyer (Ground floor and first floor, Building B)		
<b>15:50-17:30</b>	<b>B100 (1st floor, Building B)</b>		<b>B104 (Ground floor, Building B)</b>
	Parallel Session K - Theme Papers	Parallel Session L - Special Methodology Session	
<b>17:30-17:40</b>	Summary of the day Prof. Venija Cerovečki		
<b>17:40-18:00</b>	Chairperson's Report by EGPRN Chair Tiny van Merode		
<b>18:00-18:15</b>	Presentation of the Poster-Prize for the best poster presented		
<b>18:15-18:25</b>	Introduction to the next EGPRN meeting		
<b>18:25-18:30</b>	Closing		
<b>20:30</b>	Social Night with Dinner, Dance and Music! Pre-booking online essential. Location: The Diocletian Palace Address: Dioklecijanova 1, 21000, Split.		

# Programme

## Thursday, 11 May 2023

09:30 - 13:00	<b>EGPRN Executive Board Meeting</b> Location: School Hall (Building A)  Only for Members of the Executive Board.
13:00 - 15:00	<b>EGPRN Collaborative Study Group Meeting: Digital TRANSition and dlgiTal resllience in ONcology</b> Location: A020 (Building A)
13:00 - 14:00	<b>Lunch</b>  Price is not included in the conference fee. You may purchase lunch at the Student Restaurant and Cafe.
14:00 - 16:00	<b>EGPRN Collaborative Study Group Meeting: PuV-CoVa</b> Location: A115 (Building A)
14:00 - 17:00	<b>EGPRN Council Meeting</b> Location: B103 (Building B)  Only for EGPRN Executive Board and EGPRN Council members.
15:30 - 18:00	<b>Workshop 1: How to Integrate Implementation Science into your Research: Strategies, Resources, and Practical Applications</b> Location: A101 (Building A)
15:30 - 18:00	<b>Workshop 2: GRADE Methodology and Its Application in Clinical Practice Guidelines</b> Location: A102 (Building A)
17:00 - 18:00	<b>EGPRN Committee Meetings and Working Groups</b> <ul style="list-style-type: none"><li>• EGPRN Research Strategy Committee - B103 (Building B)</li><li>• EGPRN Educational Committee - A115 (Building A)</li><li>• EGPRN PR &amp; Communication Committee - A020 (Building A)</li></ul>
18:00 - 19:30	<b>Welcome Reception and Opening Cocktail</b> Location: Ground Floor (Building B)  Prebooking online is required.

**Friday, 12 May 2023**

08:00 - 08:30	<b>Registration</b> Location: 1st floor (Building B)
08:30 - 08:45	<b>Opening of the Meeting by EGPRN Chairperson</b> Location: B100 (1st floor, Building B) <ul style="list-style-type: none"><li>• Tiny Van Merode (Speaker)</li></ul>
08:45 - 09:00	<b>Welcome by Local Host</b> Location: B100 (1st floor, Building B) <ul style="list-style-type: none"><li>• Goranka Petricek (Speaker)</li></ul>
09:00 - 09:40	<b>International Keynote Lecture</b> Location: B100 (1st floor, Building B) <ul style="list-style-type: none"><li>• Tiny Van Merode (Chair)</li><li>• Person centered care, a core concept in family medicine. - Igor Švab (Keynote Speaker)</li></ul>
09:40 - 11:10	<b>Plenary Session - Theme Papers</b> Location: B100 (1st floor, Building B) <ul style="list-style-type: none"><li>• Tiny Van Merode (Chair)</li><li>• European general practitioners'/family physicians' attitudes towards person-centered care and factors that influence its implementation in everyday practice-preliminary results - Goranka Petricek</li><li>• Lowering long-term use of benzodiazepine receptor agonists: a primary care perspective - Kristien Coteur</li><li>• Person centered care for patients with long covid - Jako Burgers</li></ul>
11:10 - 11:40	<b>Blue Dot Coffee Break</b> Location: Student Cafe  For the first time attenders.
11:10 - 11:40	<b>Coffee Break</b> Location: Foyer (Ground floor and first floor, Building B)  For the regular attenders.
11:40 - 13:10	<b>Parallel Session A - Freestanding Papers: Quality in Practice and Personal Life</b> Location: B100 (1st floor, Building B) <ul style="list-style-type: none"><li>• Pemra C. Unalan (Chair)</li><li>• Evaluating teaching quality in family medicine practice: A medical student perspective in Switzerland - Stefania Di Gangi</li><li>• Health-related quality of life during the pandemic in Germany: a web-based longitudinal study - Dominik Schröder</li><li>• Mental health of general practitioners and family medicine specialists two years after the beginning of the COVID-19 pandemic: results from a European survey - Marija Zafirovska</li></ul>
11:40 - 13:10	<b>Parallel Session B - Freestanding Papers: Care for Vulnerable Populations</b> Location: B104 (Ground floor, Building B)

- Jean Yves Le Reste (Chair)
- Demographic and behavioral characteristics of populations vaccinated against Covid-19 with and without prior influenza vaccines, aged 65 and above: a combined cross-sectional and survey study - Anthony Heymann
- Intermediate care in caring for dementia, the point of view of general practitioners: A key informant survey across Europe - Ferdinando Petrazzuoli
- What is the prevalence of anxiety and depression in internally and externally displaced Ukrainian refugees? A European survey. - Jānis Blumfelds

13:10 - 14:10

**Elevator Pitch**

Location: A020 (Building A)

(Lunch boxes available)

Join us to share your research ideas - or learn about other people's research ideas!

If you have a new research idea, and haven't sent an abstract to present it at the Split EGPRN, why not present it to us as an 'elevator pitch'?

'Elevator pitches' are usually used to 'sell' a business idea, but here you will have 2 minutes to tell us about your ideas for a new research study. [Click here for more information.](#)

13:10 - 14:10

**Lunch**

Location: Foyer (Ground floor and first floor, Building B)

14:10 - 15:40

**Parallel Session C - Theme Papers: Prevention**

Location: B100 (1st floor, Building B)

- Tuomas Koskela (Chair)
- An e-learning course on the patient-centred approach to colorectal cancer screening: GPs first choice! - Amélie Aïm-Eusébi
- Innovative population-based strategies for primary prevention of cardiovascular disease: A 2-year randomised control trial (RCT) evaluating behavioral change led by community champions versus brief advice. - Delphine Le Goff
- Psychological determinants of vaccination behavior against COVID-19 and influenza of chronically ill in German primary care – a cross-sectional survey - Linda Sanftenberg

14:10 - 15:40

**Parallel Session D - Freestanding Papers: Correlation Studies**

Location: B104 (Ground floor, Building B)

- Marion Tomicic (Chair)
- Correlation between obstructive sleep apnea and depression, anxiety, affective temperaments and lifestyle factors - Peter Torzsa
- Increased fracture risk among children and adolescents with celiac disease: a nationwide cohort study - Galia Zacay
- The Relationship Between Social Media Addiction and Orthorexia Nervosa in Adult Individuals Admitted to Obesity Polyclinic - Hilal Özkaya

15:40 - 16:00

**Coffee Break**

Location: Foyer (Ground floor and first floor, Building B)

16:00 - 17:30

**Parallel Session E - One Slide Five Minute Presentations**

Location: B100 (1st floor, Building B)

- Ferdinando Petrazzuoli (Chair)
- Mehmet Ungan (Chair)
- An in-depth look at family-centred care in the primary care consultation - Heather L Rogers
- Development of a tailored intervention responding to the needs expressed by caregivers of persons living with dementia - Clarisse Dibao

- How to Overcome Barriers to Information and Communication on HPV Vaccination? A Swot Analysis Based on the Opinions of Practicing Clinicians - Mehmet Ugan
- Imposter Syndrome Amongst Medical Students and Resident Doctors in Croatia - Sunčana Vlah Tomičević
- Patients lists: a tricky balance - Inês Pinheiro
- Present and future of Home Care by GPs in the Province of Modena (Italy): a descriptive study with a qualitative insert, the MAGMA Home Study. - Alice Serafini
- Social Prescribing in Primary Care across Europe - Nataša Mrduljaš-Đujić
- Study Protocol for Treatment of Insomnia in Primary Care Study (TIP Study) - Ansa Rantanen
- The Introduction of Green Prescription into Family Medicine Practices in Croatia - Lorena Bosnar
- Validating a toolkit to guide the implementation of high-quality virtual primary care: an international eDelphi study - Ana Luisa Neves

16:00 - 17:30

**Parallel Session F - Freestanding Papers: COVID-19**

Location: B104 (Ground floor, Building B)

- Philippe-Richard Domeyer (Chair)
- How the COVID-19 pandemic affected the total annual time spent by family physicians managing common diagnoses - Shlomo Vinker
- Views about COVID-19 vaccination in Europe: results from a general population survey (the PuV-CoVa study) - Aleksandar Zafirovski

17:30 - 17:40

**Summary of the day**

Location: B100 (1st floor, Building B)

- Igor Švab (Keynote Speaker)

17:40 - 17:50

**End of the conference day**

17:50 - 18:50

**EGPRN Collaborative Study Group Meeting: Örenäs**

Location: A102 (Building A)

17:50 - 18:50

**EGPRN Collaborative Study Group Meeting:PHC-Eurodata-Covid19**

Location: A101 (Building A)

18:00 - 19:00

**Practice Visits in Split**

Location: 3 different options.

Online pre-registration required, space is limited. The groups will leave from the conference venue.

Please see <https://meeting.egprn.org/page/practice-visits-1>

**Saturday, 13 May 2023**

08:30 - 09:10

**National Keynote Lecture**

Location: B100 (1st floor, Building B)

- Goranka Petricek (Chair)
- Family medicine as a scientific and professional discipline in Croatia - Venija Cerovečki (Keynote Speaker)

09:10 - 10:40

**Parallel Session G: Theme Papers: Vulnerable People**

Location: B100 (1st floor, Building B)

- Radost Assenova (Chair)
- Maltreatment of older people: challenges for patient-centred care in general practice. - Naomi Aerts
- The role of health professionals in providing patient-centered and equitable care to LGBTIQ+ patients: translation, cultural adaptation and validation of the Greek version of Lesbian, Gay, Bisexual and Transgender Development of Clinical Skills Scale - Ilias Pagkozidis
- Using a QR-Code on a poster in primary care waiting rooms as a medium to screen for intimate partner violence - Christophe Berkhout

09:10 - 10:40

**Parallel Session H: Web Based Research Course Presentations**

Location: B104 (Ground floor, Building B)

- Mehmet Urgan (Chair)
- Ferdinando Petrazzuoli (Chair)
- Shlomo Vinker (Chair)
- Longitudinal Web-Based Study on Psychological Outcomes Amongst General Practitioners and Psychiatrists in Croatia and Effects of Intervention in a Cohort Group - Sunčana Vlah Tomičević
- Patients with Medically Unexplained Symptoms in Primary Care: Perception of the Patients and their Doctors - Martin Seifert
- Psychological Safety and Team Performance in Primary Care - Ricardo Antunes

10:40 - 11:00

**Coffee Break**

Location: Foyer (Ground floor and first floor, Building B)

11:00 - 12:30

**Poster Session 1: Cardiovascular and Pulmonary Diseases**

- Hilde Bastiaens (Chair)
- A virtual community of practice to improve the empowerment of people with ischaemic heart disease: a randomized controlled trial - Ana Isabel Gonzalez-Gonzalez
- Screening Elderly For Risks Associated With Falls and Acute Health Incidences - Didem Kafadar
- Structured telephone intervention to improve the self-management in COPD patients in primary level of health care - Azra Gicic
- The treatment results of hypercholesterolemia and costs of care for prediabetics compared with type 2 diabetics in Southwest Finland - Merja Laine

11:00 - 12:30

**Poster Session 2: COVID-19**

- Davorina Petek (Chair)
- Eurodata Study: Covid-19 Vaccination Pathway and the Role of Primary Care in 27 European Countries - Sara Ares Blanco
- Long-COVID psychological and neuropsychological symptoms - Raquel Gomez Bravo
- Post-COVID-19 brain fog assessment in family medicine, a pilot study - Vanja Lazic
- PRICOV-19 study Hungarian Results - Zoltán Lakó-Futó
- Primary health care during the COVID 19 pandemic in Croatia - Asja Ćosić Divjak
- Vaccine hesitancy in poorer people: A qualitative study on attitudes, behaviors, and

barriers to COVID-19 vaccination among beneficiaries of a social supermarket of a Greek island community - Eleni Jelastopulu

11:00 - 12:30

### Poster Session 3: Metabolic Diseases and Life Style Prevention

- Ferdinando Petrazzuoli (Chair)
- Diabetes control in the community, under the management of a diabetes-clinic nurse specialist, and the effect of a parallel diabetologist advice - Joseph Azuri
- Interrelation of psychosocial and clinical-pathogenetic changes in obese patients - Taisiia Bagro
- Perceiving financial hardship: mental health outcomes and lifestyles choices - Joan Llobera Canaves
- Perceptions of illness in patients diagnosed with type 2 diabetes mellitus - Lucija Gosak
- Problematic continuity of care for diabetic patients in family medicine – can education of patients help? - Juraj Jug

11:00 - 12:30

### Poster Session 4: Treatment and Safety of Care

- Clarisse Dibao (Chair)
- General Practitioners' prescription of psychotropic drugs among youth in Belgium - Sherihane Bensemmane
- Patient-Centred Deprescribing of Potentially Inadequate Medication in Patients with Polypharmacy (PARTNER) – study protocol of a cluster randomized trial - Sophie Peter
- Polypharmacy in the elderly with multimorbidity and the manifestation of cognitive impairments and functional deficit - Marta Tundzeva
- Self-medication practices to prevent or treat COVID-19 during the pandemic. The case of a rural region of central Greece. - Maria Bakola
- Self-reported data on medication adherence regarding lipid lowering drugs, antihypertensives and glucose lowering drugs in family medicine in Croatia - Ino Kermc
- Training needs of primary health care professionals on perinatal grief - Carolina Allegra Wagner

11:00 - 12:30

### Poster Session 5: Organisation of General Practice

- Torunn Bjerve Eide (Chair)
- Bridging the gap between theory and practice in general medicine - Lisa Voggenberger
- Clinical Rotation at the Primary Level of Care for First-Year Medical and Dental Medicine Students - Marija Petek Šter
- Is there any change in the Career Perceptions of Family Medicine Residents After Working in COVID-19 Clinics During the Pandemic? - İbrahim Halil Özden
- Medical deserts and disparities in population health within the European Union - Robert Likic
- Photovoice-inspired qualitative analysis of photographs from family physicians' practice in Italy: a pilot study - Irene Bruschi
- The peculiarities of primary healthcare at the vulnerable areas of Ukraine - Albina Zharkova

11:00 - 12:30

### Poster Session 6: Research Methodology

- Jako Burgers (Chair)
- Digital Health applications (DiGA) to support psychological wellbeing – A systematic review protocol - Annika Schmitz
- Digital TRANSition and dlgiTal resilience in ONcology - Noemí López
- Fracture Incidence in 1233 Elderly Women and Risk Factors for Hip Fracture. A 20-year Population Based Follow-Up Study in Primary Care in Sweden. - Hans Thulesius
- Impact of digital-first technologies on quality and safety of care - Joana Carvalho
- Patient and Public Involvement (PPI) in research: Concept of a cross-indication patient advisory board in primary care - an example from Germany - Susanne Kersten
- Patient and Public Involvement in General Practice Research: Concepts of patient and public involvement applied in the Networks of the Initiative of German Practice-Based Research Networks - DESAM-ForNet - Christine Kersting



11:00 - 12:30

**Poster Session 7: Screening and Diagnosis**

- Anthony Heymann (Chair)
- Diagnostic value of screening tests: Questionnaires, Peak flow-meter and Microspirometer in early detection of individuals with chronic obstructive pulmonary disease in primary health care in North Macedonia - Katerina Kovachevikj
- Exploration of the course of control in domestic violence against women, from its establishment of the influence to its awareness - Emeline Padeloup
- Facele study - Isabelle Auger
- Mammography screening - motivational factors and obstacles among women in primary care - Krisztián Vörös
- The Frequency of Depression Among the General ICPC-2 Coding of Internally Displaced Patients Appeals to Uzhgorod "Interfamily" Clinic in Ukraine - Pavlo Kolesnyk
- What cancer screening programmes are there in different European countries, and how are General Practitioners involved in them? A European survey. - Robert Hoffman

12:30 - 13:30

**Lunch**

Location: Foyer (Ground floor and first floor, Building B)

13:00 - 13:30

**EGPRN Collaborative Study Group Meeting: Person-Centered Primary Care**

Location: A116 (Building A)

13:30 - 15:30

**Parallel Session I - Theme Papers**

Location: B100 (1st floor, Building B)

- Jean Yves Le Reste (Chair)
- Development and evaluation of a mix-method intervention involving training and a new consultation model for patients with palliative care needs in primary care – Before-After Study - Carlos Seïça Cardoso
- Pilot implications for system implementation of motivational interviewing based alcohol screening and brief intervention in primary health care in Slovenia - Tadeja Hočevar
- Turkish Validity and Reliability Study of the "Scale for BioPsychoSocial Dimension of Family Physician' Work" - Pemra C. Unalan

13:30 - 15:30

**Parallel Session J: Freestanding Papers: COVID-19**

Location: B104 (Ground floor, Building B)

- Lieve Peremans (Chair)
- Changes in work tasks and organization of general practice in Norway during the COVID-19 pandemic: results from the Pricov-19 study - Torunn Bjerve Eide
- Organizing outreach work for vulnerable patients in general practice during COVID-19: results from the cross-sectional PRICOV-19 study in 38 countries - Esther Van Poel
- Social participation and mental health of immunocompromised individuals during the COVID-19 pandemic – Results of a longitudinal observational study over three time points - Gloria Heesen
- Trapped in a double cage: Building resilience in cancer caregivers endangered by the COVID-19 pandemic. - Sophie Opsomer

15:30 - 15:50

**Coffee Break**

Location: Foyer (Ground floor and first floor, Building B)

15:50 - 17:30

**Parallel Session K: Theme Papers**

Location: B100 (1st floor, Building B)

- Ana Luisa Neves (Chair)
- Cocreating a person-centred integrated care for people of low socio-economic status. - Hester Van Bommel

- Exploring the general practitioners' point of view about clinical scores: a qualitative study - Maxime Pautrat
- Patient-centred interprofessional collaboration and integration in primary care. A qualitative study. - Muhammed Mustafa Sirimsi

15:50 - 17:30

**Parallel Session L: Special Methodology Session**

Location: B104 (Ground floor, Building B)

- Paul Van Royen (Chair)
- A COVID-19 Conundrum – Can the reported skin manifestations of COVID-19 be explained by re-activation of herpes virus? - Itamar Getzler
- An IMP to "take care" of COPD! - Patrícia Tuna
- Arterial stiffness and lower extremities arterial disease – cross-sectional study of general practice patients - Anna Kamieńska

17:30 - 17:40

**Summary of the day**

- Venija Cerovečki (Speaker)

17:40 - 18:00

**Chairperson's Report by EGPRN Chair**

- Tiny Van Merode (Speaker)

18:00 - 18:15

**Presentation of the Poster-Prize for the best poster presented**

- Radost Assenova (Speaker)

18:15 - 18:25

**Introduction to the next EGPRN meeting**

- Martin Seifert (Speaker)

18:25 - 18:30

**Closing**

20:30 - 00:00

**Social Night with Dinner, Dance and Music!**

Pre-booking online essential.

Location: [The Diocletian Palace](#)Address: [Dioklecijanova 1, 21000, Split.](#)

## **Sunday, 14 May 2023**

09:30 - 12:00

### **EGPRN Executive Board Meeting**

Location: School Hall (Building A)

Only for Members of the Executive Board

# International Keynote Lecture

## Person centered care, a core concept in family medicine

**Prof. Igor Švab**

Dean of Medical Faculty University of Ljubljana Editor-in-chief of the Slovenian Journal of Public Health  
Honorary Secretary of EGPRN between 1995 – 2001  
Executive Board member EGPRN between 1991 – 2001

Person-centered care is a crucial concept that was first defined within the scope of defining family medicine. It is considered one of the main characteristics of family medicine. Its definition was primarily established by EURACT. By defining the concept, it could be taught and incorporated into medical education curricula.

However, the concept of person-centered care is only meaningful if evidence is produced to prove its usefulness in healthcare. This is the task of research organisations, which need to provide evidence that person-centered care works and positively impacts healthcare quality. Even when this evidence is provided, a significant challenge remains in convincing policymakers and other decision-makers to implement person-centered care in healthcare policies.

The future of patient-centered care is likely to involve even greater emphasis on personalization, technology, and patient engagement. By leveraging these tools to deliver more individualized and responsive care, healthcare providers can improve health outcomes and patient satisfaction while also reducing healthcare costs.

## Local Keynote Lecture

### Family medicine as a scientific and professional discipline in Croatia.

#### Assoc. Prof. Venija Cerovečki

Associate Professor at the Department of Family Medicine, School of Medicine, University of Zagreb and a practicing family physician at Zagreb-Centar Health Center.

Croatian family medicine has a rich and challenging past, but also a challenging present and future. Analyzing the development of family medicine in Croatia, it can certainly be concluded that the profession has always followed scientific achievements, implemented them in theoretical training and scientifically analyzed them, but has encountered and encounters difficulties in implementing scientific findings in everyday practice. This challenge requires a lot of effort in the future related to convincing decision-makers and stakeholders that scientific achievements and their implementation in everyday practice improve quality of care for the whole population. Family medicine as a scientific discipline was primarily developed within the activities of the Departments of Family Medicine, first within the Department of Family Medicine in Zagreb, and then at the Departments of Family Medicine in Split, Rijeka and Osijek. These activities implied involvement of members of the Departments of Family Medicine in the preparation of dissertations, but also in the implementation of international and national research projects, which were often connected with membership in European General Practice Research Network (EGPRN). Scientific projects are carried out through the activities of members of the Departments of Family Medicine as well as other family doctors in clinical and public health projects, which also promotes an interdisciplinary approach in family medicine in scientific activities. Family medicine as a professional discipline was formally developed in accordance with international recommendations. The fact that specialty training as a necessary component of the development of the profession was conceptually conceived at School of Public Health „Andrija Štampar“, School of Medicine, University of Zagreb in 1960. confirms Croatian family physicians as active participants in the development of the profession of family medicine on a global level. Since then, the specialty training of family physicians has been carried out and improved based on the recommendations of European Academy of Teachers in General Practice/Family Medicine (EURACT), European Union of General Practitioners/Family Physicians) UEMO and other international associations of medical education, primarily An International Association of Health Professional Education (AMEE).

**Theme Paper / Ongoing study with preliminary results****European general practitioners'/family physicians' attitudes towards person-centered care and factors that influence its implementation in everyday practice- preliminary results**

Goranka Petricek, Kathryn Hoffmann, Erika Zelko, Sara Willems, Esther Van Poel, Vincent De Prez, Sanda Kreitmayer, Radost Assenova, Zlata Ozvacic Adzic, Venija Cerovečki, Miro Hanževački, Jelena Rakic Matic, Gorka Vuletic, Marion Tomicic, Marko Rađa, Bohumil Seifert, Sabine Bayen, Thomas Frese, Heidrun Lingner, Zoi Tsimtsiou, Peter Torzsa, Claire Collins, Dorien Zwart, Debbie Vermond-Engel, Katarina Stavrikj, Kiril Soleski, Marija Mihajlova, Filip Lokvenec, Torunn Bjerve Eide, Mina Dahli, Adam Windak, Katarzyna Nessler, Krzysztof Studzinski, Bruno Heleno, Joana Azeredo, Iliana-Carmen Busneag, Milena Kostic, Zalika Klemenc Ketis, Davorina Petek, Ksenija Tusek Bunc, Sara Ares Blanco, Jesús González-Lama, Magallon Botaya, Heather L Rogers, David Lerma Irureta, Fátima Méndez-López, Sven Streit, Alexandre Gouveia, Katharina Tabea Jungo, Canan Tuz, Mehmet Urgan, Vildan Mevsim

University of Zagreb School of Medicine, 10000 Zagreb, Croatia. E-mail: goranka.petricek@mef.hr

**Keywords:** Person-centered care, general practice/family medicine, questionnaire-based study

**Background:**

Person-centered care (PCC) is widely acknowledged as a core value in family medicine and has been associated with many positive outcomes of care. There has been no comparison of GPs attitudes towards person-centeredness across European countries.

**Research questions:**

To investigate GPs/FPs attitudes towards person-centeredness. To understand GPs/FPs facilitators and barriers related to practicing PCC. To document obstacles to practicing PCC in practice.

**Method:**

A cross-sectional questionnaire-based study across 22 European countries (finished in one country, in 10 countries ongoing, in 11 countries finishing the preparatory phase). In each country, the population of GPs/FPs will be reached through the official mailing list of the national medical associations. The study instrument consists of four parts: General information about the doctor and the doctor's office, Perceived Stress Scale (PSS), Patient Practitioner Orientation Scale (PPOS) and Facilitators and barriers to PCC in everyday practice. The Ethics Committee, School of Medicine, University of Zagreb approved the project. The study will be carried out in close collaboration with the European Association for Quality and Patient Safety in Primary Care (EQuIP) and the European General Practice Research Network (EGPRN). The study will be coordinated by the Department of Family Medicine, School of Medicine University of Zagreb (Croatia). The project is supported by the EGPRN Grant.

**Results:**

GPs/FPs attitudes towards person-centeredness will be described and investigated in correlation to socio-demographic data and work stress in each participating European country. GPs/FPs facilitators and barriers to practicing PCC in everyday practice will be analysed. Data will be analysed using software package STATISTICA 7.1 (StatSoft Inc, Tulsa, OK, USA), and  $P < .05$  will be considered statistically significant.

**Conclusions:**

Regardless of the specific context of care that is highly dependent on the patient, physician and healthcare system characteristics, PCC represents a core value of family medicine that should be implemented in GPs/FPs everyday work across Europe.

**Theme Paper / Finished study****Lowering long-term use of benzodiazepine receptor agonists: a primary care perspective**

Kristien Coteur, Sanne Peters, Pieter Jansen, Birgitte Schoenmakers, Marc Van Nuland

KU Leuven, 3000 Leuven, Belgium. E-mail: kristien.coteur@kuleuven.be

**Keywords:** primary care; benzodiazepines; insomnia; patients; general practitioners; pharmacists

**Background:**

Long-term use of benzodiazepine receptor agonists (BZRA) is a global health issue. Its complications jeopardise the personal health of BZRA users and come with substantial socio-economic costs. Nevertheless, it remains difficult to manage the decrease and stopping of BZRA use for insomnia in primary care. Motives to use BZRA in the long term remain unclear, and we currently have little direction on how to adequately support appropriate use.

**Research questions:**

Which factors contribute to long-term BZRA use for insomnia in primary care, from patients', general practitioners', and pharmacists' perspectives?

**Method:**

Qualitative research with in-depth semi-structured interviews, following a grounded theory approach, set in primary care in Belgium. Twenty-four participants were interviewed, including nine patients, six general practitioners, and nine pharmacists. Transcripts were analysed using the Framework Method. Thematic findings were interpreted in the context of the Theoretical Domains Framework.

**Results:**

We found a reflexive relation between views about hypnotic use at the level of society, healthcare, and patients. Six key messages captured factors that could contribute to lowering long-term BZRA use for insomnia in primary care: 1. societal beliefs as a game changer; 2. the opportunity of non-pharmacological treatment; 3. collaboration in primary care; 4. patient-centred goals; 5. informed consent; 6. self-management. Consistent with these factors, the participants discussed many ideas for interventions, which were mainly focused on the TDF domain of environmental context and resources.

**Conclusions:**

Long-term BZRA use for insomnia is a multifaceted health problem that is not adequately addressed at this time. The current social, and healthcare context are not empowering patients and professionals to lower long-term BZRA use for insomnia. Stakeholders have multiple ideas on how to turn the tide. Specifically, for primary care, all stakeholders reported the need for a non-medicalised relationship between the patient and general practitioner to improve prescribing rates.

**Points for discussion:**

Which community actions could contribute to a more empowering climate to lower BZRA use in your country?

Should you implement goal-oriented care for the treatment of insomnia in primary care?

How can we reduce the medicalisation of psychosomatic disorders in primary care?

**Theme Paper / Ongoing study with preliminary results****Person centered care for patients with long covid**

Jako Burgers, Jeroen Gruiskens, Thijs Van Meulenbroek, Annerika Gidding-Slok, Ivan Huijnen, Cynthia Lamper, Jean Muris, Marcia Spoelder-Merkens, Darcy Ummels, Carlijn Wiertz, Thomas Hoogeboom, Jeanine Verbunt

Department Family Medicine, Maastricht University, 6229 HA Maastricht, Netherlands. E-mail: jako.burgers@maastrichtuniversity.nl

**Keywords:** Person centered care, long covid, rehabilitation

**Background:**

In the Netherlands, more than 8 million people have experienced COVID-19. Approximately 200,000 people have persistent symptoms for more than four weeks (long covid). Depending on the complexity of problems and limitations in daily life, the patient is treated by the general practitioner (GP), supplemented with allied healthcare (e.g. physiotherapy, occupational therapy, speech therapy) or specialized rehabilitation care. The effectiveness of these treatments, however, is unknown.

**Research questions:**

- Is a person centered care program useful in improving participation in society?
- How should a regional interdisciplinary COVID-19 rehabilitation network be designed?

**Method:**

First, a pragmatic literature review of studies and guidelines available on long covid was performed. Then, we organized five focus groups with patients and four focus groups with healthcare professionals to explore their views and experiences of current healthcare. Both review outcomes and focus groups findings will be used in designing care pathways specified by level of complexity. These pathways will be evaluated in single case experimental design studies (SCEDs).

**Results:**

The project runs from August 2022 to February 2024. The literature review yielded 53 studies and 3 guidelines (Dutch, NICE, WHO). No studies with high evidence of quality were found. Research on specific rehabilitation programs is lacking. Most guideline recommendations were based on low evidence or expert opinion. Lifestyle advice, support in return to work, and monitoring are recommended in general practice. Patients in focus groups indicated that GPs have little knowledge on long covid. Most rehabilitation treatments included energy management techniques (i.e., pacing). Patients were satisfied with allied healthcare professionals. Patients and professionals agreed that collaboration and patient involvement in managing care is essential in complex cases.

**Conclusions:**

Long covid care needs improvement of knowledge and specific recommendations for GPs. Core values (e.g., person centeredness, continuity, and a holistic approach) seem to be essential in supporting patients effectively.

**Points for discussion:**

Methods for recruitment of GPs and long covid patients

Use of Single Case Experimental Design (SCED) to study effectiveness of person centered care

Research and primary care guidelines on long covid in other countries



**Freestanding Paper / Almost finished study****Evaluating teaching quality in family medicine practice: A medical student perspective in Switzerland**

Stefania Di Gangi, Oliver Senn, Andreas Plate

Institute of Primary Care, University of Zurich and University Hospital of Zurich, 8091 Zurich, Switzerland. E-mail: stefania.digangi@usz.ch

**Keywords:** family medicine / general practice, undergraduate medical education, teaching placement, educational quality

**Background:**

Teaching placements in family medicine practice (FMP) aim to motivate medical students to choose FMP as a career. Student evaluations are helpful to understand educational needs and to improve the quality of teaching provided. However, interpretation of these evaluations can be challenging, as the student-to-FMP ratios may be small.

**Research questions:**

1) How students experienced the FMP as a teaching environment to acquire the FMP skills. 2) How to identify a benchmark for the quality of teaching provided.

**Method:**

Retrospective, cross-sectional survey research recruiting all undergraduate fourth-year medical students at the University of Zurich, Switzerland, attending a mandatory placement in FMP during 2019-2022. The evaluation, 33 questions, focused on: communication and course content, course satisfaction, FMP environment, skills acquisition. FMPs in benchmark quality group were identified using a k-means cluster analysis algorithm, based on individual item average score on 14 indicator questions for "good teaching" and on the number of students per FMP.

**Results:**

A total of 713 students (response rate 81%) and 249 FMPs (median[interquartile-range]: 2[1,4] students per FMP) were included. Overall, 89% of the students were satisfied with the placement and 82% reported an increased confidence in clinical skills. Taking into account the quality indicator scores and the number of students per FMP, we identified a cluster of 26(10%) FMPs below the benchmark group score range. Placement in FMPs of this cluster was negatively associated with raised student motivation to choose FMP as a career.

**Conclusions:**

Our study described students' experiences in FMP and identified FMPs below educational quality benchmark, taking into account the risk of misinterpretation of students' experiences due to low student-to-FMP ratios. Proper identification of these FMPs could improve the quality of teaching with positive effects on students' experience and their future career paths.

**Points for discussion:**

Are students good judges of quality of teaching?

Can we optimize the placement of medical students in general practice?

What is the best way to approach the practitioners needing improvement (below the benchmark) for an internal evaluation process?

**Freestanding Paper / Almost finished study****Health-related quality of life during the pandemic in Germany: a web-based longitudinal study**

Dominik Schröder, Stephanie Heinemann, Gloria Heesen, Alexandra Dopfer-Jablonka, Frank Klawonn, Frank Mueller

University Medical Center Göttingen, 37073 Göttingen, Germany. E-mail: dominik.schroeder@med.uni-goettingen.de

**Keywords:** COVID-19; Long COVID; Pandemic; Quality of Life; social participation

**Background:**

Health-related Quality of Life (hrQoL) is an important outcome when characterizing and comparing health over time. For new diseases as long COVID hrQoL can give insights in terms of primary care demand and treatment. Especially when investigated in a longitudinal study design.

**Research questions:**

How does hrQoL changes throughout the pandemic in individuals with lasting long COVID compared to participants without previous SARS-CoV-2 infection?

How does symptoms change in participants with long COVID?

**Method:**

An online survey was conducted in Germany investigating changes in hrQoL and symptoms using a longitudinal study design including two time points. All persons 18 years or older were eligible to participate. EQ-5D-3L and EQ-VAS were used as hrQoL outcome. 27 symptoms were rated by participants with long COVID on a 11-point Likert-scale (0 = no symptoms; 11 = worst symptoms). Covariates include sociodemographic, medical and pandemic-specific variables. Descriptive and inferential statistics were performed comparing changes in hrQoL between both time points and across groups according to their COVID-19 status.

**Results:**

Data from 1,113 participants was included in the analysis. The average time between baseline and follow-up was approximately 60 days. Between baseline and follow-up participants with Long COVID (n=699) worsened significantly in EQ-5D VAS scores (M = -2.14, SD = 18.13, p<0.001) and improved significantly in EQ-5D-3L index scores (M = 0.04, SD = 0.18, p<0.001). In participants with no previous SARS-CoV-2 infection (n=329) hrQoL did not change significantly. The health dimensions pain/discomfort and anxiety/depression improved the most in participant with long COVID. 20 out of 27 symptoms in participants with long COVID improved significantly regarding symptom severity and prevalence.

**Conclusions:**

Subjective hrQoL worsened while objective hrQoL improved in participants with long COVID. This discrepancy needs to be investigated further as subjective hrQoL determinate primary care demand. EQ-5D index score may not reflect all health dimensions related to long COVID.

**Points for discussion:**

Therapy and management of patients with long COVID in family practice

hrQoL as a basis for efficacy and cost-effectiveness studies

Subjective vs. objective health when treating patients

**Freestanding Paper / Almost finished study****Mental health of general practitioners and family medicine specialists two years after the beginning of the COVID-19 pandemic: results from a European survey**

Marija Zafirovska, Aleksandar Zafirovski, Jelena Danilenko, Kristien Coteur, Heidrun Lingner, Nicola Buono, Christine Brütting, Aleksander Stepanović, Mumtaz M Mazicioglu, Mustafa Kursat Sahin, Milena Cojic, Miloranka Petrov Kiurski, Iliana-Carmen Busneag, Liljana Ramasaco, Zaim Jatic, Vanja Lazic, Lyubomir Kirov, Hristo Dimitrov, Monika Brovč, Fatbardha Skenderi, Manon Richter, Mustafa Fevzi Dikici, Daniel Atijas, Erjona Abazaj, Milena Kostic, Ljubin Sukriev

Association of general practice/family medicine of South-East Europe (AGP/FM SEE), 1000 Skopje, North Macedonia. E-mail: m.zafirovska27@gmail.com

**Keywords:** mental health, general practice, family medicine, COVID-19

**Background:**

The mental health of physicians is greatly affected by work-related stress. This is significantly increased during pandemics due to poor coping and maladjustment. Currently, information on the mental health status of general practitioners (GPs) and family medicine specialists (FMSs) in Europe is missing. Part of achieving a global recovery from the COVID-19 pandemic is providing adequate attention and care to the mental health of GPs and FMSs as the pillars of primary healthcare.

**Research questions:**

What are the levels of anxiety, depression and fear of COVID-19 among GPs and FMSs in Europe, two years after the start of the COVID-19 pandemic, and what factors might influence them?

**Method:**

Thirteen countries participated in an online survey that included questions concerning the professional and personal experience of GPs and FMSs during the COVID-19 pandemic, as well as different scales for assessing mental health: PHQ-9, GAD-7 and Fear of COVID-19 scale. Descriptive statistics, linear regression and thematic analysis with inductive coding were used to analyse the data.

**Results:**

1724 respondents participated. More than 3/4 were female, the average age was 47±12.01 years and >70% worked in an urban area. On average, respondents reported mild depression (6 on the PHQ-9), mild anxiety (5 on the GAD-7), and a mean score of 12.85±5.29 on the FCV-19 scale. Having had to close their practice during the pandemic had the biggest effect on increasing depression, whereas falling within an at-risk category for COVID-19 had the biggest effect on increased anxiety and fear. The most used coping mechanism was reaching out to friends and family. However, one in ten did nothing to cope with their stress or sadness.

**Conclusions:**

COVID-19 created specific significant stressors that negatively impact the mental health of GPs and FMSs two years after the start of the pandemic. Adapted interventions to support coping with mental health problems are needed.

**Points for discussion:**

How can we use the results of this research to help in creating better mental health support systems for physicians during pandemic outbreaks?

How can we reduce the negative impact and long-term effects of the COVID-19 pandemic on the mental health of GPs and FMSs?

How can we increase interest and improve response rates of GPs and FMSs in future research regarding mental health?

**Freestanding Paper / Finished study****Demographic and behavioral characteristics of populations vaccinated against Covid-19 with and without prior influenza vaccines, aged 65 and above: a combined cross-sectional and survey study**

Galia Zacay, Anthony Heymann, Danna Valinsky

Meuhedet HMO, 55900 Ganei-Tikva, Israel. E-mail: gzacay@hotmail.com

**Keywords:** Immunization, Patient Adherence, public health, Community medicine, doctor-patient relationship

**Background:**

The proportion of the population vaccinated in Israel against Covid-19 during 2021 was extremely high compared with the uptake rates of the influenza vaccine. Understanding the precipitating factors that led to the high vaccination rate may facilitate maintaining these rates, in the event of a recommendation for a seasonal Covid-19 vaccine.

**Research questions:**

The aim of this study was to identify factors associated with repeat influenza vaccination that may assist in maintaining high adherence to the Covid-19 vaccine in the future.

**Method:**

We used a mixed-methods design for this study. The first part was a cross-sectional study of adults aged 65 and over who were vaccinated against Covid-19, comparing variables such as age, gender and health status between those with a history of influenza vaccination in the previous five years and those without. The second part consisted of a questionnaire administered to a subsample of the above population regarding vaccine hesitancy and intention to be vaccinated.

**Results:**

Strong adherence to annual influenza vaccine recommendations was associated with earlier Covid-19 vaccine uptake. Regardless of previous influenza vaccine history, all groups had a high uptake of the third Covid-19 booster vaccine. Respondents with lower adherence to influenza vaccines were more likely to demonstrate higher levels of vaccine hesitancy, but despite this, motivators for the Covid-19 vaccine were similar between groups.

**Conclusions:**

Confidence in the health system and the Covid-19 vaccine is a strong motivator regarding vaccine uptake. This should be addressed to maintain high vaccination rates.

**Points for discussion:**

what may be the best approach to motivate the public to adhere to vaccination recommendation?

**Freestanding Paper / Published****Intermediate care in caring for dementia, the point of view of general practitioners:  
A key informant survey across Europe**

Clarisse Dibao, Caroline Oger, Tony Foley, Peter Torzsa, Vanja Lazic, Sanda Kreitmayer, Limor Adler, Ana Kareli, Christian Mallen, Cindy Heaster, Gindrovel Dumitra, Donata Kurpas, Rita Viegas, Stéphanie Giezendanner, Victoria Tkachenko, Jan De Lepeleire, Rosario Falanga, Aristeia Missiou, Aisling Jennings, Ferdinando Petrazzuoli

dumg tours, 37000 tours, France. E-mail: clarissedd@gmail.com

**Keywords:** Intermediate care, dementia, general practice

**Background:**

Intermediate care is often defined as healthcare occurring somewhere between traditional primary (community) and secondary (hospital) care settings. High quality intermediate care is important in dementia, may prevent caregiver burnout and lead to optimal care for people with dementia. However, very little is known about the point of intermediate care for persons with dementia in Europe.

**Research questions:**

What intermediate care services exist and how are they utilized in the care of people with dementia in Europe?

**Method:**

Key informant survey was sent to GPs via a self-developed questionnaire with space for open ended comments. 16 European countries participated to this cross-sectional mixed method study. Given the volunteer nature of the study, no minimum sample size requirements were applied to participation. Convenience sampling technique was used to address variations due to regional variations and regulations within the same country. Descriptive analyses of all intermediate care facilities groups by countries were performed. Qualitative analyses approach was used for the optional-free text to exemplify and/or complete the reasons contained in the closed response categories.

**Results:**

The questionnaire was sent to 16 European countries. 583 questionnaires were analyzed. The responding physicians were 48 ( $\pm 11$ ) years old on average and they had been in practice for an average of 18 (+ /11) years. The types of intermediate care considered were integrated at-home services, respite and relief services, day care centers and nursing homes. Their availability was considered very inhomogeneous by the majority of respondents. The main benefits of intermediate care cited were better medical care for the patient (78%), better quality of life for the caregiver (67%), prevention of the caregiver burden (73%) and a break for the caregiver (59%). The reported difficulties were: accessing these facilities due to limited financial support (76%) and cumbersome administrative procedures (67%).

**Conclusions:**

Intermediate care in Europe is diverse and heterogeneous.

**Points for discussion:**

What will be the next step of this study ?

How do cultural differences impact results?

**EGPRN Fellowship Presentation / Study Proposal / Idea****What is the prevalence of anxiety and depression in internally and externally displaced Ukrainian refugees? A European survey.**

Nataliia Ponzel, Jānis Blumfelds, Ileana Gefaell, Oksana Ilkov, Michael Harris

University of Exeter, UK, BA3 4SJ Radstock, United Kingdom. E-mail: michaelharris681@btinternet.com

**Keywords:** General practice; Refugees; Anxiety and depression

**Background:**

Levels of anxiety and depression in the world are high even in peaceful times. Refugees are more likely to experience poor mental health than the local population, including higher rates of depression and anxiety disorders. This is linked to pre-migration experiences (such as war trauma) and post-migration issues (such as separation from family and poor housing).

The full-scale invasion of Ukraine has resulted in an estimated 10 million refugees, of which more than 3.8 million have left Ukraine. Many continue to face significant psychosocial difficulties, even in their new environments.

**Research questions:**

What levels of anxiety and depression are there in Ukrainian refugees inside and outside Ukraine, and how do levels in the two groups compare?

**Method:**

In this survey of adult Ukrainian refugees in Latvia, Spain, Ukraine and the United Kingdom, participants will be recruited through health care centres and refugee support groups. Levels of anxiety and depression will be measured using the GAD-7 and PHQ-9 instruments, using anonymous online or paper questionnaires. The questionnaires will be translated into Ukrainian, with validation by back-translation. As well as looking at overall anxiety and depression levels, we will compare the prevalence in refugees within Ukraine with those outside it.

**Results:**

We will present the study protocol and the findings of the pilot study. Any preliminary results will also be presented.

**Conclusions:**

For doctors working with Ukrainian refugees, assessment of mental health issues may be challenging, risking a delay in diagnosis and treatment. Having an awareness of the underlying prevalence of anxiety and depression in this group will help their healthcare providers be proactive in their care. We are not aware of any studies that have compared levels of anxiety and depression of refugees within their own country with those outside it.

**Points for discussion:**

What experience do EGPRN members have of assessing for mental health problems in refugees?

What are the main challenges that they have in diagnosing and managing anxiety and depression in this group of patients?

Would any EGPRN colleagues like to collaborate with us in this research?

**Theme Paper / Finished study****An e-learning course on the patient-centred approach to colorectal cancer screening: GPs first choice!**

Amélie Aïm-Eusébi, Antoinette Bouziane, Karima Sekri, Bernard Clary, Bernard Freche, Julien Le Breton, Isabelle Auger

Université Paris Cité, 75018 Paris, France. E-mail: amelie.aim-eusebi@u-paris.fr

**Keywords:** Person-centred care, colorectal cancer, screening, e learning, primary care

**Background:**

Colorectal cancer (CRC) is the third most common cancer in men and the second in women worldwide. Between 2020-2021, in France, 35% of the eligible population completed screening, which is under the acceptable uptake rate.

**Research questions:**

The FORCEPS study aimed to test whether a training program, for general practitioners (GPs), focused on person-centred approach could increase their patients' CRC screening rate. Our study reports on the construction of, participation in and evaluation of the e-learning course tested in the FORCEPS study.

**Method:**

An interdisciplinary team designed an e-learning program for French GPs on the Moodle® platform. Learning activities related to the stated learning objectives and interactive approaches were specified. Two sessions took place, in May and November 2018, during 6 weeks. We evaluate the level of intended knowledge and skills acquired by the participants and their satisfaction. We used an online mixed method survey with likert scales and open-ended questions.

**Results:**

116 GPs registered for the training program. 70% of the GPs who registered for the first session opted to follow the training via e-learning rather than in person. Among the participants, 36.0% followed the training in its entirety during session 1, as did 24.0% during session 2. At the end of the training, none of the participating GPs self-assessed themselves as a "novice", and the number of GPs self-assessing as "intermediate" or "experienced" increased. 62.9% of the participants were generally satisfied with the e-learning course.

**Conclusions:**

The web-based program focused on improving GPs' communication skills to encourage CRC screening was chosen by a large majority of the participating GPs and received moderately positive reviews. While GPs' theoretical knowledge can be improved through our training program, it remains to be seen whether or not this will be reflected in their everyday practice, thus resulting in an increased CRC screening participation rate among patients.

**Points for discussion:**

Do you want to know more about the entire FORCEPS study ? What is the next step ?

Why not adapt this training to other themes ?

**Theme Paper / Finished study****Innovative population-based strategies for primary prevention of cardiovascular disease: A 2-year randomised control trial (RCT) evaluating behavioral change led by community champions versus brief advice.**

Delphine Le Goff, Gabriel Perraud, Jérémy Derriennic, Paul Aujoulat, Morgane Guillou, Marie Barais, Jean Yves Le Reste

Faculté de médecine, Médecine Générale, 29200 Brest, France. E-mail: docteurdlegoff@gmail.com

**Keywords:** primary prevention; cardiovascular system; community participation; community health workers; motivational interviewing

**Background:**

Cardiovascular diseases (CVD) cause 17,9 million deaths worldwide. The SPICES project implemented a cardiovascular disease prevention community-based program. During the summer 2019, students screened the population with the Interheart Non-Laboratory Score (INL) to recruit participants in a French rural and vulnerable setting. Then, community champions were trained to behavioural change. The aim of this study was to assess their efficacy with intermediate INL adults.

**Research questions:**

The primary objective of this study was to evaluate the efficacy of a behavioural change program plus brief advice, conducted by community champions, for people at intermediate cardiovascular risk, compared with brief advice only.

**Method:**

A randomised control trial with 1:1 allocation tested brief advice plus behavioral change led by community champions versus brief advice. A 24-month difference of 15% in the INL in intention to treat was expected. Participants objectives were independently recorded at 4 months.

**Results:**

1309 participants were includable. 536 people were analyzed. In March 2021, happened the Covid 19 pandemic with three lockdowns during the trial and public restrictions. At 24 months, 110 people remained in intervention group and 147 in control group (total=257). Difference within groups was not significant (-0,12 (-0,80; 1,04)  $p=0,758$ ). The main participants objective was weight-loss. In accordance with the hierarchical analysis, the confirmatory analysis procedure could not continue beyond the first non-significant criterion. On an exploratory basis, no significant difference was found on the secondary criteria. Only 29% of eligible subjects agreed to participate to the study. Among those, only 48% completed the study.

**Conclusions:**

The difference of the mean INL score of 15% was not achieved. Money for health procedures would better be invested in public procedures. People entering individual strategies should be sorted on their capacities to change. The investment to accompany participants did not lead to success despite the sociological literature evidence.

**Points for discussion:**

efficiency of community support

efficiency of self-set goals

scores accuracy



**Theme Paper / Finished study****Psychological determinants of vaccination behavior against COVID-19 and influenza of chronically ill in German primary care – a cross-sectional survey**

Linda Sanftenberg, Simon Keppeler, Nadine Heithorst, Tobias Dreischulte, Marco Roos, Philipp Sckopke, Markus Bühner, Jochen Gensichen

Institute of General Practice and Family Medicine, 80336 Munich, Germany. E-mail: linda.sanftenberg@med.uni-muenchen.de

**Keywords:** primary care; mental health; chronically ill; vaccination; behaviour change

**Background:**

Vaccines against COVID-19 and influenza are safe and provide good protection from severe infections. They are highly recommended for vulnerable patients with chronic diseases. In many cases, these patients suffer from psychological comorbidities like depression and anxiety disorders. Chronically ill adults are mainly vaccinated in primary care, but vaccination rates remain insufficient.

**Research questions:**

The aim of this study is to analyze the associations of depression and anxiety disorder on vaccination behavior against COVID-19 and seasonal Influenza in chronically ill primary care patients.

**Method:**

For this cross-sectional observational study, a paper-based survey was conducted from July- December 2022 in Bavaria, Germany. We invited adult primary care patients suffering from one or more chronic health conditions (diabetes typ 1/2, asthma bronchiale/chronic obstructive pulmonary disease, coronary heart disease or breast cancer). Besides sociodemographics, we analysed symptoms of depression (PHQ-9) and anxiety disorder (OASIS), social activity (LSNSN), patient activation (PAM), physician-patient relationship (PRA) and antecedents of vaccination behavior (5C). Descriptive statistics and linear mixed-effects regression models were calculated.

**Results:**

We analyzed data of n=795 study participants. Major depression was suspected in 18.4%, and anxiety disorder in 20.3% of them. Concerning vaccinations against COVID-19, depression was negatively associated with trust in vaccine safety (item „Confidence“  $\beta = -0.04$ , 95% CI [-0.07, -0.01]) and positively associated with subjectively perceived structural barriers to get vaccinated (item „Constraints“,  $\beta = 0.02$ , 95% CI [0.001; 0.04]). Concerning vaccinations against influenza, depression did not show any association with vaccination behavior. Higher age, male sex, higher education, high scores of self-activation, and a good physician-patient relationship were associated with a positive vaccination behavior.

**Conclusions:**

To address low confidence in the safety and efficacy of vaccinations, targeted educational interventions like communication-based short interventions in primary care might be useful. Subjectively perceived constraints might be addressed by regular personalized reminder systems.

**Points for discussion:**

What details have to be considered in the development of a communication-based intervention (in terms of feasibility, acceptance and relevance to European primary care)?

How should we integrate non-medical primary care professionals (physician assistants, nurses, pharmacists etc.) in the upcoming intervention?

To which other vulnerable patient groups could these results possibly be transferrable?

**Freestanding Paper / Ongoing study with preliminary results****Correlation between obstructive sleep apnea and depression, anxiety, affective temperaments and lifestyle factors**

Gergely Marton Torzsa, Dalma Csatlós, Csenge Hargittay, Laura Dalnoki, Ajandek Eory, Peter Torzsa

Semmelweis University, 1221 Budapest, Hungary. E-mail: gtorzsa@gmail.com

**Keywords:** Correlation between obstructive sleep apnea and depression, anxiety, affective temperaments, lifestyle factors

**Background:**

Obstructive Sleep Apnea (OSA) is the most common sleep breathing disorder with a prevalence of 2-4% in the general population which continues to increase in parallel with obesity. OSA is an independent cardiovascular risk factor, in this group hypertension is twice as frequent, myocardial infarction is three times, the risk of diabetes is five times and the danger of traffic accidents while falling asleep is 5-8 times higher than in the general population.

**Research questions:**

The aim of our study is to assess the prevalence of mood disorders among people with sleep apnea. Our goal was to explore the relationship between affective temperaments and depressive symptoms.

**Method:**

Sociodemographic and anthropometric data of the patients were recorded, mood disorders were assessed with the Beck Depression Questionnaire (BDI) and the HADS-A self-administered anxiety questionnaire. Affective temperament was examined with the self-reported TEMPS-A questionnaire, while patients' quality of life was assessed with the Promis-57 questionnaire. OSA diagnosis was established with a polysomnography.

**Results:**

362 patients were included in the study, the average age was  $54.2 \pm 12.1$  ( $\pm$ SD) years, 64.6% were men. The rate of OSA was 33.6% in men and 22.5% in women ( $p < 0.000$ ). Significantly more patients with OSA exercised (41.1% vs. 28.9%,  $p = 0.023$ ), other lifestyle factors did not reveal any significant difference between the two groups. The prevalence of depressive symptoms among OSA patients was 42%, while among those without sleep disorders it was 14% ( $p < 0.001$ ). In multivariable logistic regression models, the increase in the irritable, depressive and cyclothymic temperament scores showed a close relationship with the increase in BDI score ( $p < 0.001$ ).

**Conclusions:**

Untreated depression is very common among OSA patients, which worsens the severity of the sleep disorder. Among OSA patients with irritable, depressive or cyclothymic temperaments, severe depressive symptoms were found even more often. Therefore, screening for mood disorders is particularly important in this population.

**Points for discussion:**

How can we effectively screen for OSA in family practice?

How can we identify the OSA patient with mood disorders?

**Freestanding Paper / Finished study****Increased fracture risk among children and adolescents with celiac disease: a nationwide cohort study**

Galia Zacay, Ilana Weintrob, Dalit Modan-Moses, Yael Levy-Shraga

Meuhedet HMO, 55900 Ganei-Tikva, Israel. E-mail: gzacay@hotmail.com

**Keywords:** celiac disease, pediatric fractures, cohort study, epidemiology

**Background:**

One of the complications of celiac disease (CD) is decreased bone mass. Our aim was to analyze the risk of fractures among children with CD compared with matched children without CD; and to identify clinical and laboratory risk factors to fractures among children with CD.

**Research questions:**

The aim of the current study was to evaluate the fracture incidence rate of children with celiac disease compared with a large matched healthy population. A second aim was to identify clinical and laboratory risk factors to fractures among children with celiac.

**Method:**

This registry-based cohort study included 2,372 children with CD and a large, matched comparison group of 11,860 children. Demographic and clinical data, anthropometric measurements and laboratory results were extracted from the electronic database of Meuhedet, a health maintenance organization. Fracture events at ages 1-18 years were identified by coded diagnoses.

**Results:**

The overall fracture incidence rate was 256 per 10,000 patient-years (PY) in the CD group and 165 per 10,000 PY in the comparison group ( $p < 0.001$ ). Among boys, the fracture incidence rates were 301 per 10,000 PY and 202 per 10,000 PY ( $p < 0.001$ ), for the respective groups; and among girls 224 vs 138 per 10,000 PY, respectively ( $p < 0.001$ ). The stratified hazard ratios (HR) to have a fracture was 1.57 (95%CI 1.43-1.73,  $p < 0.001$ ); and for multiple fractures 1.67, (95%CI 1.38-2.01,  $p < 0.001$ ). Analyze of the periods before and after the diagnosis of CD separately, showed that during the period until the diagnosis, the stratified HR for fractures among children with CD compared to children without celiac was 1.64 (95%CI 1.42-1.88,  $p < 0.001$ ). The stratified HR at the period from the diagnosis to the end of follow-up was 1.46 (95%CI 1.26-1.71,  $p < 0.001$ ).

**Conclusions:**

Children with CD had greater fracture risk than a matched group without CD both preceding and following the CD diagnosis.

**Freestanding Paper / Almost finished study****The Relationship Between Social Media Addiction and Orthorexia Nervosa in Adult Individuals Admitted to Obesity Polyclinic**

Beyza Sena Şener, Hilal Özkaya

BASAKSEHIR CAM VE SAKURA CITY HOSPITAL, ISTANBUL, Turkey. E-mail: beyzascinar@gmail.com

**Keywords:** Obesity, Social Media Addiction, Orthorexia Nervosa, Family Medicine**Background:**

Obesity is becoming more common in the world day by day. Orthorexia nervosa; to make healthy and proper nutrition obsessive and to show obsessive behaviors in this regard. There are studies on the relationship of orthorexia nervosa with obesity and social media use.

**Research questions:**

What is the frequency of orthorexia nervosa in obese individuals? How does the presence of orthorexia nervosa in obese individuals affect obesity management? Does social media addiction increase the incidence of orthorexia in obese individuals?

**Method:**

The cross-sectional study was conducted with 174 participants who admitted to the obesity polyclinic between 01.11.2022-01.02.2023 and covered the inclusion criteria, and their sociodemographic information, social media use and addiction status (with SMBÖ-SF scale) and the presence of orthorexia nervosa (with ORTO-11 scale) were investigated.

**Results:**

A total of 174 people of 117 (67.2%) women and 57 (32.8%) men were included to our study. The majority of the participants (41.4%) are between the ages of 18-30. The mean BMI value was  $30.53 \pm 5.10$ . The mean score of the participants was  $28.33 \pm 4.61$  on the orthorexia nervosa scale and  $46.47 \pm 14.78$  on the social media addiction scale.

According to the BMI value, those who were obese had higher SMBÖ-SF scores compared to those who were overweight. A statistically significant negative relationship was found between the total score of ORTO-11 and the "Virtual communication" score of the SMBÖ-YF sub-dimensions.

**Conclusions:**

In our study, it was found that the incidence of orthorexia nervosa was higher in obese individuals who scored higher on the social media addiction scale. This situation; it has been shown that sharing on social media can have an impact on people's body image and diet. It was concluded that informing obese individuals who admitted to the polyclinic about nutrition is important in protecting against popular trends in social media and possible eating disorders.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****An in-depth look at family-centred care in the primary care consultation**

Heather L Rogers, Itxaso Respaldiza Berroeta, Aitor García Moreno, Sandra López Caballero, Marga López Rey, M<sup>a</sup> Cruz Muñoz González, Ander Portugal Martínez, Amaia Rueda Merino, José Manuel Vidal Arboiro, Juan José Rodríguez Salvador

Biocruces Bizkaia Health Research Institute, 48903 Barakaldo, Spain. E-mail: rogersheatherl@gmail.com

**Keywords:** Person-centred care, family, communication

**Background:**

A number of definitions of family-centred care (FCC) have been proposed for a variety of care contexts, involving different health professionals, and specific to diverse health conditions. Associated theoretical models have been synthesized in a recent scoping review (Kokorelias et al., 2019) into a universal model in which the overarching goal is FCC plan development and implementation. The model has four components: 1. Consideration of family context; 2. Patient, family, and care provider collaboration; 3. Illness-specific education; and 4. Dedicated policies and procedures. However, very little is known about the implementation of these FCC components in real world primary care consultations.

**Research questions:**

The main aim of this study is to begin to document what FCC looks like in different primary care settings across Europe.

Two primary research questions are:

1. How is FCC defined across different European primary care settings? Are all 4 components used?
2. How is FCC implemented across different European primary care settings? How do these components translate into the real world?

Sub-questions of interest include:

- A. How is family defined and what are the implications for primary care consultations?
- B. How are issues with respect to privacy and cognitive capacity handled?
- C. Do triadic consultations (consultations that involve a patient and at least one family member) extend beyond pediatric and geriatric consultations? Under what circumstances and why?

**Method:**

Because of the lack of instruments for valid measurement of FCC, qualitative research approaches would be favored. Semi-structured interviews with carefully selected informants would be optimal to begin to gain insight into these questions.

**Results:**

TBD

**Conclusions:**

TBD

**Points for discussion:**

How do you define family-centred care?

When do you move from FCC model 1. 'Component consideration of family contexts to model' 2. component 'Collaboration with family members'? What criteria do you employ?

What dedicated FCC policies and procedures exist within your practice and/or health care system?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Development of a tailored intervention responding to the needs expressed by caregivers of persons living with dementia**

Clarisse Dibao

dumg tours, 37000 tours, France. E-mail: clarissedd@gmail.com

**Keywords:** Tailored intervention - caregivers - dementia - needs**Background:**

The multidimensional interventions carried out to reduce the caregiver's burden are based on psychological support, advice, therapeutic education, information and respite structures. These interventions are not very effective due to the great heterogeneity of caregivers, insufficient intervention time and improvement objectives that do not correspond to the expectations of caregivers. The judgment criteria used in these studies are also heterogeneous. Knowledge of the patient and caregiver, their living and care context, and better coordination of care could make these different interventions more effective by adapting them to the needs of caregivers, which are currently poorly understood. It is therefore necessary to develop this complex intervention, to implement an assessment of the context, of which the expectations of caregivers of patients with Alzheimer's disease are part, accompanied by a reflection on the choice of relevant judgment criteria.

**Research questions:**

How to develop a tailored intervention responding to the needs expressed by caregivers of persons living with dementia ?

**Method:**

Observational and qualitative study whose main objective is to build a personalized complex intervention that meets the expectations of caregivers of patients living with Alzheimer's disease. A Delphi method will be used to determine the different components of the intervention among results from previous exploratory studies and an updated review of the literature. The primary outcome will be the description of the intervention following the recommendations of the TIDieR checklist. The secondary objectives will be the assessment of the feasibility, fidelity and relevance of the intervention. The secondary evaluation criteria will be:

- The acceptability of caregivers and healthcare professionals obtained through qualitative interviews (assessment of the acceptability of the intervention)
- The consensus on the judgment criterion(ies) obtained by the DELPHI method from caregivers

**Results:**

N/A

**Conclusions:**

N/A

**Points for discussion:**

How to adapt the intervention to different cultures ?

How to integrate cultural specificity in a complex and tailored intervention development ?

What outcome to choose if the needs of caregivers are different ?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet**

## **How to Overcome Barriers to Information and Communication on HPV Vaccination? A Swot Analysis Based on the Opinions of Practicing Clinicians**

Hüsna Sarıca Çevik, Ayşe Gülsen Ceyhan Peker, Süleyman Görpelioğlu, Shlomo Vinker, Mehmet Urgan

Ankara University School of Medicine Ibn-I Sina Hospital, Family Medicine, 06680 ANKARA, Turkey. E-mail: mehmetungan@gmail.com

**Keywords:** Communication, HPV, SWOT, Vaccination

### **Background:**

Advice given with effective communication skills from clinicians is a powerful motivation for young people to get the HPV vaccination and for their parents to beat vaccine hesitancy.

### **Research questions:**

1-Considering the target age group, which strategies need to improve in interpersonal communication skills of GPs when speaking with youth and their parents? Which messages have the most significant impact on vaccination decisions?

2-What is(are) missing about HPV vaccination in clinical practice? What are the risks/benefits and recommendations for improving strategies to provide clinicians with the necessary tools for HPV vaccination practice?

3-Which strategies can be followed for educating primary care clinicians on HPV immunisation?

### **Method:**

A SWOT analysis workout with clinicians will be performed through a web-based form as part of the EU co-funded "PROTECT-EUROPE project" coordinated by the European Cancer Organisation. There are 33 outstanding organisations from 16 countries, including WONCA Europe, in this consortium. One of the main focuses of this project is to improve one-to-one communication regarding HPV vaccination between clinicians and young people and their parents/carers to ensure healthcare professionals are equipped with the skills and knowledge to have the best possible conversations with their target population.

Ethical committee approval has been obtained, and a data-gathering form has been prepared.

### **Results:**

The SWOT analysis results, determining communication gaps from the eyes of GPs/FDs who are members of the EGPRN, are planned to be published and shared with our European members to support them in improving the practice. The results are expected to raise awareness in all but especially among those with low vaccination rates in WONCA Europe member countries. No result is available yet.

### **Conclusions:**

EGPRN members from all over Europe will be instrumental in achieving the goal of putting practice into prevention.

### **Points for discussion:**

Most effective method for acceptance of the HPV vaccination: for clinicians, parents, and young people

Strongest and most convincing communication methods in HPV vaccine acceptance

Opportunities to establish proper communication, which may increase vaccine acceptance upon recommendation for vaccination

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Imposter Syndrome Amongst Medical Students and Resident Doctors in Croatia**

Sunčana Vlah Tomičević, Valerija Bralić Lang

Health Center Zagreb - East, 10040 ZAGREB-DIO, Croatia. E-mail: [suncanav@gmail.com](mailto:suncanav@gmail.com)**Keywords:** imposter syndrome, medical students, residents, Croatia**Background:**

Imposter syndrome (IS) is defined as impossibility to accept credits for objectively own success but rather contributing it to external factors like luck, acquaintances or a mistake with simultaneously feeling like a fraud. It starts at a young age, potentiates during schooling, and is more often seen in highly successful professionals, women and young people. IS is related to negative psychological outcomes. Although present, isn't well researched in medical community. Since doctors and medical students have a higher prevalence of burnout, anxiety, and depression IS should be considered as a possible impact on the results.

**Research questions:**

Primary objective is to research the prevalence of IS and it's differences amongst 1st, 4th, 6th year medical students in School of Medicine in Zagreb and young doctors during residency. Other objective is to compare their negative psychological outcomes (depression, anxiety, and stress) and prevalence of IS. In the end, prevalence of IS, depression, anxiety, and stress amongst medical students and residents will be compared with the general population expecting higher results in our medical sample.

**Method:**

An anonymous questionnaire that can be filled only once with demographic data (age, sex, student or resident status), Clance Impostor Phenomenon Scale (CIPS), and Depression Anxiety and Stress Scale 21 (DASS-21) will be presented to the students and residents during class (Psychology medicine, Psychiatry, Family medicine, General skills). Each student and resident will mark their questionnaire with a unique code so results of CIPS can be compared with their DASS-21 results. CIPS consists of 20 statements, is validated, translated to Croatian and most often used tool for IS. DASS-21 is a self-reported 21-item instrument, also validated and translated to Croatian that, with defined thresholds, quantifies depression, anxiety, and stress. Using statistical analysis, connection between IS and depression, anxiety, and stress will be researched.

**Points for discussion:**

Effects of medical schooling on IS

Are negative psychological outcomes caused by IS?

Time and ways of intervention to ease the IS



**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Patients lists: a tricky balance**

Inês Pinheiro, Sofia Esquível, Hélder Henriques

Family Health Unit Santos Pousada, 4200-486 Porto, Portugal. E-mail: icpinheiro@arsnorte.min-saude.pt

**Background:**

A list of users of a family doctor in Portugal entails a certain workload that varies according to multiple factors that force it's dimension to be weighed by it's characteristics and the context in which it operates. When this weighted dimension is excessive, there are negative repercussions on the access and quality of the care provided. Moreover, it affects the satisfaction of health professionals and health of the patients.

Currently, patients up to 6 years old or over 65 years old are multiplied by factors to balance the list of users in terms of the weight of their needs/pathologies.

The covid 19 pandemic encouraged users to make contacts via email/telephone more frequently, a trend that seems to continue after the normalization of face-to-face assistance.

Empirically, a family doctor has the notion that a small number of patients consumes a great percentage of resources/appointments/contacts.

**Research questions:**

Are really the patients who represent the higher weight in the list the most troublesome?

**Method:**

Descriptive retrospective study on the top 100 users who made more contacts belonging to a list of users of a GP practice in Porto, Portugal in 2021.

**Results:**

The top 100 of frequent users corresponds to 1349 contacts out of 6255 throughout the year, which corresponds to an average of 13.5 contacts for each of these 100 patients. Of these, 65% of patients were aged between 7 and 65 years old.

**Conclusions:**

According to the results found in the year 2021, more than 50% of the contacts made by the 100 people most frequent are not considered as the age recommended as having more support needs or chronic pathologies.

These contacts include telephone or email contacts, letters, or face-to-face consultations.

Is this the best way to balance patient lists? Aren't patients with less digital skills disadvantaged in relation to the others?

**Points for discussion:**

Is this the best way to balance patient lists?

Aren't patients with less digital skills disadvantaged in relation to the others?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Present and future of Home Care by GPs in the Province of Modena (Italy): a descriptive study with a qualitative insert, the MAGMA Home Study.**

Alice Serafini, Erika Borellini, Davide Fornarciari, Luca Ghirotto, Peter Kurotschka, Lucia Palandri, Silvia Riccomi, Elena Righi, Elisa Stefani, Giulia Ugolini, Gaetano Feltri

University of Modena and Reggio Emilia, 41121 Modena, Italy. E-mail: alice.serafini@hotmail.it

**Keywords:** #homecare #housecall #palliativehomecare #primarycareresearchnetwork #italy

**Background:**

The increase in life expectancy, in disabilities and in the number of elderly living alone represent a challenge for healthcare services and in particular for GPs as an increasing number of patients require Home Care (HC). Rumors spread among the population claiming that "GPs no longer make house calls" while Italian GPs' perceive an increasing workload for HC. At present, we are not aware of any study performed in Italy describing the HC activity of GPs and their perceptions about.

**Research questions:**

How is HC actually organized in the Province of Modena and how many home visits do GPs perform each year, to which patients and with what outcomes?

What do physicians, nurses, patients and caregivers think about the HC service?

**Method:**

We'll conduct a retrospective descriptive study from the GP's EMR-data through a SQL extraction in Modena Province (Italy), led by GPs-investigators in collaboration with the Local Health Authority and the University Department of Public Health. The variables will characterize both GPs and patients (socio-demographic data, comorbidities and socio-economic status), the volume and type of HC delivered, and their outcomes. A collection of qualitative data regarding experience and reflection of GPs, nurses, patients and caregivers will be performed through Focus Groups. The inclusion in the retrospective descriptive study will be on a voluntary basis, and all GPs will be asked to participate. Based on previous studies, we expect to include at least 10% of GPs. For participating in the Focus Group, GPs, nurses, patients and caregivers will be randomly extracted from the HC lists and asked to take part. The main outcomes will be the number and type of HC performed by each GPs and hospitalizations, deaths and ED access rates. The descriptive data will be analyzed using descriptive and bivariate statistics while the qualitative data through the SWOT framework.

**Points for discussion:**

Does the SWOT framework best suit for analyzing qualitative data?

What is the best variable to include to measure the QoL of patients and caregivers and burnout/distress level that could be extracted from the EMR?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Social Prescribing in Primary Care across Europe**

Nataša Mrduljaš-Đujić, Ferdinando Petrazzuoli, Jean Pierre Jacquet, Jane Randall-Smith, Juan Manuel Mendive, Katerina Javorská, Wolfram Herrmann, Joyce Kenkre, Miriam Dolan, Joanne Robins, Donata Kurpas, Patrick Ouvrard, Sinah Afra Noemi Evers, Thomas Kloppe

University of Split School of Medicine, 21410 Supetar, Croatia. E-mail: md.natasa@gmail.com

**Keywords:** social prescribing; community-based programmes; link worker; non-pharmacological care; referral to social services; social determinants of health;

**Background:**

Social Prescribing (SP) means referring patients in primary care to social activities within their community that could improve their health and well-being, often addressing isolation and loneliness.

SP programmes are being widely promoted in the UK. Although they are now being increasingly adopted all over Europe, their formats differ, and depend on health care system and facilities in the country/region.

Our previous study on SP confirmed that there is a need to clarify more to health professionals what is social prescribing dealing with. Therefore, this proposed study aims to map across Europe established SP programmes, how they are organized and implemented within healthcare systems. This will assist in establishing a clear definition of “social prescribing” for Europe and greater understanding within communities.

**Research questions:**

What constitutes social prescribing activities in European Primary Care?

**Method:**

In this qualitative, multi-country study the steering group will develop an open-ended questionnaire. The first draft of the questionnaire will be based on the research objectives, the results of our preliminary study on the topic and an extensive literature review. Subsequently, a panel of Primary Health Care experts and methodology experts will use a Delphi process to evaluate the validity of the items, the length of the questionnaire, formulate suggested changes, and identify missing items. The research team will then discuss all feedback until consensus will be reached, and a final version of the questionnaire will be developed.

The national coordinator will deliver the questionnaire to European key informants primary care personnel actively involved in Social Prescribing. The outcome of the questionnaire will be translated in English and validated via a back translation.

**Points for discussion:**

Is Social Prescribing popular in your country?

Are you aware of organisations or group with similar objectives in your country?

Are any audience participants willing to be partners in this study and also join the WESIG on Social prescribing and community orientation?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Study Protocol for Treatment of Insomnia in Primary Care Study (TIP Study)**

Ansa Rantanen, Elina Bergman, Päivi Korhonen, Juha Markkula

University of Turku, Turku, Finland. E-mail: atsipp@utu.fi

**Keywords:** insomnia, CBT-I

**Background:**

Chronic insomnia is highly prevalent in Finnish primary care patients. Guidelines suggest cognitive behavioural therapy for insomnia (CBT-I) as the first-line treatment, but its availability has been poor. In 2020 and 2021, a structured "Sleep School" group CBT-I method was implemented in health centres of Southwest Finland. The effect and feasibility of the Sleep School method has not yet been studied. Also, its effect on objectively measured sleep is unknown.

**Research questions:**

The primary aim is to investigate whether Sleep School is an effective treatment to decrease self-reported harm of insomnia among primary care patients, compared to treatment as usual. Sleep School's long-term effects, and its effects on quality of life, depressive symptoms, and objective measurements of sleep (duration, quality, structure), and patient-related factors affecting its effectiveness are also assessed.

**Method:**

The TIP study is an open, randomised clinical treatment study conducted among Finnish primary care population. Patients aged  $\geq 18$  years who want help with their insomnia symptoms and whose Insomnia severity index (ISI) score is  $\geq 8$  are included. The planned sample size is 250 patients. Subjects are randomly assigned to those participating in the Sleep School and to those receiving usual care (short counselling by a nurse) and stratified by sleep medicine use and the severity of insomnia. Self-administered questionnaires are used to gather information about participants' sociodemographic factors, health, and habits at the baseline and during the follow-up (at 2, 4, 6, and 12 months). Some participants are also followed objectively with a smart watch application. The primary outcome is the ISI score. Linear mixed models are used to analyse repeatedly measured continuous variables. The associations between objective and subjective measurements are assessed with correlation, linear models, or chi-square test, as appropriate.

**Points for discussion:**

Experiences in implementing CBT-I in primary care

Use of objectively measured sleep in detailed diagnosis of insomnia and its treatment

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****The Introduction of Green Prescription into Family Medicine Practices in Croatia**

Lorena Bosnar, Valerija Bralić Lang

Health centre Zagreb - Centre, 10 000 Zagreb, Croatia. E-mail: lorena.bosnar@gmail.com

**Keywords:** physical activity, family physicians, Green Prescription**Background:**

Regular physical activity (PA) plays an indisputable role in prevention and management of chronic non-communicable diseases. The Green Prescription (GP) represents a written recommendation for PA, and it is currently being used, in various forms, by many countries in the world (Sweden, UK, New Zealand, Japan, Canada etc.). In Croatia, it hasn't been used by family physicians (FP) so far, but only by physicians working in few Institutes of Public Health.

**Research questions:**

To examine and evaluate the level of FP' interest in additional education on the topic of prescribing PA and to assess their interest in implementing GP in their daily work.

**Method:**

A short cross-sectional survey will be conducted on 500 FP working in family medicine (FM) practices in Croatia, regardless of whether they are FM specialists or not. The online questionnaire designed for this survey will, beside standard demographic data (age, sex, years of working experience, FM specialty status, regular or substitute status), encompass questions regarding the frequency of their assessment of PA in patients, frequency of counselling on PA, their knowledge of the concept and function of GP, and whether they are willing to, in their free time, further educate themselves on the topic of prescribing PA and implementing GP in their daily work. Responses will be evaluated on the basis of the 5-point Likert scale, allowing also for free comments in support to further elaboration of the statements and to overall qualitative assessment of the concept. The participants will be recruited via an email notification that will contain a link to the web version of the questionnaire set up via the SurveyMonkey® platform (SurveyMonkey Inc., Palo Alto, CA). The software will not collect respondents' IP addresses and will be completely anonymous and voluntary.

**Results:**

TBD by survey analysis.

**Conclusions:**

TBD

**Points for discussion:**

Bearing in mind the daily workload of PF, do they have time to devote to prescribing PA?

Are FP motivated enough and do they consider themselves adequately educated to prescribe PA?

Do FP feel that additional education will increase their confidence in prescribing PA on a daily basis?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Validating a toolkit to guide the implementation of high-quality virtual primary care: an international eDelphi study**

Ana Luisa Neves, Joana Carvalho, On Behalf Of The Insight Group

Department of Primary Care and Public Health, W6 8QG London, United Kingdom. E-mail: ana.luisa.neves@gmail.com

**Keywords:** Primary care, digital health, telemedicine

**Background:**

Research is needed to consider how to support primary care organisations to smoothly incorporate virtual consultations as part of their clinical practice, while ensuring that quality and safety of the care provided. Based on qualitative research capturing the views of more than 1,600 General Practitioners across 20 countries, we developed a toolkit to guide the implementation of high-quality virtual primary care. The toolkit includes several domains: contextual considerations, technology infrastructure, awareness & experience, safety & risk management, strategic planning and supporting policies (LiE-PLOSDigHealth-2022).

**Research questions:**

The aim of this study is to explore General Practitioners' perspectives on the appropriateness and relevance of this tool.

**Method:**

We will use an eDelphi approach to engage GPs (n=100-150) with experience using virtual consultations (i.e., telephone or video); GPs will be recruited through purposive and snowball sampling techniques. Social medial platforms including WhatsApp, Facebook and LinkedIn will also be used. Data will be collected using semi-structured online questionnaires until consensus was reached on the various dimensions. Responses on the relevance of the dimensions were summarised to inform decisions on retention of the dimensions according to pre-specified rules. Thematic analysis of the free-text responses will be used to revise definitions and the assessment of dimensions.

**Results:**

Study proposal / idea.

**Conclusions:**

It is expected that this study will provide evidence base on whether our new instrument can be used in practice to guide, evaluate and monitor the implementation of high-quality virtual care in general practice.

**Freestanding Paper / Finished study****How the COVID-19 pandemic affected the total annual time spent by family physicians managing common diagnoses**

Shlomo Vinker, Avivit Golan Cohen, Ilan Green, Eugene Merzon, Ariel Yehuda Israel

Leumit Health Services, Family Medicine, 7740101 Ashdod, Israel. E-mail: vinker01@gmail.com

**Keywords:** workload, reason for encounter, complaint, COVID-19

**Background:**

The COVID-19 pandemic changed the way that common diseases are diagnosed and managed. Telemedicine modalities have been increasingly used. COVID-19 may have triggered new complaints, while lockdowns, social isolation, and barrier precautions adopted during the pandemic, may have decreased the transmission of several common infectious diseases.

**Research questions:**

To study changes in the total annual time spent by primary care physicians between 2019 and 2022 by dividing visits according to treated complaints categories.

**Method:**

A cross-sectional study based on the electronic medical records of all patients of LHS visits to primary care physicians in 2019 and 2022 (N=715,000 patients).

Visits had been classified according to the ICD-9 code of the visit. For each code, we calculated AADT (Accumulated Annual Duration of Time), and we calculated the change of AADT in each ICD-9 code/codes group between 2019 and 2022

**Results:**

We observed a marked increase in the AADT spent for visits for poorly defined complaints and administrative tasks (+26%). There was also a marked increase in AADT spent in visits for metabolic complaints such as obesity (+24%), diabetes mellitus (+6.1%), and gastrointestinal problems (+2.9%). Interestingly, less AADT was spent on respiratory infections (-30%), COPD (-23%), ophthalmological problems (-11.6%), and ear problems (-4.6%). There was also less AADT spent in visits related to injuries (-14%), arthropathies (-4.5%), and back problems (-2.1%). Less AADT was also recorded for the treatment of chronic conditions such as hypertension (-21%), and disease screening and health promotion encounters (-5.3%).

**Conclusions:**

The reduction of respiratory infectious diseases is temporary, but the shift from face-to-face medicine may have led to a concerning trend of spending more time on administrative tasks and shifting the treatment of ENT and Ophthalmologic problems to other specialists. These trends are the result of external forces, it is time to be proactive in influencing the case mix in our clinics.

**Points for discussion:**

The shift in the clinical work of family physicians - is it the same around Europe?

Are we papered to work and to teach the new remote modalities of family medicine?

How can we measure the outcomes of the new era of treatment?

**Freestanding Paper / Finished study****Views about COVID-19 vaccination in Europe: results from a general population survey (the PuV-CoVa study)**

Marija Zafirovska, Kristien Coteur, Aleksandar Zafirovski, Jelena Danilenko, Heidrun Lingner, Nicola Buono, Christine Bruetting, Liljana Ramasaco, Vanja Lazic, Monika Brovč, Fatbardha Skenderi, Felix Bauch, Erjona Abazaj, Michael Harris, Ana Lesac Brizić

KU Leuven, 3000 Leuven, Belgium. E-mail: kristien.coteur@kuleuven.be

**Keywords:** COVID-19; Vaccination; Survey; Primary Care

**Background:**

Vaccination has greatly reduced mortality from COVID-19, but is not accepted by all. Although concerns about safety and efficacy play a part in this, little is known about the general public's views about the advantages and disadvantages of COVID-19 vaccination, what other factors influence their vaccination decision-making, and their information needs.

**Research questions:**

What are the views of Europeans without a healthcare qualification on COVID-19 vaccination, and what factors influence these views?

**Method:**

An online questionnaire in eight European countries examined people's willingness to be vaccinated, their motivation, vaccination status, vaccine preference, and their information needs. Quantitative data was analysed descriptively and with logistic regression. Qualitative data was analysed thematically with inductive coding.

**Results:**

Of the 1008 respondents, 60% were female, their median age was 38 years (IQR: 28-58), and 80% had been vaccinated for COVID-19. While 44.1% agreed that 'COVID-19 vaccines are safe', 36.3% disagreed. Younger people, and those who felt that they were well informed about the different COVID-19 vaccines available in their countries, were more likely to agree that the vaccination is effective and necessary. Health and social aspects were described as advantages by some participants, and as disadvantages by others. A sense of contribution and protection motivated many, while others preferred to acquire 'natural immunity' because they did not belong to an at-risk group. Other barriers to uptake included concerns about the vaccine's rapid development and lack of information on long-term effects. Vaccination uptake could be increased by education, with information from experts working outside the pharmaceutical industry, and improving communication with hard-to-reach populations.

**Conclusions:**

The public's views on COVID-19 vaccination show great variation. Although most respondents (80%) were vaccinated, they had conflicting views on its benefits, for both health and social aspects. The availability of unbiased expertise was considered to be especially valuable.

**Points for discussion:**

What do these results mean for your practice? How should you change your interaction with patients?

What might cause variation in the general public's views on vaccination across Europe?

How would these views compare to those of healthcare professionals?



**Theme Paper / Almost finished study****Maltreatment of older people: challenges for patient-centred care in general practice.**

Lieve Peremans, Naomi Aerts, Kristof Van Assche, Maxime Castermans, Paul Van Royen, Hilde Bastiaens

University of Antwerp, Primary and Interdisciplinary Care, 2610 Antwerp-Wilrijk, Belgium. E-mail: lieve.peremans@uantwerpen.be

**Keywords:** Maltreatment, older people, patient-centred care

**Background:**

Older people are vulnerable for maltreatment, but also reluctant to ask support from healthcare providers. Interprofessional collaboration between health care and justice has deontological obstacles. Limited research has been done on models taking in account the patient's perspective.

**Research questions:**

What are the different stakeholder's perspectives and concrete obstacles in the prevention, detection and policy for maltreatment?

**Method:**

The first step involves a descriptive qualitative interview study with a purposive sample of patients and experienced professionals including nurses, GPs, social workers, notaries, lawyers and judges. Data-collection by two skilled interviewers (NA and MC) started in October 2022. Respondents were identified by organisations familiar with the problem and by snowballing. Second, we are starting a multiple case study of abused older persons, to identify and interview the parties involved and examine the obstacles they encountered during the intervention process.

**Results:**

Until now 24 patients and 39 professionals were interviewed. Three main themes were highlighted: (1) need for sensitization of older people and professionals, (2) difficulties raised by deontological obligation and (3) need for, and obstacles hampering interprofessional collaboration.

Multi-level sensitization is needed because of the complexity of elder abuse; the victim's vulnerability, their reluctance to request help; and potential abuse of powers of attorney.

Healthcare professionals, focused on a patient-centred approach, identified a tension between a trust-based relationship and upholding professional secrecy. No adequate model for interprofessional collaboration currently exists, but only goodwill of the individual actors.

**Conclusions:**

These results highlight the complexity of situations of elder abuse, and the challenges in developing and valorizing an interprofessional collaboration model which can overcome the obstacles for collaboration between healthcare, welfare and legal experts and which takes into account the patient's perspective.

**Points for discussion:**

Who has experience with valorisation study of this kind of models for interprofessional collaboration?

What is your experience with the problem of elderly abuse in your practice?

**Theme Paper / Finished study****The role of health professionals in providing patient-centered and equitable care to LGBTIQ+ patients: translation, cultural adaptation and validation of the Greek version of Lesbian, Gay, Bisexual and Transgender Development of Clinical Skills Scale**

Ilias Pagkozidis, Bettina Haidich, Loukas Athanasiadis, Theodoros Dardavesis, Zoi Tsimtsiou

MSc Social- Preventive Medicine and Quality in Healthcare, Laboratory of Hygiene, Social & Preventive Medicine and Medical Statistics, School of Medicine, Aristotle University of Thessaloniki, Greece, Thessaloniki, Greece. E-mail: pagoilias@gmail.com

**Keywords:** quality in healthcare, patient-centeredness, equity, validation, LGBTIQ+, LGBT-DOCSS

**Background:**

Ensuring patient-centered and equitable care is intertwined with quality in primary care and important for minorities, such as the LGBTIQ+ community, often described as having limited access, lower satisfaction with health services, and worse health outcomes. This study aimed at providing a valid and reliable Greek version of a tool, allowing the recording of knowledge, attitudes and clinical preparedness of health professionals towards LGBTIQ+ patients.

**Research questions:**

Is the Greek version of the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS) valid and reliable?

**Method:**

After obtaining permission by the scale's developer, bilingual translation was performed, followed by cultural adaptation, which shaped the Greek version of LGBT-DOCSS, after interviewing 13 health professionals. A validation study was carried out among health professionals, at Hippocratio General Hospital of Athens. The validity of the Greek version was tested with structural validity (convergent and known groups validity) and face validity, while internal consistency and test-retest reliability (second completion after 2-3 weeks by same participants) were applied to test reliability.

**Results:**

Overall, 238 healthcare professionals participated in the study. The Greek LGBT-DOCSS demonstrated known groups validity, with groups characterized by older age, stronger religiosity, no contact with LGBTIQ+ individuals at work or personal life, no LGBTIQ+ health education, and heterosexual orientation being associated with lower scores ( $p < 0.05$ ). Convergent validity was demonstrated (correlation with the Greek version of Attitudes towards Lesbians and Gay men (ATLG) scale, Spearman's  $\rho = -0.598$ ,  $p < 0.001$ ), while face validity was confirmed by 81.9% ( $n = 195$ ) of participants (median 8/10). Regarding reliability, satisfactory internal consistency (Cronbach  $\alpha = 0.785$ ) and test-retest reliability (Pearson's  $r = 0.793$  and student's  $t$ -test  $p = 0.7$ ) were found.

**Conclusions:**

The Greek version of LGBT-DOCSS is a valid and reliable scale, the only tool available in Greece for mapping health professionals' knowledge, readiness and attitudes towards LGBT patients, in efforts to ensure provision of patient-centered and equitable care.

**Points for discussion:**

What are the difficulties, if any, that health professionals in primary care face when catering for LGBTIQ+ patients?

Are health professionals in primary care prepared for providing patient-centered and equitable care to LGBTIQ+ patients?

How do you aid LGBTIQ+ patients in realizing their full health potential?

**Theme Paper / Finished study****Using a QR-Code on a poster in primary care waiting rooms as a medium to screen for intimate partner violence**

Christophe Berkhout, Alix Teneur, François Quersin, Axel Descamps, Lieve Peremans, Paul Van Royen

University of Lille, UFR3S, Faculty of medicine, 59045 LILLE CEDEX, France. E-mail: christophe.berkhout@univ-lille.fr

**Keywords:** Intimate partner violence, risk assessment, poster, waiting rooms, social isolation.

**Background:**

One woman out of ten is a victim of intimate partner violence (IPV). In France, every year, about 120 women are killed by their partner. Victims would have liked their GP or midwife to tackle the problem in 73% of cases, as 52% of them don't initiate proceedings. The Woman abuse screening tool has been validated in French (WAST-F). There is few literature about the use of posters exposing a Quick Response-Code (QR-Code) in waiting rooms.

**Research questions:**

To test the efficacy of a QR-Code on a poster in the waiting room of GPs and midwives to screen for IPV. To evaluate the duration of the motivation of GPs and midwives to screen for IPV in real life.

**Method:**

The design was a cross-section observational study implemented between May and October 2022. Investigators were GPs and midwives. Women were included if they were aged 18 years or more, if they had a smartphone with an Internet connection and if they were consulting alone. The WAST-F was attainable online scanning a QR-Code on a poster in the waiting room. In all eligible women, investigators were expected to complete another questionnaire checking for inclusion criteria and tackling explicitly IPV.

**Results:**

Twenty GPs and midwives included patients. Forty women scanned the QR-Code and completed the WAST-F questionnaire, 17 completing both questionnaires. Investigators included 227 patients, 210 completing only the investigator's questionnaire. Sixteen (18%) patients were screened positive for IPV. In 8 cases, the investigator was not aware of it. The poster was noted by 139 patients (61%), 199 (88%) had a smartphone with an Internet connection and 2 (1%) scanned the QR-Code and completed online the WAST-F before the encounter. Fifteen (7%) patients completed the WAST-F after the encounter. Despite reminders, inclusions drastically decreased after 10 weeks. A sustained rhythm of one QR-Code scanned weekly was observed.

**Points for discussion:**

It was noted that women consulting their GP for themselves were often accompanied by their partner

People use their smartphones in waiting rooms for gaming but seldom scan QR-Codes on posters

Sustained screening for IPV in women is difficult to implement in primary care

Presentation on 13/05/2023 09:10 in "Parallel Session G: Theme Papers: Vulnerable People" by Christophe Berkhout.

## **Longitudinal Web-Based Study on Psychological Outcomes Amongst General Practitioners and Psychiatrists in Croatia and Effects of Intervention in a Cohort Group**

Sunčana Vlah Tomičević, Valerija Bralić Lang

Health Center Zagreb - East, 10040 ZAGREB-DIO, Croatia. E-mail: [suncanav@gmail.com](mailto:suncanav@gmail.com)

**Keywords:** psychological outcomes, general practitioners, family medicine, psychiatrists

### **Background:**

Doctors work in a stressful environment and have a higher prevalence of stress-related mental disorders, anxiety, depression, and PTSD. The suicide rate is 2 - 4 times higher. Beside occupational factors, unexpected events like the SARS-CoV-2 pandemic, bad workplace relationships, family problems, and personality type influence the result. GPs and psychiatrists are much affected by mental health problems. Since both specialties treat mentally ill patients, recognition of own mental strain and implementation of alleviating methods should be exercised but it's often ignored.

### **Research questions:**

To compare the prevalence of stress, anxiety, depression, and PTSD amongst GPs and psychiatrists and which risk factors are influencing the result. To analyze if participation in Balint groups benefits their mental health.

### **Method:**

An online questionnaire for GPs and psychiatrists with sociodemographic data, DASS-21, IES-R, Family APGAR, and risk factors (work environment and satisfaction, family life, chronic disease) will be formed and conducted 2 times throughout 2 years. The questionnaire can be filled out only once and participants will have to create a unique code to mark their answers. Amongst them, a representative cohort group of volunteers will be formed to participate in Balint groups and learn techniques of mindfulness and relaxation. After three months, the cohort will be asked to fill out the questionnaire again using their code.

### **Results:**

Prior results showed a high prevalence of stress, anxiety, depression, and PTSD amongst GPs and we are expecting higher results in GPs in comparison with psychiatrists. We anticipate work satisfaction to have a great influence on the result. The intervention should lower the results in DASS-21 and IES-R.

### **Conclusions:**

A high prevalence of stress, anxiety, depression, and PTSD amongst primarily GPs and also psychiatrists is influenced by a group of risk factors. Mindfulness and relaxation along with support received through Balint groups are beneficial for doctors' mental health.

### **Points for discussion:**

Prevalence and risk factors of stress, anxiety, depression, and PTSD in GPs and psychiatrists

Rising awareness of mental disorders in doctors

Efficiency of self help and effect of intervention?

**Web Based Research Course Presentation / Ongoing study no results yet****Patients with Medically Unexplained Symptoms in Primary Care: Perception of the Patients and their Doctors**

Martin Seifert

Charles University, 3rd Faculty of Medicine, 12000 Prague 2, Czech Republic. E-mail: matseifert@seznam.cz

**Keywords:** medically unexplained symptoms, primary care, general practitioners, patient perception, somatization, psychosomatic care, qualitative study

**Background:**

Patients with medically unexplained symptoms (MUS) make up a significant proportion of patients in general practice and can be very burdensome for doctors and the whole health and social care system. Czech general practitioners (GPs) can officially achieve second medical specialization in Psychosomatic medicine which is based on many courses, months of internships, around 250 hours of self-experience, an original paper and finally an oral exam. There is an original Czech guideline on primary care of patients with MUS. Yet, there has been no research focusing on patients with MUS or with somatization disorders in primary care or their GPs in the Czech Republic.

**Research questions:**

What do patients with MUS expect from their GPs? How do they experience the role of their GP in their illness?

What is the perception of the Czech GPs with and without psychosomatic education of their role in care of patients with MUS? What are their needs in delivering the best care for their patients with MUS?

**Method:**

We currently analyse the results of an on-line questionnaire focused on experience with care of patients with MUS filled by 152 GPs. We performed thematic analysis of three open questions.

We will carry out individual in-depth semi-structured interviews with patients with MUS lasting at least 3 months identified by their GPs and with the GPs of these patients. We will also do focus groups with GPs without and with GPs with psychosomatic training facilitated by a psychotherapist with experience with MUS patients. We will perform thematic analysis of all the data collected from records of the interviews and the focus groups.

**Conclusions:**

We expect to identify the potentials for improvement of the care for patients with MUS by their GPs and also to identify significant barriers to improving patient outcomes.

**Points for discussion:**

What should be the right cost-effective psychosomatic education for GPs? Effective or for everybody?

How should the cost-effective psychosomatic intervention in primary care look like?

How to identify the "psychosomatic" patients in general practice and how to select the patients for the study?

## Psychological Safety and Team Performance in Primary Care

Ricardo Antunes, Catarina Viegas Dias

Usf da baixa, 1900-138 L Lisboa, Portugal. E-mail: ricardoantunes.55@gmail.com

**Keywords:** Primary Care; Team; Psychological safety; Teamwork; Multidisciplinary; Autonomous; Interdependent.

### Background:

Psychological safety is the degree to which individuals are able to take on personal risk and express divergence, without fear of embarrassment or criticism. Psychological safety is a team level phenomenon that is associated with patient safety and better learning environments in secondary care, but studies in teams providing primary care (TPPC) are lacking. In the past decades, there has been an increasing focus on the relevance of teamwork and interdependence among TPPC, which dynamics differ greatly from secondary care. However, the levels of psychological safety remain uncharacterized in primary care, and its impact on performance of TPPC remains understudied.

### Research questions:

This study aims to describe the level of Psychological Safety in TPPC and explore its association with team performance.

### Method:

We will conduct a cross-sectional study, following the STROBE guidelines. Psychological safety will be measured using a translated version of Edmonson's Psychological Safety Tool Questionnaire. As a team performance proxy, we will use the global performance index, publicly available for all TPPC in Portugal. The study will include 8 primary care teams in the Lisbon area, which include doctors, nurses and clinical secretaries. Team selection will be random, and stratified 1:1 according to performance (lowest quartile/highest quartile). Sample size was calculated assuming a standard deviation of 5 (based on a study in secondary care) and an alfa error of 0.05 (two-sided), which will provide 80% power to detect a 10-point difference between psychological safety mean scores of low and high performing teams. Statistical analyses will include Pearson's correlation and multiple regression. The protocol will be submitted to the local Ethics Committee.

### Results:

We anticipate that high performing teams will have higher psychological safety than low performing practices.

### Conclusions:

Results will help increase awareness of the importance of psychological safety in primary care teams and might increase acceptability of future interventions to increase it.

### Points for discussion:

Are other research teams exploring psychological safety in primary care in Europe?

Representativeness versus feasibility of the study

**Poster / Almost finished study****A virtual community of practice to improve the empowerment of people with ischaemic heart disease: a randomized controlled trial**

Débora Koatz, Helena Vall-Roque, Patricia Cifuentes, Vanesa Ramos, Alexandra Torres, Anthea Santos, Ana Toledo, Javier García, Valeria Pacheco, Lilisbeth Perestelo-Pérez, Carola Orrego, Ana Isabel Gonzalez-Gonzalez

Innovation & International Projects Unit, Dirección General Investigación, Docencia e Innovación, Consejería de Sanidad, Comunidad de Madrid / RICAPPS, 28013 MADRID, Spain. E-mail: aisabel.gonzalezg@salud.madrid.org

**Keywords:** Ischemic heart disease, virtual community of practice, self-management, empowerment, randomized controlled trial

**Background:**

Virtual Communities of Practice (VCoP) offer ubiquitous access to knowledge for people in similar situations. Main benefits include information exchange, social support, and skills improvement to cope with the disease. There is scarce evidence on the clinical impact of these interventions on people with chronic conditions.

**Research questions:**

What is the effectiveness of a VCoP regarding patient activation and other patient relevant measures in people with recent diagnosis of ischaemic heart disease (IHD)?

**Method:**

A pragmatic randomised controlled trial is taking place in Catalonia, Madrid and Canary Islands, Spain. Three hundred patients with a recent diagnosis of IHD must be recruited to participate in the intervention/control (usual care) group. The intervention group is offered participation in a co-designed gamified VCoP for 12 months, which proposes tailored content based on empowerment dimensions developed by a multidisciplinary team. The primary outcome is the Patient Activation Measure. Secondary outcomes include clinical variables, knowledge, attitudes, adherence to Mediterranean diet, physical activity, depression, anxiety, medication adherence, quality of life and health resources use. Data is collected from self-reported questionnaires at baseline, 6, 12 and 18 months.

**Results:**

Two-hundred eighty-two participants have been included since June 2021. Preliminary results show that, at 12 months, a significant difference is found for patient activation and adherence to Mediterranean diet: the change in the trajectory of the two groups over time is significant, favouring the intervention group. A tendency towards significance is also found for self-efficacy on managing the disease.

**Conclusions:**

Due to COVID-19, recruitment is a major challenge. Although the study is still in progress, preliminary results suggest that using a VCoP might be a useful approach for individuals with IHD to improve their empowerment. This study has been funded by Instituto de Salud Carlos III through projects "P118/01404, P118/01397, P118/01333", co-funded by European Regional Development Fund (ERDF), "A way of shaping Europe".

**Points for discussion:**

How to optimize patient recruitment with the post COVID-19 situation

Usefulness of VCoP for IHD and other chronic diseases: strengths and limitations

How to overcome the barriers and limitations that VCoP might pose for people with chronic diseases

**Poster / Ongoing study no results yet****Screening Elderly For Risks Associated With Falls and Acute Health Incidences**

Didem Kafadar, Nurver Sipahioğlu, Ayşen Fenercioğlu

Istanbul University-Cerrahpaşa, Cerrahpaşa School of Medicine, 34098 İstanbul, Turkey. E-mail: dkafadar@gmail.com

**Keywords:** elderly, screening, comprehensive assessment, falls

**Background:**

In elderly population, presence of geriatric syndromes such as incontinences, cognitive impairment and depression as well as physical competence in performing daily living activities are defined by comprehensive geriatric assessment (CGA) which may be difficult to perform in conditions of primary care clinics. To assess elderly patients in our community in limited time and to determine the patients who need further assessments, G8 screening tool has been defined as a practical tool.

**Research questions:**

1. What are the sociodemographic features and comorbidities of geriatric patients who score low from G8 screening test?
2. Is gait speed adequate to enhance the findings of G8 screening tool?

**Method:**

A total of 123 consecutive patients with no history of falls in the last year will be included to the study after their informed consent is obtained. The sociodemographic characteristics, medical conditions and body mass index (BMI) and gait speed of the patients applying to the outpatient clinics are recorded. In G8 screening test, brief questions regarding CGA, self-rated health status, BMI, and age of the patient are considered in the final score. If the patient scores  $\leq 14$ , then CGA is needed to further assess the patient. For 3 months, at the end of each month patients will be followed up by phone calls for any falls and health impairment. Patients with visual and hearing impairments, oncologic and neurologic diseases will be excluded.

**Results:**

By screening, comorbidities, sociodemographic features, association of G8 screening score and health incidents and falls during the follow-up period will be evaluated. Gait speed may enhance the results of the G8 screening test.

**Conclusions:**

As a result of this study, the effectiveness of a practical tool to define the elderly at risk of falling or experiencing health incidents may be demonstrated in primary care settings. We may raise awareness in the community about risks concerning the elderly population.

**Points for discussion:**

Discussion of utilization of screening tests in limited time in primary care settings.



**Poster / Study Proposal / Idea****Structured telephone intervention to improve the self-management in COPD patients in primary level of health care**

Azra Gicic, Katerina Kovachevikj, Sashka Janevska, Marta Tundzeva, Katarina Stavrikj, Sasho Stoleski

PZU HIGIN - Skopje, 1000 Skopje, North Macedonia. E-mail: movalis@yahoo.com

**Keywords:** COPD, self-management, family doctors, telephone coaching, primary level of health care

**Background:**

The COVID-19 pandemic showed that the telephonic consultation is well accepted among the chronic patients. The prevalence of COPD in North Macedonia is 7.16%. The COPD is the third most common reason for the patients' visits to their family doctor ambulance, second most common reason for referral to a secondary healthcare system and the first reason in hospitalization of patients in North Macedonia.

**Research questions:**

The structural telephone intervention to COPD patients by their family doctors in primary health care will improve the control of the disease and the quality of life compared to the standard health care protocol.

**Method:**

Randomized controlled study in 24 family medicine ambulances in Skopje including 240 patients older than 18 with mild form of COPD (GOLD1 and GOLD2) confirmed with spirometry and  $\leq 1$  exacerbations without hospitalization. In 120 patients will be performed telephone intervention SAPHA by GP (smoking cessation advice, adherence to therapy, physical activity, action plan and prevention of infections) and the other 120 will get the standard health care. The telephone intervention will take place in the first, 2nd, 4th and 12th week since the begin of the study.

In all of the patients within the 0, 6th and 12th month we will evaluate quality of life, COPD symptoms, dyspnea level and psychical activity with the use of 4 internationally standardized questionnaires.

**Results:**

The primary outcome is related to the quality of life measures using St.Georges respiratory questionnaire (SGEQ) score at 12 months from baseline. The secondary outcomes measures health habits (smoking and psychical activity), adherence to therapy and symptoms control using the mMRC and CAT, depression and anxiety level, number of exacerbations and antibiotics prescriptions at six and 12 months.

**Conclusions:**

We expect improvement of quality of the live using self-care management in patients with mild form of COPD in primary heath care.

**Points for discussion:**

What precautions should be taken to prevent bias?

Is one year enough to achieve in improvement of life-quality ?

**Poster / Almost finished study****The treatment results of hypercholesterolemia and costs of care for prediabetics compared with type 2 diabetics in Southwest Finland**

Merja Laine, Hannu Järveläinen, Markku Vielma, Juha-Matti Varjonen, Päivi Rautava

University of Turku, 21530 Paimio, Finland. E-mail: merja.laine@fimnet.fi

**Keywords:** prediabetes, diabetes, comorbidities, treatment, costs

**Background:**

Prediabetics have a markedly increased risk of developing type 2 diabetes and cardiovascular diseases. Moreover, the costs of treatment caused by type 2 diabetes and its comorbidities are high.

**Research questions:**

Does the intensity of lipid treatment differ in prediabetics and type 2 diabetics if cardiovascular diseases were established/not diagnosed? How do macrovascular complications affect the costs of treatment?

**Method:**

This was a qualitative retrospective register study. The study included data from 37 501 type 2 diabetics and 42 554 prediabetics from Southwest Finland in 2019.

Prediabetics were identified based on abnormal glucose metabolism from the patient registers of the health centres. Diabetics were identified and grouped based on laboratory tests, diagnosis, special reimbursement rights for antidiabetic drugs. Cardiovascular diseases were identified based on the ICD10 diagnosis from the historical data. Treatment levels for LDL cholesterol and costs were compared in type 2 diabetics and prediabetics with and without cardiovascular comorbidities.

**Results:**

32% (11 998) of type 2 diabetics and 26% (10 892) of prediabetics had cardiovascular comorbidities. LDL was studied in 77% of type 2 diabetics and 66% of prediabetics. Only 40% of diabetics and 30% of prediabetics, who had cardiovascular disease, achieved a target of LDL < 1.8 mmol/l and more than half of those without complications had LDL > 2.5 mmol/l. The total costs of specialised medical care and pharmacotherapy per patient per year for type 2 diabetics with complicated disease were EUR 4 688 and without complications EUR 1 981 and for prediabetics EUR 3 376 and EUR 1 961, respectively.

**Conclusions:**

Treatment of prediabetics is not as intensive as the treatment of diabetics. Comorbidities increase the costs of both pharmacotherapy and specialised medical care compared to patients without complications. Earlier identification and treatment could improve the prediction of prediabetics and achieve cost savings.

**Points for discussion:**

Can electronic health register (EHR) help us to identify better the prediabetics?

How can we improve the treatment of hypercholesterolemia

Could better treatment of hypercholesterolemia reduce healthcare costs

**Poster / Ongoing study with preliminary results****Eurodata Study: Covid-19 Vaccination Pathway and the Role of Primary Care in 27 European Countries**

Lourdes Ramos Del Río, Ileana Gefaell, Sara Ares Blanco, Marina Guisado Clavero, Louise Fitzgerald, Heidrun Lingner, Liubovė Murauskienė, Ábel Perjés, Davorina Petek, Ferdinando Petrazzuoli, Goranka Petricek, Martin Sattler, Natalija Saurek-Aleksandrovska, Alice Serafini, Theresa Sentker, Gunta Ticmane, Peter Torzsa, Bert Vaes, Shlomo Vinker, Limor Adler, Maria Bakola, Sabine Bayen, Elena Brutskaya-Stempkovskaya, Iliana-Carmen Busneag, Asja Ćosić Divjak, Maryher Delphin Peña, Philippe-Richard Domezey, Sabine Feldmane, Dragan Gjorgjievski, Miroslav Hanževački, Kathryn Hoffmann, Oksana Ilkov, Shushman Ivanna, Marijana Jandric-Kocic, Erva Ucuncu, Aleksandar Kirkovski, Snežana Knežević, Büşra Çimen Korkmaz, Milena Kostic, Anna Krztoń-Królewiecka, Liga Kozlovska, Katarzyna Nessler, Anna Segernäs Kvitting, Sven Streit, Senn Oliver, Raquel Gomez Bravo, Maria Pilar Astier-Peña, Ana Luisa Neves, Nagu Penakacherla, Bruno Heleno, Sherihane Bensemmane

SERMAS, 28004 Madrid, Spain. E-mail: ileanagefaell@gmail.com

**Keywords:** COVID-19, Primary Care, Vaccination, Drug-Related Side Effects and Adverse Reactions

**Background:**

Primary health care (PHC) participated in COVID-19 vaccination in Europe but their role has not been described.

**Research questions:**

How was the COVID-19 vaccination pathway in different European countries in PHC? Where did vaccination take place in the community?

**Method:**

Descriptive, cross-sectional, retrospective study with qualitative data acquired through a semi-structured questionnaire to know COVID-19 vaccination in PHC in Europe (27 countries participating). Main variable: COVID-19 vaccination pathway in PHC. All variables were collected from each country in December 2020 till December 2021.

**Results:**

Vaccination centres were developed in 25 countries. PHC professionals participated in the vaccination campaign in 25 countries but the participation was variable (in Italy was voluntary, in Turkey and Greece only adults were vaccinated in PHC). GP practices vaccinated in 20 countries. GPs, nurses were more frequently involved but also midwives, pharmacists, paediatricians, dentists, physiotherapists, students, paramedics. Patients could get an appointment online, by phone, in person in most of the countries. A safety protocol before vaccination was present in nearly all the countries. Advice regarding side effects was given in all the countries with informed consent in at least three countries. The waiting time after the vaccination was between 10 and 30 minutes. Patients with prior anaphylactic reactions were referred to Allergology in 6 countries. In case of side effects of the vaccine, nurses and doctors provided care.

**Conclusions:**

Multiprofessional PHC teams participated actively in the COVID-19 vaccination in at least 25 European countries .

**Points for discussion:**

What are the benefits of COVID-19 vaccination in primary health care?

Which are the professionals more suitable for COVID-19 vaccination in the context of the pandemic?

**Poster / Ongoing study with preliminary results****Long-COVID psychological and neuropsychological symptoms**

Raquel Gomez Bravo, Charles Benoy, Mark Ritzen, Alexandre Infanti, Joel Billieux, Claus Vögele

CHNP, Rehaklinik., L-9002 Ettelbruck, Luxembourg. E-mail: raquelgomezbravo@gmail.com

**Background:**

It is estimated that between 10-20% of people who experienced COVID-19 develop a 'post COVID-19 condition' or 'Long COVID' (LC), which includes all mid- and long-term physical, psychological and neuropsychological symptoms.

**Research questions:**

What are the psychological and neuropsychological symptoms associated with Long COVID?

**Method:**

Descriptive, online cross-sectional questionnaire and neuropsychological tests. Participants were recruited through public relations, information and social media campaigns, targeting long COVID patients, general public and healthcare professionals.

**Results:**

Out of the 1.895 participants who completed the survey, 78.4% reported to have had COVID-19, and 64.3% experienced LC symptoms with fatigue as the most frequently reported symptom (65.4%). The estimated most common Corona variant was omicron (40%), followed by delta (11.5%). There were positive and statistically significant correlations between reported physical symptoms and results from the neuropsychological tests, perceived stress, anxiety and depression scores. The average time that elapsed between LC symptom onset and completion of the online survey was 8.3 months.

**Conclusions:**

Online real-time neuropsychological testing should be considered as part of the routine evaluation of Long COVID patients to specifically treat these symptoms within multidisciplinary teams.

**Points for discussion:**

Should validated self-report assessment scales and neuropsychological tests be included in standard diagnostic procedures to adequately address neuropsychological and mental health consequences of long COVID?

Can eHealth solutions offer a valuable alternative to provide effective assessment for Long COVID patients experiencing cognitive impairment?

**Poster / Ongoing study with preliminary results****Post-COVID-19 brain fog assessment in family medicine, a pilot study**

Ana Lesac Brizić, Vanja Lazic

Health center Zagreb - Center, Association of Teachers in General Practice / Family Medicine, 10000 Zagreb, Croatia. E-mail: vanjlaz@gmail.com

**Keywords:** post-COVID, brain fog, tool validation

**Background:**

COVID-19 affects cognitive functions and is associated with functional changes in the central nervous system. In addition, it is associated with cognitive impairment, behavioral changes, confusion, and poor concentration, which is described in the literature as brain fog (BF). The cause of BF can be the virus itself, but also a number of biopsychosocial factors that have been disrupted due to the pandemic. BF, even if transient, strongly impairs a person's quality of life and leads to reduced social functionality. BF can be assessed using Mini-Cog or MoCA, however, these tests might not be a good fit for post-COVID-19 BF. The measurement of reaction time (RT) and complex reaction time (cRT) using online tools might provide a simple way to assess post-COVID-19 BF in a family medicine setting.

**Research questions:**

The aim of this study is to assess RT and cRT in post-COVID-19 patients with BF, relative to their expected age and gender averages in RT and cRT tests, COVID-19 severity, post-COVID-19 duration, self-assessment scores of BF, and Mini-Cog results.

**Method:**

50 patients aged 18-65 who visit their family doctor with complaints of post-COVID-19 BF will be asked to join the pilot. Patients will be asked by their doctors to complete online RT, cRT, and Mini-Cog tests in the office along with BF severity self-assessment. COVID-19 data including disease severity and time period from COVID-19 infection will be collected from patient medical records. The validity of RT and cRT will be assessed relative to Mini-Cog and BF self-assessment.

**Results:**

Preliminary results will be presented at EGPRN SPLIT 2023.

**Conclusions:**

The proposed study will assess RT and cRT tests as tools to assess BF in post-COVID-19. This could help better identify patients with BF as a vulnerable population, and to provide them with the most adequate rehabilitation possible from both medical and social points of view.

**Points for discussion:**

How do you evaluate post-COVID-19 brain fog in your country?

Are you aware of any tests or procedures that are aimed specifically at evaluating post-COVID-19 brain fog?

Do you think RT and cRT are a good fit as a proxy for post-COVID-19 brain fog severity?

**Poster / Finished study****PRICOV-19 study Hungarian Results**

Zoltán Lakó-Futó, Esther Van Poel, Sara Willems, Krisztián Vörös, Peter Torzsa

Semmelweis University, Budapest, 1085 Budapest, Hungary. E-mail: lakofutozoltan@gmail.com

**Keywords:** Covid 19, primary care, PRIVO19, epidemia, wellbeing

**Background:**

Hungarian Results of Pricov-19 study. The research focused on the impact of the COVID-19 pandemic on primary care in Europe.

**Research questions:**

How primary care was organized in different countries of Europe. Present work shows Hungarian results.

**Method:**

The research consortium governed by Ghent University, collected data using questionnaires filled out on a voluntary basis. The research took place in the member states of the European Union, as well as in Ukraine, Moldova, Bosnia-Herzegovina, Kosovo, Serbia, Turkey, Israel, Norway and Switzerland.

**Results:**

Department of Family Medicine, Semmelweis University, Budapest, organized the collection of Hungarian national data. The questionnaires were filled out by 384 participants in Hungary. 96% of the respondents experienced an increase in responsibilities in their practices. 38% considered the need for additional training in order to adapt to the changed environment. 84% of completed questionnaires reported restrictions in the area of practice infrastructure. The prominence of online communication channels (video communication 15% vs 27%), pre-screening of doctor's appointments (89%), infection control (90.1%) was noticeable.

**Conclusions:**

The Covid-19 epidemic subjected primary care participants to a serious duty. New ways and communication channels have become popular at different levels of healthcare, patient communication and collegial contact. Preserving the physical and mental health of healthcare employees have become one of the most important tasks in order to maintain the functionality of the sector.

**Points for discussion:**

Covid 19 epidemic,

primary healthcare

wellbeing

**Poster / Ongoing study with preliminary results****Primary health care during the COVID 19 pandemic in Croatia**

Asja Ćosić Divjak, Goranka Petricek, Miro Hanževački, Ksenija Kranjčević, Valerija Bralić Lang, Marion Tomicic, Tamara Poljičanin, Sara Ares Blanco, Raquel Gomez Bravo

Zagreb-Centar Helath Centre, Zagreb, Croatia. E-mail: asja.cosic@gmail.com

**Keywords:** COVID-19, Primary Health Care, Clinical Pathways, Croatia

**Background:**

Although Primary health care (PHC) is the cornerstone of health care, its role was not properly recognized during the COVID 19 pandemic. Reviewing and publishing data on PHC activities during the pandemic should enable better management of future pandemic situations.

**Research questions:**

There is insufficient data on PHC activities in response to the COVID-19 pandemic. It was also not investigated what exactly was the role of PHC in controlling the pandemic in Croatia.

**Method:**

Descriptive, cross-sectional, retrospective study on COVID-19 infection for September 2020 in the context of PHC in Croatia, part of PHC-Eurodata-Covid19 study (supported by the EGPRN Grant). Qualitative data acquired through a semi-structured questionnaire on COVID-19 pathway in PHC in Croatia. Main variable: PHC COVID-19 acute clinical pathway. Secondary variables: COVID-19 diagnosis, testing, hotline, remote assessment.

**Results:**

COVID 19 case detection and testing was performed at the PHC level. RT-PCR and rapid lateral flow test was performed free of charge with a medical referral. PHC as well as Laboratories reported results to patients. Contact tracing was made mainly by general practitioners and public health specialists. Mandatory isolation ranged from 10 to 14 days. Completion of isolation required 3 consecutive days without fever as well as significant improvement of respiratory and other symptoms. Sick leave was given by general practitioners. Patients' hotels were available. Follow up was made mainly by phone call or email. X Ray and laboratory testing was also available. In case of deterioration patients were referred to hospital by ambulance.

**Conclusions:**

PHC was the first contact with health care system for most COVID-19 patients in Croatia – from testing, physical exploration, complementary diagnostics, treatment, sick leave and contact tracing. Publishing data on PHC activities should strengthen its role and consequently enable better management of future pandemic situations.

**Points for discussion:**

What measures at PHC level could strengthen response for future pandemics?

**Poster / Finished study****Vaccine hesitancy in poorer people: A qualitative study on attitudes, behaviors, and barriers to COVID-19 vaccination among beneficiaries of a social supermarket of a Greek island community**

Paraskevi Thymara, Maria Bakola, Konstantina Sultana Kitsou, George Charalambous, Eleni Jelastopulu

Department of Public Health, Medical School, University of Patras, 26500 Rio Patras, Greece. E-mail: maria.bkl@gmail.com

**Keywords:** COVID-19; Vaccination Hesitancy; Anti-Vaccination; Vulnerable Populations; Greece

**Background:**

Several studies report that COVID-19 vaccination rates are lower in people of low socioeconomic status. Studies investigating the parameters of vaccination hesitancy in poorer people are lacking.

**Research questions:**

This study aims to investigate COVID-19 vaccine reluctance among vulnerable members of a community, focusing on factors and barriers influencing vaccine acceptance.

**Method:**

We used in-depth interviews with 11 unvaccinated beneficiaries (state-recognized vulnerable groups) of a social supermarket in Spetses, a small Greek island, to produce an analysis of the current barriers to vaccination. The study took part from February till June 2022. Each participant was asked nine semi-structured questions, the interview was recorded and transcribed, and a thematic content analysis was performed.

**Results:**

The results of the interviews revealed two majors differently situated groups. One group is made up of people who are afraid of side effects of COVID-19 vaccination, while the other is made up of people who adopt a general attitude of resistance against the government and the mandatory COVID-19 vaccination. Furthermore, our study has shown that COVID-19 vaccination has created a rift in personal relationships with friends and family and revealed significant communication gaps regarding the COVID-19 vaccination campaign in Greece.

**Conclusions:**

This study highlights the importance of qualitative studies investigating the reasons for vaccine hesitancy in people of low socioeconomic status. The communication campaign on COVID-19 vaccination in Greece needs to be improved and redefined, as well as the role a primary care physician can play in boosting vaccination confidence.



**Poster / Finished study****Diabetes control in the community, under the management of a diabetes-clinic nurse specialist, and the effect of a parallel diabetologist advice**

Joseph Azuri, Tzipi Gadot

Tel Aviv University and Maccabi Helathcare Services, 6745605 Tel Aviv, Israel. E-mail: azurij@actcom.co.il

**Keywords:** Nurse, Diabetes, Diabetologist**Background:**

Nurses play a key role in managing care and educating people with diabetes in various healthcare systems worldwide, while physicians play this role in others. In addition, some healthcare systems authorize specialist nurses to change patient dose regimens.

**Research questions:**

We examined diabetes outcomes in the community by the management of a diabetes-clinic nurse only versus parallel management with a diabetologist.

**Method:**

Retrospective data were collected for 100 consecutive people with diabetes registered in a community clinic with a diabetes-clinic nurse specialist as a case manager from 1/2018. About half of the patients selected received parallel advice from a diabetologist. Inclusion criteria included poor control of type 2 diabetes (HbA1c above 9%). Patients using an insulin pump, glucose sensor technologies, or multiple injection insulin programs were excluded.

**Results:**

One hundred people with diabetes who met the study criteria were included in the study, 64 males and a mean age of  $60.03 \pm 11.11$ . In a follow-up of  $161.31 \pm 68.65$  days, HbA1c levels decreased by  $3.17 \pm 1.95\%$  and did not change in a further follow-up of  $162.36 \pm 72.75$  days. Significant improvement was also observed in controlling the other risk factors examined. Parallel consultation with a diabetologist and the nurse's use of her authority for dose modifications showed no differences in all parameters. Logistic regression for analyzing the effect of the variables related to the patient showed only a moderate effect.

**Conclusions:**

Access to professional services remains a significant challenge for healthcare systems in long-term diabetes control. Monitoring poorly controlled people with diabetes with the help of a diabetes-clinic nurse specialist in the community clinic significantly improved diabetes and risk factors control and persisted long after the intervention. Healthcare systems should consider expanding the service of the diabetes-clinic nurse specialist in the community. Further studies will be required to examine the results in different patient subgroups.

**Points for discussion:**

Diabetes control in the community

**Poster / Ongoing study with preliminary results****Interrelation of psychosocial and clinical-pathogenetic changes in obese patients**

Victoria Tkachenko, Taisiia Bagro

Shupyk National Healthcare University of Ukraine, Department of Family Medicine, Kyiv, 04112 Kyiv, Ukraine. E-mail: wtk@ukr.net

**Keywords:** abdominal obesity, anxiety, depression, sleep quality, sleepiness, eating behavior, serotonin, leptin, primary care

**Background:**

The problem of obesity in the world plays a significant role in the progression of non-communicable diseases.

**Research questions:**

To determine the interrelation between psychosocial and clinical-pathogenetic changes in obese patients.

**Method:**

75 patients with obesity ( $39.03 \pm 0.93$  years) and 75 healthy ( $36.84 \pm 0.96$  years) were examined with measurements of body surface area (BSA), waist/hip ratio (WHR), conicity index (ConI), a body shape index (ABSI), abdominal volume index (AVI), blood levels of glucose, insulin, HOMA index, cholesterol, lipidogram, serotonin and leptin, scores of HADScale, Beck Scale, Hamilton Scale, Dutch Eating Behavior Questionnaire, Epworth Sleepiness Scale, Pittsburgh Sleep Quality Questionnaire, SF-36. Statistical analysis used IBM SPSS, Excel 2010.

**Results:**

Study group, in contrast to control group, had significantly higher levels of BMI, WHR, BSA, indices ConI, ABSI and AVI, HOMA, glucose, insulin, cholesterol, lipidogram, leptin, lower serotonin level. It was accompanied with clinically expressed anxiety or depression, changes in eating behavior (tendency to "eat emotionally", overeat, eating without restrictions), sleep disturbances (excessive daytime sleepiness, poor sleep quality) and reduced quality of life. A positive correlation between obesity indices, glucose levels, lipidogram, atherogenicity index, HOMA index, leptin, scores of depression and anxiety, and negative correlation with ABSI index, HDL, serotonin were found. In addition, positive correlation was observed between leptin and scores of depression, anxiety, eating behavior, sleepiness, and negative correlation of these indicators with the level of serotonin.

**Conclusions:**

A strong interrelation between abdominal obesity, psychoemotional, metabolic, sleeping and eating disorders, leptin and serotonin levels was determined. It is important to consider in patient-centered care of obesity.

**Points for discussion:**

What is pathogenetic mechanism of these changes?

Which other diagnostics can be needed?

What GP can prescribe to improve the patient-centred care for such patients?

**Poster / Ongoing study with preliminary results****Perceiving financial hardship: mental health outcomes and lifestyles choices**

Joan Llobera Canaves, Ruth Martí Lluch, Oana Bulilete, Maria Jesus Serrano Ripoll, David Medina Bombardo, José Ignacio Ramírez Manent, Christian Jean-Mairet I Soler, Catalina Vicens Caldentey

Unidad de Investigación, Gerencia de Atención Primaria de Mallorca, 07002 Palma de Mallorca, Spain. E-mail: oana.bulilete@ibsalut.es

**Keywords:** Primary care, mental health, healthy lifestyles, financial stress

**Background:**

Primary care screening for unmet social needs can yield crucial data for patient-centered care. There are several hypotheses (such as behavioral, psychosocial, social support) used to analyze the association between non-communicable chronic diseases and experiencing financial strains (FS).

**Research questions:**

Objectives:

to analyze and compare the characteristics of a general adult population sample declaring having FS versus those who did not (no-FS);

to examine the relationship between FS and lifestyles, mental health outcomes and social support.

**Method:**

Cross sectional study from DESVELA cohort. Setting: primary health care (4 centers) . Population: general population between 35 to 65 years with health coverage in the Balearic Islands. Measurements: sociodemographic, educational level, monthly income (€), FS, material deprivation, lifestyles [tobacco, adherence to Mediterranean diet (PREDIMED), physical activity (IPAQ)], self-rated perceived health (SRPH), BMI, at least 1 comorbidity, social support (Duke-11), anxiety (GAD-7), depression (PHQ-9) and quality of sleep (PSQI). Statistical analysis: descriptive, chi-square, T-test.

**Results:**

364 participants; mean age 48.5±8.1; men 50.4%. Declaring FS: 25.1% (91/362) vs no-FS 74.9% (271/362); secondary educational level: 26.3% FS vs 73.7% no-FS, p0.00; income 1.001-2000€: 50.6% FS vs 49.4% no-FS, p0.00; material deprivation: FS 89.2% vs 10.8%, p0.00; regular SRPH 44.6% FS vs 55.4% no-FS, p0.00; active smokers, 35.2% vs 64.8% no-FS, p0.03; high adherence to Mediterranean diet 16.0% FS vs 84.0% no-FS, p0.01; high level physical activity FS 23.6% vs 76.4%, p0.80; BMI: mean difference 1.6±0.7, p0.02; having 1 comorbidity 28.7% vs 71.3%, p0.02; perceived social support: mean difference 4.9±1.0, p0.00; severe anxiety levels FS 50.0% vs 50.0%, p0.00; moderately-severe depression 66.7% FS vs 33.3%, p0.00; good quality of sleep 11.4FS vs 88.6% no-FS, p0.00.

**Conclusions:**

There is a clear association between perceiving FS and psychological well-being, as well as certain lifestyle choices, such as smoking or following the Mediterranean diet.

**Points for discussion:**

Social determinants of health

Mental health outcomes

Health promotion

**Poster / Finished study****Perceptions of illness in patients diagnosed with type 2 diabetes mellitus**

Lucija Gosak, Mateja Lorber, Gregor Stiglic

University of Maribor, Faculty of Health Sciences, Maribor, Slovenia. E-mail: lucija.gosak2@um.si

**Keywords:** diabetes type 2 mellitus; disease perception; person-centred care

**Background:**

The perceptions and beliefs of individuals with diabetes type 2 and their knowledge influence is important for individual's health. The perception of the illness also associated with the quality of life and the state of the illness. Patients with chronic conditions require person-centred care to meet the patient's health needs and achieve better quality of life.

**Research questions:**

What is the perception of the illness in patients diagnosed with type 2 diabetes mellitus?

**Method:**

A questionnaire Brief Illness Perception Questionnaire (Broadbent, et al., 2006), which provides a rapid assessment of disease perception. The scale measures a patient's cognitive and emotional representations of their illness, including consequences, timeline, personal control, treatment control, identity, compliance, care, emotional response, and causes. We have performed a categorical analysis for the highest stated cause of the disease.

**Results:**

In the research participated 141 people diagnosed with T2DM. The mean age of the participants was 63.08 (SD=12.96). The mean perception of T2DM score was 40.06/80 (SD=10.46), which does not reflect a very threatening view of the disease. A more threatening perception of the disease was held by participants who, in addition to diabetes, also reported obesity (41.08 vs. 40.78) and the presence of cardiovascular disease (42.10 vs. 41.15). The most important factors influencing their disease were heredity and genetics (n=33), stress and other psychological strains (n=24), and inadequate diet (n=23).

**Conclusions:**

Most of the respondents feel that they can influence their disease themselves, so it is important that they receive ongoing care and support from a nurse to change their behaviour and a person-centred individual approach. Most person-centred methods are developed targeting individual consultations, although group-based programs are a widespread and efficient method of support. Person-centeredness in group-based programs requires a change in practice towards addressing biopsychosocial issues and facilitating group processes which can lead to better perception of chronic disease.

**Poster / Finished study****Problematic continuity of care for diabetic patients in family medicine – can education of patients help?**

Juraj Jug

Health center Zagreb-west, 10000 Zagreb, Croatia. E-mail: juraj2304@gmail.com

**Keywords:** diabetes mellitus, education, quality of care**Background:**

Approximately half of the patients with type 2 diabetes mellitus (T2DM) in Croatia had been diagnosed of which only half have a controlled disease. Annual HbA1c measurements are missing in many patients leading to more T2DM complications and unnecessary costs.

**Research questions:**

Can individual education of T2DM patients about regular check-ups (including lab findings and physical exams) help achieve better T2DM disease control?

**Method:**

This observational intervention study was started in November 2021 in one family practice in Zagreb, Croatia, with 1745 patients (116 have T2DM, 6.65%). HbA1c levels were missing in 46 patients in 2021 who were later called and referred to the lab. All patients who did their lab exam (36, 78.26%) were educated about the importance of regular check-ups in 3-6 months depending on HbA1c. Other patients with T2DM were not called and educated about this matter. All patients with T2DM were checked for having lab parameters and body mass index (BMI) noted in 2022 as the outcome of this intervention. Statistical significance was determined by the Mann-Whitney U test in Statistica v.12.0.

**Results:**

43 T2DM patients had lab results in 2022 (37.07%). 14 were from the educated group (38.89%) and had significantly higher BMI (median 36.10 vs. 29.40 kg/m<sup>2</sup>,  $p < 0.001$ ) and lower HbA1c (median 7.00 vs. 7.45%,  $p < 0.01$ ) than other 22 patients missing these values in 2022. 29 patients from the second group (41.43%) showed similar results in HbA1c (6.50 vs. 6.90%,  $p < 0.05$ ). The educated group had worse initial HbA1c levels than the second group (7.45 vs. 6.70%,  $p < 0.001$ ) which was significantly improved in 2022 (7.45 vs. 7.00%,  $p < 0.01$ ).

**Conclusions:**

Individual education of T2DM patients about the importance of regular lab and physical check-ups in this study was not successful as expected. Better control of T2DM was achieved, although only 1/3 of educated patients had their lab findings noted.

**Points for discussion:**

How much do your patients with type 2 diabetes really know about their disease and when should they report for regular check-ups?

Are check-ups of patients with type 2 diabetes really necessary every 3-6 months, or we can be satisfied if we manage to examine all patients within one year?

**Poster / Ongoing study with preliminary results****General Practitioners' prescription of psychotropic drugs among youth in Belgium**

Sherihane Bensemmane, Robrecht De Schreye

Sciensano, 1050 Brussels, Belgium. E-mail: sherihane.bensemmane@sciensano.be

**Keywords:** primary care, psychotropic drugs, prescription, youth**Background:**

The prescription of psychotropic medication for children and young adults has been increasing in Belgium. Available data suggest a large proportion of these prescriptions are initiated by General Practitioners (GPs), although current guidelines targeting the first line (GPs and pharmacists) advise against the prescription of psychotropic drugs for children and young adults. Heretofore, little is known about the rationale and medical indication of this prescription in general practice. Therefore, we need to investigate GPs' behaviour towards the prescription of psychotropic drugs for children, adolescents and young adults.

**Research questions:**

To understand for which medical indication psychotropic drugs are prescribed by Belgian GPs.

**Method:**

A 21 months retrospective population-based study based on data collected by the Belgian network of Sentinel General Practices (SGP) on all 0 to 23 years old patients consulting their GPs for psychotropic medications. Descriptive statistics were performed.

The questionnaire was created in collaboration with BelPEP (Belgian Psychotropic Experts Platform).

**Results:**

During the study period 86 cases were reported, corresponding to an incidence rate of 10 per 10000 person-years. Overall, 56% of patients were female. The average age was 17 (IQR 14-21).

Antidepressants were the main psychotropic prescribed treatment (47.7%), followed by psychostimulants (29.1%), and antipsychotics (23.3%). 31.4% of psychotropic drug prescriptions were associated with attention deficit hyperactivity disorder (ADHD), 20% with depression disorder, 19.7% with insomnia, 18.6% with depressive complaints (patients), 15.1% with anxiety disorder.

73.2% of antidepressants prescription were made by GPs, 62.5% for sedative-hypnotic drugs, 42.9% for anxiolytics, 25% for antipsychotics, and 8% for psychostimulants. Non-medical treatment (e.g. Psychologist) started or will be launched in 67.4% of reported cases.

**Conclusions:**

During the study period, antidepressants were the main class of prescribed psychotropic medication. Furthermore, mood disorders (e.g. depression, anxiety) were preponderant indications justifying prescription. Although guidelines advise GPs to avoid initiating psychotropic medication, they often report being the initial prescriber.

**Points for discussion:**

The role of GPs in prescribing of psychotropic medications

Psychotropic medication among youth

**Poster / Ongoing study no results yet****Patient-Centred Deprescribing of Potentially Inadequate Medication in Patients with Polypharmacy (PARTNER) – study protocol of a cluster randomized trial**

Sophie Peter, Achim Mortsiefer, Michaela Maas, Annette Härdtlein, Vita Brisnik, Christiane Muth, Svetlana Puzhko, Kerstin Bernartz, Hanna M. Seidling, Robert Moecker, Sophia Klasing, Laura K. Lepenies, Petra Kaufmann-Kolle, Patrizio Vanella, Michael Koller, Florian Zeman, Gunnar Huppertz, Yvonne Eberhardt, Tim Steimle, Nadine Steinkat, Tobias Dreischulte

Chair of General Practice II and Patient-Centredness in Primary Care, Institute of General Practice and Primary Care, Faculty of Health, Witten/Herdecke University, 58448 Witten, Germany. E-mail: sophie.peter@uni-wh.de

**Keywords:** polypharmacy; interprofessional care; medication safety; potentially inadequate medication; deprescribing

**Background:**

Polypharmacy (5 or more medications) may increase the risk of adverse drug effects, especially in older patients. The guidelines recommend at least annual medication reviews, which are often complex and time-consuming for General Practitioners (GPs) and pharmacists. The PARTNER study will examine a coordinated and intensified collaboration between GPs and pharmacists in Germany and involving patients in decision making in order to optimize medication safety for drugs with high risk for adverse events (potentially inadequate medication, e.g. sedatives and anticholinergics).

**Research questions:**

Does a complex intervention consisting of intensified collaboration between GPs and pharmacists improve the quality of medication safety for older patients with polypharmacy?

**Method:**

Multicentered two-arm cluster randomized controlled trial involving 352 community-dwelling patients  $\geq 65$  years with polypharmacy, and 44 GP and pharmacists dyads. Intervention: a) educational training for GPs and pharmacists and intensified collaboration between these two groups of health professionals; b) patient education and coordinated patient counseling on medication safety. The effectiveness of the intervention will be evaluated after 6 months' follow up by calculating the percentage of patients with the clinically relevant reduction of target potentially inadequate medications. Health economic evaluation and process evaluation will also be performed.

**Results:**

Recruitment starts in spring 2023. The study period is until 2025. We expect our intervention to improve communication between GPs, pharmacists and patients and improve the deprescribing of potentially inadequate medications.

**Conclusions:**

If the study shows a positive result, adoption into routine care in Germany will be sought. Due to the complexity and often time-consuming nature of medication reviews, increased collaboration between GPs and pharmacists, and involving patients in decision making may lead to a successful and sustainable improvement in medication safety for patients with polypharmacy in primary care.

**Points for discussion:**

How is a cooperation between GPs and pharmacists implemented in other European countries?

What parts of the intervention hold promise for better collaboration between GPs and pharmacists?

**Poster / Ongoing study with preliminary results****Polypharmacy in the elderly with multimorbidity and the manifestation of cognitive impairments and functional deficit**

Marta Tundzeva, Ljubin Sukriev, Vesna Velikj Stefanovska, Katerina Kovachevikj, Azra Gicic, Sashka Janevska, Katarina Stavrikj

Center of family medicine, Medical faculty, Skopje, 1000 Skopje, North Macedonia. E-mail: mtundzeva@gmail.com

**Keywords:** Polypharmacy, cognitive impairments, functional deficit,

**Background:**

Polypharmacy in the elderly with multimorbidity in particular results in drug interactions and the manifestation of cognitive impairments and functional deficits.

**Research questions:**

Do polypharmacy among adults older than 60 years with a diagnosed chronic illness influence possible cognitive impairment?

**Method:**

A national prospective multicenter study started in 2022 in 46 outpatient clinics of family medicine specialists in primary care. The selection of PHC practices was done randomly. Subjects older than 60 years with a confirmed minimum of one chronic disease at risk for dementia were included. 3 standardized questionnaires: Mini-cog test, IADL test, GDC tests were used to assess risk of dementia and cognitive and functional deficits. Statistical analysis processed using the SPSS software package, version 22.0 for Windows (SPSS, Chicago, IL, USA).

**Results:**

Eight hundred fifty eight participants were analyzed, with female predominance (57.69%). Sex and age as independent predictors significantly affect the variability of polypharmacy consistently 0.7% vs. 0.5%. 57.92% of patients received daily  $\leq 2$  groups of medications. Respectively most of the patients receive 2 groups of medications for treatment of chronic diseases (34,27%). There is no significant association between the obtained Mini-cog test scores and the number of medication groups they receive ( $p=0.12$ ). The higher GDS score was significantly associated with polypharmacy ( $p=0.03$ ). patients receiving  $\geq 3$  groups of medications were 1.47 times more likely to have mild depression compared to those receiving  $\leq 2$  medications [OR=1.47 (1.09 – 1.97) 99% CI]. A non-significant negative correlation was found between the height of the IADL score and the number of medication groups used for the therapy of chronic diseases ( $p=0.38$ ).

**Conclusions:**

Our study has shown that Risk factors(age and sex) related to health comorbidities and other sociodemographic factors have not been observed to result in the development of excessive polypharmacy. Patients with less prescribed group of medications had an increased risk of major depression.

**Points for discussion:**

Correlation of drug interactions and sociodemographic factors on cognitive impairments.

Correlation of the GDS,IADL score, and risk of dementia in patients with polypharmacy.



**Poster / Finished study****Self-medication practices to prevent or treat COVID-19 during the pandemic. The case of a rural region of central Greece.**

Nikolaos Vaitsis, Stamatina Aggelakou-Vaitsi, Konstantina Soutana Kitsou, Maria Bakola, Maria Drakopoulou, Konstantina Mavridou, Eleni Jelastopulu

Department of Public Health, Medical School, University of Patras, Greece, 26504 Patras, Greece. E-mail: maria.bkl@gmail.com

**Keywords:** self-medication; COVID-19; pandemic; home remedies; non-prescription drugs

**Background:**

According to the World Health Organization (WHO) self-medication is the selection and utilization of medicines to treat self-recognized symptoms or ailments without consulting a health provider. During the COVID-19 pandemic, the fear of contracting the virus may have led to self-medication practices among the general population worldwide.

**Research questions:**

The goal of the research is to evaluate patterns and factors that affect self-medication practices in a rural region of Greece during the pandemic.

**Method:**

A cross-sectional study using an online survey was developed, and it was distributed via social media platforms to the general population of the city of Farsala (central Greece). The survey evaluated the types of drugs and treatments used for self-medication, the causes of self-medication, and the variables influencing these practices.

**Results:**

A total of 782 people participated in the study, 50.1% were females—with mean age 47.5 years. The vast majority of the participants (90.3%) used at least one medication to treat or prevent COVID-19. Paracetamol (99.4%), vitamin D (90.8%), zinc (84.6%), and vitamin C (54.5%) were the most frequently used self-medication products. Smokers and female gender had significant correlations with self-medication ( $p < 0.001$ ). The use of pharmacists ( $p < 0.001$ ), internet searches like Google ( $p < 0.001$ ), TV ( $p < 0.001$ ), and social media ( $p < 0.001$ ) as information sources about self-medication drugs to prevent or treat COVID-19 were associated with a significantly higher percentage of self-medication use.

**Conclusions:**

Our study identified the self-medication prevalence, the medications and the dietary supplements used during the COVID-19 pandemic, as well as, the reasons for their use. By actively participating in debunking false claims about drugs, particularly in the media, health care providers should work to reduce the risks of self-medication.

**Points for discussion:**

Good self-medication can provide benefits such as reduction of healthcare cost burden (medical hours spend on minor conditions, lowering the cost of prescription reimbursement systems, etc).

On the other hand, self medication may include: incorrect self-diagnosis, delays in seeking medical advice when needed, severe adverse reactions and drug interactions, incorrect dosage, masking of severe disease, risk of dependence and abuse.

**Poster / Finished study****Self-reported data on medication adherence regarding lipid lowering drugs, antihypertensives and glucose lowering drugs in family medicine in Croatia**

Ino Kermc, Pero Hrabac, Venija Cerovečki, Jure Samardzic, Zeljko Reiner, Davor Milicic

University of Zagreb, School of Medicine, Department of Family Medicine, Zagreb, Croatia, Health Centre Zagreb-Centar, Zagreb, Croatia, 10000 Zagreb, Croatia. E-mail: ino.kermc@gmail.com

**Keywords:** Medication adherence, Person-centred care in family medicine

**Background:**

Person-centred care is an approach to healthcare that focuses on the individual needs and preferences of the patient. It includes actively involving the patient in their own care, decision-making and tailoring treatment plans to meet their needs and goals. Medication adherence is an important aspect of person-centred care. It ensures that the patient can follow their treatment plan and achieve the best possible outcomes.

**Research questions:**

Do patients, from their point of view, follow the doctor's instructions regarding prescribed lipid lowering drugs, antihypertensives and glucose lowering drugs?

**Method:**

We used medication adherence data from the questionnaire used in primary care arm of the EUROASPIRE V survey done in Croatia. Questionnaire was self-administered by the patients taking antihypertensives, glucose or lipid lowering drugs. They were asked how often they took their medications as the doctor prescribed. The possible answers were: all of the time(100%), early all of the time(90%), most of the time(75%), about half the time(50%), less than half the time(<50%).

**Results:**

In total 198 patients answered the questions, 85 regarding lipid lowering drugs, 156 regarding antihypertensives and 58 regarding glucose lowering drugs. In that order 49.41%, 56.41% and 53.45% answered taking medications as doctor prescribed all of the time while 36.47%, 29.49% and 27.59% took it nearly all of the time. In contrast, only 1.92% answered taking antihypertensives about half the time but 5.17% and 3.45% answered taking glucose lowering drugs about half the time or less. Regarding the lipid lowering drugs, the 4.71% and 1.18% patients reported taking them for about half the time and less.

**Conclusions:**

While majority of the patients reported high levels of adherence there is still a significant part of them who are not taking their medications regularly, especially with glucose lowering drugs. Person-centred care, a core value in family medicine, is an important tool to address that problem.

**Points for discussion:**

Medication adherence

Person-centred care in family medicine

**Poster / Finished study****Training needs of primary health care professionals on perinatal grief**

Alba Martinez Satorres, Anna Escalé Besa, Lorena Díez García, Carolina Allegra Wagner, Marta Llagostera Estruch, Nuria Turmo Tristan, Marta Arcarons Martí, Francisco Javier Fernandez Segura, Zulema Martí I Oltra, Pablo Pires Núñez, Ana Escribano Sanz

Institut Català de la Salut, 08226 Terrassa, Spain. E-mail: albasatorres@gmail.com

**Keywords:** Medical training; Continuing education; Primary care; Stillbirth; Disenfranchised grief.

**Background:**

It is estimated that 10-25% of pregnancies end in abortion, a common complication of early pregnancy. The approach to perinatal grief (PNG) is still a taboo in our society and creates discomfort and insecurity among primary health care (PHC) professionals, who are ill-prepared to deal with it. Knowing the experiences, opinions and training needs of professionals is essential to enhance training interventions.

**Research questions:**

Which are the training needs regarding perinatal bereavement among PHC professionals in Catalonia?

**Method:**

Cross-sectional observational study of online survey type (51 questions self-completed and anonymous survey), aimed at PHC in Catalonia, during March-May 2022.

Variables analyzed: demographic variables, knowledge on risk factors for gestational losses, characteristics and approach to perinatal grief, community resources and perceived training needs.

**Results:**

Results from 525 professionals were analyzed (250 GP, 119 nurses). Of which 85.6% were women. 91.6% of those surveyed had not received any training.

We detected a gap in knowledge about how to deal with this grief, risk factors and the resources to address it. Of the professionals surveyed, 85.2% responded that as a PHC professional they did not have sufficient training on perinatal grief and 80.9% that they would be interested (148/488) or very interested (247/488) in receiving it. A total of 54.8% preferred face-to-face training, compared to 42% who preferred online or 3% mixed.

**Conclusions:**

PHC professionals do not have sufficient training on perinatal bereavement. However more than 80% of professionals answered that they would be interested or very interested in receiving it.

Perinatal grief continuous training is needed without big differences between classroom or online teaching preferences.

PNG training needs of the target population will be considered when designing and developing interventions, activities or a combination of elements designed to improve the perinatal grief follow-up management in PHC.

**Points for discussion:**

There is a lack of knowledge about about how to deal with perinatal grief, risk factors and the resources to address it.

There is a high interest of primary care professionals in receiving perinatal grief approach training

It is necessary to design and develop interventions, activities or a combination of elements designed to improve the perinatal grief follow-up management in Primary Care.

**Poster / Ongoing study no results yet****Bridging the gap between theory and practice in general medicine**

Lisa Voggenberger, Erika Zelko

Institute for General Medicine, JKU, Linz, Austria. E-mail: lisa.voggenberger@jku.at

**Background:**

Teaching medical students should not be solely based on theoretic concepts but should incorporate a skill-set that is relevant to real-life situations. To our knowledge, there have been no studies done so far to generate an overview of the of typical patient profiles in general practitioner (GP) practices in Austria.

**Research questions:**

We aim to understand everyday practice better to then include current-status and practice-oriented findings into the curriculum for current and future medical students of the Johannes Kepler University (JKU) of Linz, Upper Austria.

**Method:**

We created an online survey that invites all GPs in Upper Austria (1) to report on equipment and demographics of their practices, and (2) to retrospectively describe up to 100 patient encounters (reason for doctor visit, diagnoses, medical interventions, etc.) they had during the second week of October 2022.

**Conclusions:**

Overall, the Institute for General Medicine of the JKU Linz is determined to create a bridge between theory and practice of general medicine by investigating the range of functions of GPs in Upper Austria and letting the findings guide the direction of the academic education of future physicians.

**Poster / Almost finished study****Clinical Rotation at the Primary Level of Care for First-Year Medical and Dental Medicine Students**

Marija Petek Šter, Ksenija Rener Sitar

Medical faculty, Dep. for family medicine, University of Ljubljana, 1000 Ljubljana, Slovenia. E-mail: marija.petek-ster@mf.uni-lj.si

**Keywords:** Clinical rotation, first-year medical and dental medicine students, primary care, the role of mentors

**Background:**

The introduction of clinical rotation in the initial years of study means strengthening early contact with the patient and is an opportunity for clinical mentors to be actively involved in the learning process. For first-year students, 60 hours of clinical rotation took place at the primary level with family medicine doctors, paediatricians, gynaecologists, and dentists.

**Research questions:**

The purpose of the paper is to present an analysis of the responses of first-year students of medicine and dental medicine to the implementation of clinical rotation in the academic year 2021/22.

**Method:**

We conducted an anonymous survey among first-year medical and dental medicine students at the end of clinical rotation in the academic year 2021/22. The questionnaire consisted of closed-ended questions (Likert scale from 1 to 5) and open-ended questions. In addition, a descriptive analysis of the collected data was performed.

**Results:**

Entire population (304 students) completed the survey. 258 (84.9 %) students assessed working in a clinical setting with grade 5. Mentors were recognized as extremely positive; 288 (94.7%) students would recommend their mentor to their colleagues. Students wanted more active involvement in the work process in acquiring communication and clinical skills.

**Conclusions:**

Students assessed clinical rotation in the first year as an extremely positive experience. The highest score gave to clinical mentors. In the future, together with the mentors, we will work to ensure that first-year students move from the role of observers to the role of active members of the team.

**Points for discussion:**

Experience with clinical teaching of first-year medical and dental medicine students

Who can be a clinical mentor for medical students in their pre-clinical years of study?

**Poster / Finished study****Is there any change in the Career Perceptions of Family Medicine Residents After Working in COVID-19 Clinics During the Pandemic?**

Serap Ateş Neng, İbrahim Halil Özden, Pemra C. Unalan

Marmara University, School of Medicine, Department of Family Medicine, 34662 Istanbul, Turkey. E-mail: pcunalan@gmail.com

**Keywords:** family medicine, residency, Covid-19 pandemic, career perception, awareness

**Background:**

The World Health Organization (WHO) declared a global pandemic on March 12, 2020. During this process, family medicine residents have worked and are working in the COVID-19 polyclinic, triage and service areas together with the research residents of different clinics.

**Research questions:**

What are the effects of the pandemic on family medicine residents' education, needs and their general professional career perceptions?

**Method:**

The sample size of this descriptive research is calculated to be 260 to represent the residents in Istanbul. The online questionnaires were applied to 262 residents and 12 teachers in residency training from all institutions providing family medicine specialty training in Istanbul between June, 10 and August, 10 2021. Chi-square, T-tests and Mann-Whitney-U test were used to compare data. In comparisons,  $p < 0.05$  was considered as significant for the difference between groups.

**Results:**

During the pandemic, most of the family medicine residents stated that they had difficulty in finding a reserved time to read medical publications (59.20% $n$ :154) and also difficulty in making research/publication during the pandemic (78% $n$ :202). Most of the participants (78.10% $n$ :203) stated that the face-to-face residency trainings also turned to the online education and the majority (33.20% $n$ :87) stated that "it was getting worse, my participation in the trainings decreased and I started to get less efficiency". Vocational Career Awareness Scale and the Post-Graduation Hospital Educational Environment Scale means compared to those who preferred the branch of family medicine because it was their favorite and who receive specialization training in the field they preferred were significantly higher than those who did not receive ( $p$ :0.000).

**Conclusions:**

Providing adequate training in any extraordinary situation, working face-to-face with peers and mentors; adding some innovations to increase participation and efficiency in continuing education with the online system, and effective communication with the lecturers in those sessions; physicians who want and love the branch of family medicine provide a positive perception of the education and increase professional career awareness.

**Points for discussion:**

Would you like to know the result of any further analysis?

Do you observed the similar problem in your country among the residents?

How do you react or cope with this situation?

**Poster / Ongoing study with preliminary results****Medical deserts and disparities in population health within the European Union**

Laura Alexandra Seils, Ana Isabel Gonzalez, Katarzyna Dubas-Jakobczyk, Alicja Domagala, Robert Likic, Sorin-Adrian Dan, Linda Flinterman, Ronald Batenburg

University of Zagreb School of Medicine, 10000 Zagreb, Croatia. E-mail: robert.likic@mef.hr

**Keywords:** medical deserts; health disparities; health workers; quality in healthcare; health outcomes

**Background:**

Medical deserts are increasingly considered a problematic issue for many countries, which try to employ a multitude of policies, actions, and initiatives to achieve a better distribution of the health workforce (HWF).

**Research questions:**

To develop a roadmap out of medical deserts through initiatives and policies that support healthcare workers.

**Method:**

First, a scoping review and a qualitative survey in 33 European countries on definitions, characteristics and influencing factors of medical deserts along with approaches to mitigate them were conducted. Further, five national stakeholder workshops to discuss and evaluate the developed taxonomy took place. Six in-depth case studies to further assess the applicability and usability of the taxonomy are under development. Finally, a workshop with European experts to evaluate the feasibility and usability of the taxonomy and to discuss the best mix of policy responses and approaches to medical deserts will be conducted.

**Results:**

From the review four main themes of influencing factors evolved: i) Work-related factors, ii) Migration, iii) Lifestyle-related factors and iv) Socio-demographic factors. Identified approaches for mitigation can be summarised under five categories: i) Under- and ii) Postgraduate training, iii) Innovative models of care, iv) Monitoring and planning distribution of the HWF and v) Professional support and infrastructure. The current version of the taxonomy consists of six different types of medical deserts, each with at least one demand and one supply object: 1. Percentage population aged 65 and over; 2. Mobility of the people; 3. Economic resources; 4. Population-provider ratio; 5. Presence of healthcare services; 6. Distance/time to facilities. A further developed version of the taxonomy will be available in May 2023.

**Conclusions:**

The final guidelines and taxonomy are expected to reduce disparities in population health within the EU by ensuring timely access to high quality health care in all regions of the EU.

**Points for discussion:**

What is the relevance of medical deserts for Croatia?

What are the factors contributing to the development of medical deserts?

What measures could be used to mitigate the problem of medical deserts?

**Poster / Ongoing study with preliminary results****Photovoice-inspired qualitative analysis of photographs from family physicians' practice in Italy: a pilot study**

Alice Serafini, Irene Bruschi, Giuseppe Parisi, Viviana Forte, Luca Lenzotti, Mirko Pasquini, Martina Belluto, Luca Ghirotto

University of Modena and Reggio Emilia, 41121 Modena, Italy. E-mail: alice.serafini@hotmail.it

**Keywords:** #healthcarearchitecture #humanization #photovoice

**Background:**

The environment and furniture of a medical workplace can influence both patients and health teams satisfaction and healthcare structures projected in a careful way are an important point for humanization of care. Several studies about these topics have been performed in hospital settings, but only a few in primary care.

**Research questions:**

How do family physicians choose to equip their practice? What do they think about their practice equipment and furniture?

**Method:**

We design a qualitative pilot study inspired from the photovoice methodology. We collected data through an anonymous online survey using a snowball sampling approach. In the first part of the survey we collected socio-demographic variables. In the second part we asked participants to upload: firstly one or two pictures of their practices and explain what they liked or not and what they would have changed, secondly a picture of the most important thing in their opinion in the practice adding the explanation why they made that choice. Written answers were analyzed using thematic analysis, while participants' characteristics through descriptive statistics. A pilot analysis of the visual material is ongoing.

**Results:**

140 GPs participated in the survey but we obtained only 30 complete responses (79,17% drop out rate). With the thematic analysis of the written responses we identified 5 main themes: environment and atmosphere, customization, furniture and objects, collaboration, hygiene. Each theme contains sub themes that describe positive and negative aspects.

**Conclusions:**

The participants' answers suggested good practices for setting up a GP-practice. It is important to create a welcoming environment, being careful in choice of colors, furniture and not forgetting to add plants. The practice should include a space for the visit with the bed and the right privacy and a space for consultation. Finally, customize the environment, including personal objects resulted central for gp motivation.

**Points for discussion:**

What is the best methodology for collecting patient's view about the GP practice's organization?

Are there differences in the practice space's organization across the european countries?



**Poster / Ongoing study with preliminary results****The peculiarities of primary healthcare at the vulnerable areas of Ukraine**

Albina Zharkova

Sumy state university, 40004 Сумы, Ukraine. E-mail: a.v.zharkova@gmail.com

**Keywords:** primary healthcare, Ukraine, vulnerable population, mobile clinics, evacuation**Background:**

Since the beginning of the 2022 the healthcare system in Ukraine has faced the terrible challenge. However, the main framework of the system stands, despite of new difficulties. The situation depends on the geographical area: the territories, which are close to the frontline, certainly are suffering the most.

**Research questions:**

To detect the major problems for the primary healthcare at the areas, close to the frontline. To find out the existing solutions and assess their efficacy.

**Method:**

Observation of the situation with existing data from the actors working at the areas (governmental and nongovernmental organizations). Interviews with patients, who has been living at the areas less than 30 km from the frontline and had experienced the needs for the medical care in the meantime.

**Results:**

During the war time the need for primary care increases (limited access to the medical care, to the pharmaceutical products, to the healthy food and hygiene, stress-related exacerbations of noncommunicable diseases, complications of the chronic pathologies, etc). The capacity of the primary healthcare decreases (migration processes, destruction of the facilities, damage of the equipment etc). The important role is played by nongovernmental organizations as the temporary healthcare providers with humanitarian aid opportunities (free distribution of food, hygiene kits, basic medications). The special need is evacuation of the low-mobility and vulnerable population, which also covered by international and national humanitarian organizations with support of governmental healthcare system. However, there are another obstacles, such as arrangement of the specialized facilities for the low-mobility people or mental barriers for displacement among the patients and their relatives.

**Conclusions:**

There is the significant impact of the war conflict on the primary healthcare.

The temporary solutions might be suggested by the different actors, including nongovernmental organizations. For the vulnerable population the proper arranged medical evacuation is very important.

**Points for discussion:**

The possible solutions for the primary healthcare at the vulnerable areas

**Poster / Ongoing study no results yet****Digital Health applications (DiGA) to support psychological wellbeing – A systematic review protocol**

Annika Schmitz, Silke Frey, Ana Luisa Neves, Birgitta Weltermann

Universitätsklinikum Bonn, 53127 Bonn, Germany. E-mail: annika.schmitz@ukbonn.de

**Keywords:** digital health application, DiGA, review, mental health, depression, study protocol

**Background:**

Lack of psychological well-being is a frequent cause of GP consultations. For example, depression is a common diagnosis in primary care. Behavioural therapy is effective, as single or group therapy, in a face-to-face or online format, or - more recently - as a digital application. A recent review of 12 international studies showed positive effects of smartphone-app based interventions on middle to severe depression (Serrano-Ripoll 2022). The inSIGHT study showed that 53% of the GPs surveyed prescribed at least one digital health technology for any diagnosis in a 4 month-period during the COVID pandemic (Neves 2019). Since October 2020, digital health applications (DiGA) are a new therapeutic option in Germany, which can be prescribed like a medication. Proof of effectiveness is required for approval by the Federal Institute for Drugs and Medical Devices (BfArM). However, to date, no systematic review has been performed to evaluate the effectiveness of all available DiGA for mental health outcomes.

**Research questions:**

The aim of the study is to systematically evaluate DiGA for patients with mental health issues, especially depression and anxiety disorder.

**Method:**

All DiGA addressing mental illnesses listed in the directory will be included in the review. Effectiveness studies provided in the directory and those retrieved from electronic databases will be included. No exclusion criteria for participants will be applied. The systematic analysis is based on various frameworks: 1. general information and expert-based usability will be analysed using the framework of Arnold et al. (2019); 2. intervention effects will be summarized; 3. content and intervention strategies will be described using the behaviour change techniques and theoretical domain framework taxonomy (BCTTv1).

**Results:**

Data extraction is ongoing. First results will be available at the congress.

**Conclusions:**

The review will show if the DiGA used in Germany reach a similar level of evidence as comparable international evaluations.

**Points for discussion:**

Which quality aspects interest you most in digital health applications for your patients' well-being?

Will you prescribe more digital health applications in the future when their effectiveness is proven by more profound study designs?

**Poster / Ongoing study no results yet****Digital TRANSition and dIgiTal resilience in ONcology**

Ana Clavería, Jean Yves Le Reste, Radost Assenova, Ljiljana Majnaric, Peter Torzsa, Philippe-Richard Domeyer, Noemí López, Andreas Charalambous

SERGAS, 27170 Portomarín, Spain. E-mail: noemilopezrey@gmail.com

**Keywords:** DIGITAL HEALTH, ONCOLOGY, TECHNOLOGY

**Background:**

Cancer is the second leading cause of premature mortality and morbidity in Europe, and as such one of the main priorities of the European Commission in the health domain. The digital transformation of health and care has the capacity to act as a key enabler to enhance health and care. It can support the reform of health systems and their transition to new care models, centred on people's needs.

A consortium made up of 17 countries, with extensive participation of EGPRN members (Spain, France, Hungary, Croatia, Greece, Bulgaria), led by the European Cancer Organization, presented the TRANSITION project to EU4H-

2022-PJ-06 — Provide training for health workforce, including digital skills.

**Research questions:**

To explore digital solutions for cancer prevention, diagnosis, treatment and survival.

To analyze the needs of end users and prioritize a digital tool for each of the stakeholders.

To design and train on the selected tools and the necessary digital skills for health personnel, patients and their caregiver.

**Method:**

1. Extensive mapping and systematic review of existing digital solutions and training in the participating countries.

2. End-user needs analysis and user requirements development which will involve all stakeholders in a participatory design methodology.

3. Design of the training in the selected digital solutions

4. Extensive training for the health workforce, patients and their informal carer in 17 countries involved.

**Results:**

The project will strengthen the continuous professional development and training of healthcare professionals fighting cancer and non-clinical professionals, through new state-of-the-art education and training programme for healthcare professionals and non-clinical professionals developed in cooperation with professional associations, academic institutions specializing in professional education and training that integrates pedagogical methods that promote active learning and technologically supported tools that increase interactivity and engagement and health services involved in integral cancer care.

**Conclusions:**

What can EGPRN do to contribute to European projects?

How does family medicine contribute to cancer care?

**Poster / Finished study****Fracture Incidence in 1233 Elderly Women and Risk Factors for Hip Fracture. A 20-year Population Based Follow-Up Study in Primary Care in Sweden.**

Hans Thulesius, Moses Sjölander, Lisa Alvunger, Anna Segernäs Kvitting, Pär Wanby, Ferdinando Petrazzuoli, Robert Eggertsen, Anna Lindgren, Daniel Albertsson

R&D Kronoberg, Clinical Sciences, 35250 Växjö, Sweden. E-mail: hansthulesius@gmail.com

**Keywords:** hip fracture, women, follow-up study, population based cohort, primary care

**Background:**

Fragility fractures are a significant problem worldwide, affecting patients, healthcare systems and society as a whole. In Sweden, 70,000 fragility fractures occur annually, with 16,000 of them being hip fractures.

**Research questions:**

To describe the incidence of fragility fractures in a population based cohort of elderly women over a 20-year period following the initiation of a fracture prevention intervention study in primary care in Sweden. Additionally, to compare the incidence of fragility fractures with baseline risk factors for such fractures.

**Method:**

A retrospective follow-up design, including 1,233 elderly women aged 70 or older who answered a baseline questionnaire in 2001. We collected data from radiology reports on type of fracture, side of the body affected, and date of fracture between 2001 and 2021.

**Results:**

We found that 884 fragility fractures occurred in 536 women (43.5%) between 2001 and 2021. Of these, 268 were hip fractures, the most common type of fracture. The highest incidence of fragility fractures and hip fractures was found among women aged 90-94, with 39.5 hip fractures per 1000 person-years. In multivariate Cox regression analysis, women with a baseline height greater than 167 cm (HR = 1.6; 95% CI, 1.1-2.2) or weight less than 60 kg (HR = 1.5; 95% CI, 1.1-2.0) had an increased risk of hip fracture.

Repeated fragility fractures occurred in 14.1% of women in the intervention group and 18.6% of women in the control group ( $p = 0.047$ ).

**Conclusions:**

This population based study highlights the burden of fragility fractures in Sweden, with hip fractures being the most common type.

Women who at baseline were tall or low weight had an increased risk of hip fractures regardless of age.

Fewer repeated fragility fractures occurred in the intervention group than in the control group.

**Points for discussion:**

How much are GPs in EGPRN member countries involved in the care of women with fragility fractures?

Is prescribing osteoporosis treatment the only way GPs can help to prevent fragility fractures?

Can prescribing activities that both can strengthen muscles and improve the psychosocial network of elderly be a task for primary care?

**Poster / Ongoing study with preliminary results****Impact of digital-first technologies on quality and safety of care**

Ana Luisa Neves, Joana Carvalho, On Behalf Of The Insight Group

Department of Primary Care and Public Health, Imperial College London, 4200-450 Porto, Portugal. E-mail: ana.luisa.neves@gmail.com

**Keywords:** Primary care, digital health, telemedicine

**Background:**

In recent decades, virtual care has emerged as a promising option to support primary care delivery. However, despite the potential, adoption rates remained low. With the outbreak of COVID-19, it has suddenly been pushed to the forefront of care delivery. There is a need and opportunity to review the impact remote care had in primary care settings and reassess its potential future role.

**Research questions:**

The aim of this study is to explore the perspectives of general practitioners (GPs) and family doctors on the perceived impact on quality and safety of care.

**Method:**

Online cross-sectional questionnaire completed by GPs distributed across 20 countries. The survey was hosted in Qualtrics and distributed using email, social media, and the researchers' personal contact networks. Descriptive statistical analysis was performed for quantitative variables.

**Results:**

1,600 GPs across 20 countries were included. Most GPs saw a positive impact on the transmission of COVID-19 (n = 1123, 93.9%), monitoring infected patients (n = 880, 73.6%), delivering remote acute care (n = 758, 63.4%), managing patients with chronic conditions (n = 674, 56.4%), delivering acute care (n = 788, 65.9%), supporting patient-doctor relationships (n = 715, 59.8%), and communicating with other providers (n = 607, 50.8%). Fewer reported positive impacts when it came to patient satisfaction (n = 586, 49.1%), identifying the need to escalate care (n = 567, 47.5%) harmful delays (n = 476, 39.8%), providing equitable care for all (n = 461, 38.5%) and the gauging patients' emotional wellbeing (n = 450, 37.7%).

**Conclusions:**

From acting as the first point of contact with healthcare services for most patients, to being the gatekeepers to further specialist care, GPs' experiences using virtual care tools to perform this diverse range of tasks allow us a more comprehensive understanding as to the practical implementation benefits and challenges that accompany their routine use.

**Poster / Ongoing study with preliminary results**

## **Patient and Public Involvement (PPI) in research: Concept of a cross-indication patient advisory board in primary care - an example from Germany**

Susanne Kersten, Judith Tillmann, Christine Kersting, Jana Isfort, Klaus Weckbecker, Julia Hülsmann, Achim Mortsiefer

Institute of General Practice and Primary Care (IAMAG), Faculty of Health, Witten/Herdecke University, 58448 Witten, Germany. E-mail: susanne.kersten@uni-wh.de

**Keywords:** Patient and Public Involvement, PPI, Patient Advisory Board, Concept, Germany

### **Background:**

To address patients' care needs and facilitate patient-centred care, patient and public involvement (PPI) in research projects is strongly recommended; also in the field of general practice. In Germany, initial efforts are already being made to realise permanent PPI in general practice research by initiating cross-indication patient advisory boards.

### **Research questions:**

How can a patient advisory board be established that represents the heterogeneous patient collective in general practice? What experiences have been made during implementation?

### **Method:**

1. Literature: Screening of (inter-)national experiences/recommendations
2. Draft: purpose, group size, sampling method, inclusion/exclusion criteria, patients' role (intensity of participation): Listener – Co-Thinker – Advisor – Partner – (final) Decision-maker.
3. (inter-)national Experts' feedback and adaptation
4. Implementation: Recruitment facilitated by GPs, public postings and a local self-help organisation. By now the board consists of 12 persons (8 females) aged 36 to 78, suffering from different diseases representing the most common chronic diseases in Germany.
5. Continuous adaptation: Evaluation of the meetings and adaptation according to the patients' feedback. The meetings take place twice a year (by now: 4 meetings)

### **Results:**

The contributions of the patient advisory board have already had a direct influence on 3 ongoing projects in primary care:

- a) Living will - expectations and requirements defined by the patients have significantly influenced the interview guides (Advisor)
- b) chronic pain management - experiences on physician-patient communication under consideration of gender aspects (Co-Thinker), identification of topics for the needs analysis (Partner), Development intervention – participation-game (Partner)
- c) Smoking cessation - co-development of the interview guide for patient interviews (Partner)

The most important aspects in participatory research are equal collaboration and feedback on how the patients' contribution influenced the research projects.

### **Conclusions:**

Research projects can benefit from established advisory boards; furthermore, it offers advantages such as resource savings, well-established processes, expanded competencies and already established relationships of trust.

### **Points for discussion:**

What experience do other European countries have with patient advisory boards?

What are your recommendations for improving our concept?

What other implementation experiences are you aware of?

**Poster / Ongoing study with preliminary results****Patient and Public Involvement in General Practice Research: Concepts of patient and public involvement applied in the Networks of the Initiative of German Practice-Based Research Networks - DESAM-ForNet**

Susanne Kersten, Doreen Kuschick, Christian Kretzschmann, Andreas Polanc, Jennifer Engler, Christine Kersting

Institute of General Practice and Primary Care (IAMAG), Faculty of Health, Witten/Herdecke University, 58448 Witten, Germany. E-mail: susanne.kersten@uni-wh.de

**Keywords:** PPI, Patient Public Involvement, General Practice, Research Networks, Implementation, concept

**Background:**

Patient and Public Involvement (PPI) is increasingly implemented in general practice research in Germany. In 2020, six networks involving 23 Institutes of General Practice and a joint coordination office were established as the "Initiative of German Practice-Based Research Networks - DESAM-ForNet". A central challenge for PPI in this setting is the representation of the diverse patient populations. Even though the international literature provides recommendations on how to design PPI, adoption to this specific context is needed. Therefore, a setting-related exchange of approaches and experiences is necessary.

**Research questions:**

Exchange of experiences with the scientific community and description of how PPI is implemented in the general practice-based research networks (GPBRN) of the DESAM-ForNet initiative.

**Method:**

This contribution arose from the Working Group on Participation of the DESAM-ForNet initiative and focuses on the description of PPI formats that have been established within the six GPBRNs. The PPI formats shall be used long-term and across projects.

**Results:**

In the GPBRNs PPI takes place regularly within "public forums" (BayFoNet), "round tables" (FoPraNet-BW) or "patient advisory boards" (HAFO.NRW, RESPoNsE, SaxoForN) and focuses especially on the conception and dissemination of research. In some cases, patients are also involved together with other stakeholder groups in a "network advisory board" (FoPraNet-BW) or in a "local advisory board" (HAFO.NRW). The most successful recruitment channels so far have been personal approaches by GPs, local self-help groups, simulation patient programmes and public posters. The evaluation of the PPI formats is mostly still in the planning stage.

**Conclusions:**

The implementation of PPI is not a standard procedure, but must rather be adopted to the GP context.

**Points for discussion:**

The network-specific PPI concepts show various possibilities for long-term, collaborative PPI.

Which PPI concepts in GPBRNs do you know?

What works particularly well for you? What does not work at all?

**Poster / Study Proposal / Idea****Diagnostic value of screening tests: Questionnaires, Peak flow-meter and Microspirometer in early detection of individuals with chronic obstructive pulmonary disease in primary health care in North Macedonia**

Katerina Kovachevikj, Sashka Janevska, Marta Tundzeva, Azra Gicic, Ruzica Angeleska, Katarina Stavrikj, Irena Kondova -Topuzovska

Center of family medicine, Medical faculty Skopje, 1000 Skopje, North Macedonia. E-mail: vitakaterina@gmail.com

**Keywords:** Chronic obstructive pulmonary disease, primary health care, questionnaires, screening.

**Background:**

Macedonia has high smoking prevalence of 31/47.1% in female/male population older of 16 years. GPs have insufficient familiarity with diagnosing, treating and preventing COPD. The lack of specialists' pulmonologists who are doing diagnosis and management of COPD patients, result in underdiagnosed COPD.

**Research questions:**

Which screening test or combination of screening tests for chronic obstructive pulmonary disease (COPD) can be recommended for detecting undiagnosed COPD in primary health care in patients  $\geq 40$  years old, compared to standard test spirometry?

**Method:**

A one year cross-sectional study will be run in primary care setting in Skopje. 200 participants aged  $\geq 40$  to 75 years who came to GP for examination without respiratory symptoms and have signed an informed consent will be included. The study include six index tests that will be performed in GP's practice - 4 questionnaires for COPD screening: CDQ, CAPTURE, COPD SQ, SBQ and 2 tests for air flow measurement: Peak flow-meter and microspirometry. The results of the index tests will be compared with the result of the reference test-spirometry which will be performed at secondary health care level. A confirmed case will be defined as a patient with FEV1/FVC  $<0.70$  on the reference test.

**Results:**

The primary outcome is to determine the diagnostic value of screening tests (individually or in combination with other screening test) : questionnaires, Peak flow-meter and microspirometry in early detection of COPD in PHC. The secondary outcome is to develop an effective strategy at primary care level in diagnosing COPD.

**Conclusions:**

We expect to detect most effective screening test or a combination of screening tests for identifying undiagnosed COPD in PHC.

**Points for discussion:**

Which cut off score should be used for PEF to indicate a positive test?

Should we include evaluation of Cost-effectiveness of most effective screening strategy?



**Poster / Finished study****Exploration of the course of control in domestic violence against women, from its establishment of the influence to its awareness**

Emeline Padeloup, Chamant Christelle

Faculté de Médecine de Tours, 45570 Ouzouer sur Loire, France. E-mail: epasdeloup45@gmail.com

**Keywords:** domestic violence ; women

**Background:**

The authorities of health of several western countries recommend a systematic identification of domestic violence during general medicine consultations. However, this identification seems difficult since these women are unaware of the influence held upon them. One of the keys to improve care would be to identify the levers that would enable these women to become aware of and to recognise themselves as victims of violence.

**Research questions:**

Explore the course of control in domestic violence against women, from its establishment of the influence to its awareness.

**Method:**

We conducted a qualitative study. Individual semi-directive interviews were carried out on a purposive sample of female victims recruited from GP practices, a family planning and education centre, and a medical-judicial unit. The applied analysis was inspired by the grounded theory.

**Results:**

Six women aged 32 to 73 were interviewed. The installation of the influence was facilitated by the vulnerability and low self-esteem. It resulted in a climate of fear, shame, and guilt, which maintained and strengthened the abuser's influence on the victim. The intensity of the violence, the women's desire to protect her children, and the external aid favoured the awareness of her situation and the will to act to escape the influence. When the mechanism of control and its role in domestic violence was elucidated, the women recognised themselves in the explanations given, this constituted a "mirror effect", which revealed to them their status as victims.

**Conclusions:**

The "mirror effect" seemed to have an influence on women's awareness of their status as victims of violence. It would be interesting to evaluate its appropriation and use by GPs as well as its effect on the identification of women who are victims of violence.

**Points for discussion:**

Prospects for improving the identification and support of women victims of domestic violence

Perspectives in terms of initial medical training of medical students on the identification of domestic violence

Perspectives in terms of continuing medical education of health professionals on the role of control in domestic violence

**Poster / Ongoing study no results yet****Facele study**

Isabelle Auger, Amélie Aïm-Eusébi, Josselin Le Bel, Tristan Delory, Julie Etcheberry, Alain Mercier

Paris cité University, 95230 Soisy sous Montmorency, France. E-mail: isabelle.auger.mercier@gmail.com

**Keywords:** colorectal cancer shared decision

**Background:**

Screening for colorectal cancer (CRC) among patients at average risk is based in France on a fecal occult blood test (FOBT), carried out every 2 years from 50 to 74. If the FOBT is positive, a colonoscopy should be performed. Participation in the CRC screening program has been declining since 2016-2017. Its implementation has to get through many obstacles, either on the side of doctors/general practitioners (GP) and/or on the side of patients. GPs have to adapt their communication to the patient's literacy in order to explain the test, and lead the patient to choose the decision which suits him. To reach a shared decision, GPs should adopt a person-centered approach taking into account the patient's perspectives

**Research questions:**

How a face-to-face training of CRC screening using a patient-centered approach by the GP, influence a shared decision in the context?.

**Method:**

A cluster randomized trial and qualitative approach will be performed. The primary aim will assess the superiority of a presential training of GPs in a patient-centered approach, compared to current practice, on the implementation of a shared decision. We'll use the shared patient decision-making self-questionnaire (SDM-Q9), validated in French. We will compare the mean of the SDM-Q9 between each arm of the trial. The self-administered questionnaire will be given to the patient by the GP immediately after a consultation while a FOBT will be delivered.

The Secondary objectives will

- Evaluate the effect of the training on the GPs' rate of CRC screening, 6 months after inclusion
- Assess patients' decisional conflict with the SURE test
- Explore the understanding of the shared decision-making process among GP and patients with a qualitative study

**Conclusions:**

This study should give us a better understanding of the decision making process in the context of CRC screening and makes patient more active in the decision

**Poster / Almost finished study****Mammography screening - motivational factors and obstacles among women in primary care**

Krisztián Vörös, Bernadett Márkus, Zoltán Lakó-Futó, Csenge Hargittay, Peter Torzsa

Department of Family Medicine, Semmelweis University Budapest, 1085 Budapest, Hungary. E-mail: voros.krisztian@med.semmelweis-univ.hu

**Keywords:** breast cancer, screening, mammography, motives, obstacles

**Background:**

The relatively low attendance rates to mammography screening dropped significantly since the COVID pandemic.

**Research questions:**

Our aim was to investigate motives and obstacles to screening among women in primary care to identify possibilities to improve attendance rate.

**Method:**

In two teaching practices, women aged 40-65 years were asked in email to fill out a self-administered questionnaire about lifestyle, risk factors, motivational factors and experienced obstacles to mammography. Last screening dates were obtained from the electronic medical records.

**Results:**

There were 1092 women in this age group, 429 had an email address available. The response rate was 37.8% (162). The mean age of respondents was  $52.6 \pm 6.9$  years (mean  $\pm$  SD). Attendance to mammography within two years was 52.8%.

The presence of lifestyle risk factors was low: smoking (15.3%), alcohol consumption (11.0%), while anticoncipient use was common (66.3%). In postmenopausal women overweight was present in 34.4%, obesity in 13.5%. Breastfeeding beyond 12 months cumulatively, was rare (10.4%), but 74.2% gave birth before the age of 35. Positive family history affected 25.8% of patients.

The highest ranked three motives for attendance were being aware of the advantages of screening; caring about a healthy and lasting life and being important to oneself.

The three most mentioned obstacles to screening were having difficulties booking an appointment; fear of treatment and long waiting time.

Attendance to screening was associated with being important to oneself, while not having a mammography within two years correlated with fear of cancer and mammography, time pressure, appointment scheduling difficulties, feeling healthy, having financial difficulties about the test and not caring enough about one's health.

**Conclusions:**

A large number of patients have risk factors for breast cancer in primary care without attending to mammography. A lot of obstacles are health-system related, however by knowing motives and obstacles GPs could help patients overcome these difficulties.

**Points for discussion:**

Balance of harms and benefits for certain risk status and age groups

Improving attendance to mammography

The role of GPs to motivate and help patients overcome obstacles

**Poster / Ongoing study with preliminary results****The Frequency of Depression Among the General ICPC-2 Coding of Internally Displaced Patients Appeals to Uzhgorod "Interfamily" Clinic in Ukraine**

Pavlo Kolesnyk, Daniela Petovka

Uzhgorod National University, Medical Faculty #2, Family medicine and outpatient care department, 388000 Uzhgorod, Ukraine. E-mail: dr.kolesnyk@gmail.com

**Keywords:** family medicine, internally displaced person, ICPC codes, depressive disorder.

**Background:**

Thousands of internally displaced people (IDPs) from the Southern and Eastern Ukraine had to migrate to Uzhgorod, the capital of Transcarpathian region in western Ukraine which remains the safest place during war with Russian aggressors. Many of IDPs have serious health problems and seek for primary medical help at the volunteer clinic «Interfamily» founded due to donations from European and US sponsors. The structure of diseases coded in the system of ICPC-2 is being analyzed by the authors.

**Research questions:**

How often were depressive disorders diagnosed among the other diagnoses structure of the patients over the age of 18, who appealed to the «Interfamily» clinic from April to November 2022.

**Method:**

Method of analytical and descriptive statistics was used. Internal database of 3371 IDP patients, coded by ICPC-2 was analyzed. 89 randomly selected patients were anonymously screened for depressive disorder using the PHQ-9 questionnaire (9 questions with 4 variants of answers. Calculation gave an opportunity to evaluate severe/moderate/absence of depression).

**Results:**

3371 codes were processed within 8 months and 102 of them belong to P (psychological) group, which is 3% of the total amount.

Among 89 registered anonymous responses, severe depression (>20 points) occurred in 6(6.74%) cases, moderate depression (14-19 points) – in 20(22.47%), (10-14 points) – in 22(24.72%), mild depression (5-9 points) – in 32(35.95%), absence of depression (0-4 points) – only in 9 cases(10.11%).

**Conclusions:**

Frequency depression coding among the general reasons and diagnosis of IDPs was extremely low (3%), which was inconsistent with the results of the anonymous screening for depression (high level of moderate and severe depression).

**Points for discussion:**

This analysis is the reason for further changes in practice in order to motivate doctors to screen for the most frequent hidden pathologies including depression, as well as for further studies to evaluate the effectiveness of changes in clinic management.

**Poster / Ongoing study no results yet****What cancer screening programmes are there in different European countries, and how are General Practitioners involved in them? A European survey.**

Ilze Skuja, Robert Hoffman, Emmanouil Smyrnakis, Gergana Atanasova, Dimitra Iosifina Papageorgiou, Krzysztof Buczkowski, Marija Petek Šter, Nicola Buono, Aida Puia, Mercè Marzo-Castillejo, Zlata Ozvacic Adzic, Bernardino Oliva Fanlo, Marija Zafirovska, Hans Thulesius, Michael Harris

Örenäs Research Group, Riga Stradins University, LV1001 Riga, Latvia. E-mail: skujailzedr@gmail.com

**Keywords:** General Practitioners, Cancer, Screening, Europe

**Background:**

Cancer screening programmes vary considerably across Europe, and this affects cancer survival. While general practitioners (GPs) are part of the cancer screening process in some countries, they appear to have little involvement in others. However, there has been little comparison of cancer screening programmes in different European countries, and nothing is known about the effect that these have on GPs' workloads.

**Research questions:**

What cancer screening programmes are there in different European countries, and how are GPs involved in them?

**Method:**

A questionnaire will ask three key informants in each of twenty European countries for information about their cancer screening programmes, and for details about GP involvement in them. Each countries' answers will be compared for agreement, and inconsistencies will be referred back to the informants for resolution. The research team will compare and contrast the responses from the different countries.

**Results:**

We will present the study protocol and the findings of the pilot study. Any preliminary results will also be presented.

**Conclusions:**

Our previous research has identified that many European GPs see the implementation of cancer screening programmes as being a key priority for their countries' healthcare systems. This study will describe the cancer screening work that GPs in each country are doing, and allow countries to compare their progress in setting up cancer screening programmes.

**Points for discussion:**

The study will generate a lot of data. What methods are best suited for data analysis?

Do you think the results from this study will be useful for your country?

Would you like to participate in the study?

**Theme Paper / Almost finished study****Development and evaluation of a mix-method intervention involving training and a new consultation model for patients with palliative care needs in primary care – Before-After Study**

Carlos Seiça Cardoso, Filipe Prazeres, Barbara Gomes

Faculdade de Medicina da Universidade de Coimbra; USF Condeixa, 3045-066 Coimbra, Portugal. E-mail: carlos.asc4@gmail.com

**Keywords:** Primary Care, Palliative Care, Symptoms burden, Complex intervention, Before-After

**Background:**

There is some evidence that when General practitioners (GPs) are involved in caring for people with palliative care (PC) needs, PC delivery may be more efficient. We have developed a two-tiered intervention for patients with PC needs in primary care.

**Research questions:**

Can the developed intervention have impact on physical symptom burden (PhySB), psychological symptom burden (PsySB) and communication/practical issues (CPI)?

**Method:**

A before-after study is ongoing. A sample size of 53 patients patients was estimated (power of 80%, type I error of 5%, medium effect size of 0.5, 35% attrition rate). The intervention consists of training in PC and application of a newly consultation model (medical consultation every 3 weeks for 12 weeks). The primary outcome is PhySB, self-reported using the Integrated Palliative Outcome Scale patient version (IPOS-p) between T0w and T12w. Secondary outcomes include PsySB and CPI. The IPOS-p is a self-reported scale to identify the main concerns of PC patients. Items target specific symptoms/issues and are rated in 5-point Likert scales. Each of the 10 physical symptoms, psychological symptoms and communication/practical issues were linearly converted to a scale from 0 to 100, where higher scores correspond to more severe outcomes.

**Results:**

53 patients were recruited and 33 have completed the intervention and all outcome measurements. All patients will complete the intervention by February 2023. The recruited patients have a mean age of 72,53 (min 37, max 96); 54,7% female; 21 have advanced cancer, 10 chronic kidney disease V/VI, 16 chronic heart failure NYHA III/IV and 6 chronic obstructive pulmonary disease III/IV. Preliminary analysis shows a statistically significant reduction in PhySB (T0mean=184,85; T12=113,64; mean dif 71,21; IC95) and in PsySB (T0=128,03; T12=92,42; mean dif 35,61; IC95).

**Conclusions:**

Preliminary results indicate the intervention may have an impact on reducing symptom burden and it could be transferred to other countries with similar settings.

**Points for discussion:**

Primary care involved in (primary) palliative care

New consultation models and patient outcomes

Complex interventions in primary care research

**Theme Paper / Finished study****Pilot implications for system implementation of motivational interviewing based alcohol screening and brief intervention in primary health care in Slovenia**

Tadeja Hočevar, Karmen Henigsmann, Pika Založnik, Marko Kolšek

National Institute of Public Health, 1000 Ljubljana, Slovenia. E-mail: Tadeja.hocevar@nijz.si

**Keywords:** alcohol screening and brief intervention, motivational interviewing, primary health care, pilot study

**Background:**

With widely present wet culture and heavy alcohol burden Slovenia invested in developing and piloting a comprehensive approach for tackling alcohol related problems in the country. One of the six main sets of activities within the national project (2016-2022) was adapting and piloting motivational interviewing based alcohol screening and brief intervention (MI based ASBI) in primary health care.

**Research questions:**

We wanted to test the applicability of the measure in our primary health care system, addressing specifically the effects of training for and practicing the measure.

**Method:**

We conducted a cross-sectional study, using self-assessing questionnaires for assessing the effects of the training (data gathered pre-during-post training) and data on registered successful treatments. The latter was compared to the anticipated number of successful treatments, set according to the number needed to treat in alcohol prevention as reported in already existing studies. We studied this in 124 professionals of 5 selected primary health care professions (general practitioner, registered nurse in family medicine practice, community nurse, specialist in occupational, traffic and sports medicine, and preventive programmes facilitator) in 18 community health centres across the country. We conducted the training and piloted the measure within the period of 32 months (2018-2020).

**Results:**

As self-assessed, ASBI practitioners had higher knowledge of alcohol related issues, used motivational interviewing elements more, thought their effectiveness in using SBI improved with the training, and thought discussing alcohol drinking was more legitimate after the training. Aligned with this, the SBI practitioners all together registered 804 successful treatments, which was 183 % of the anticipated project goal.

**Conclusions:**

Practitioners of the piloted ASBI benefited from the training and were highly successful in practicing the measure. The study provides data that propose the content and way of successfully training for and practicing the MI based ASBI in selected primary health care professions on the system level.

**Points for discussion:**

tackling alcohol related problems in wet cultures

aspects of facilitating successful training for practicing MI based ASBI

implementing MI based approaches/brief interventions for behaviour change regarding different risk factors in primary health care

**Theme Paper / Ongoing study with preliminary results****Turkish Validity and Reliability Study of the “Scale for BioPsychoSocial Dimension of Family Physician’ Work”**

Meryem Seda Ustun, Arzu Uzuner, Pemra C. Unalan

Family Medicine Department of Marmara University School of Medicine, Istanbul, Turkey. E-mail: drmeryemsedaustun@gmail.com

**Background:**

Biopsychosocial approach is a clinical method that allows to address health problems with physical, mental, social, cultural and existential dimensions compared to other models that focus more on disease and pathophysiology. The importance of this model comes to the fore even more especially in the discipline of family medicine, where patient evaluation with a holistic perspective is accepted among the core competencies.

**Research questions:**

To evaluate the Turkish validity and reliability of the 35-item "Scale for biopsychosocial dimension of family physician' work" developed by Makivic et al.

**Method:**

The research was designed as a methodological study. The translation of the scale was made by people who speak native English and have a good command of Turkish. We applied the questionnaire to 18 family physicians within the scope of the pilot study. The Turkish form of the scale, together with the Turkish version of the checklist prepared by Margalit et al., was planned to be administered to at least 175 family physicians and general practitioners who have experience working in family health centers.

The internal consistency and inter-scale consistency analyzes of the scale will be performed, and the Cronbach's alpha coefficient will be calculated for internal consistency. Our data collection process continues.

Presentation on 13/05/2023 13:30 in "Parallel Session I - Theme Papers" by Pemra C. Unalan.



**Freestanding Paper / Almost finished study****Changes in work tasks and organization of general practice in Norway during the COVID-19 pandemic: results from the Pricov-19 study**

Torunn Bjerve Eide, Esther Van Poel, Sara Willems, Frode Fadnes Jacobsen

Dept. of General Practice, Institute of Health and Society, University of Oslo, Norway, 0318 Oslo, Norway. E-mail: torunnbjerveide@gmail.com

**Keywords:** COVID-19; PRICOV-19; Quality of Care; Infection Prevention and Control; Patient Flow Management; Primary Care Workforce

**Background:**

The COVID-19 pandemic led to huge and rapid changes in general practice in Norway as in the rest of Europe. Knowledge regarding these changes can inform measures in similar future situations.

**Research questions:**

We aimed to obtain more knowledge on the changes in use of alternative consultation forms, workload, tasks and delegated responsibilities of both the GPs and other personnel in the GP offices, adaptations in routines related to hygiene measures, triage of patients, and how the official rules and recommendations affected the practices.

**Method:**

We analysed data from the Norwegian part of the PRICOV-19 study, collecting data from general practice via an online self-reported questionnaire. We included 130 Norwegian general practices, representing an estimated 520 Norwegian general practitioners (GPs). All Norwegian GPs were invited to participate.

**Results:**

During the pandemic, Norwegian GPs significantly increased their use of alternative consultation forms and the implementation of infection prevention measures in their clinics. There was a large and significant increase in the use of all forms of alternative consultation forms (Digital text-based, video- and telephone consultations). The use of several different infection prevention measures were significantly increased, and the provision of hand sanitizer to patients increased from 29.6% pre-pandemic to 95.1% since the pandemic. More than half of the GPs (59.5%) reported that their responsibilities in the practice had increased, and 41% were happy with the task shift. 27% felt that they received adequate support from the government; however, 20% reported that guidelines from the government posed a threat to the well-being of the practice staff. We found no associations with the rurality of the practice location or size of the municipalities.

**Conclusions:**

Norwegian GPs adapted well to the need for increased use of alternative consultation forms, and reported a high acceptance of their increased responsibilities. However, only one in four experienced adequate support from the government.

**Points for discussion:**

How do the Norwegian findings differ from the changes related to the COVID-19 pandemic in other European countries?

To what degree are national results and conclusions transferable to other countries with very different health services systems?

How can health authorities help GP practices through future pandemics?

**Freestanding Paper / Finished study****Organizing outreach work for vulnerable patients in general practice during COVID-19: results from the cross-sectional PRICOV-19 study in 38 countries**

Esther Van Poel, Claire Collins, Peter Groenewegen, Peter Spreeuwenberg, Gazmend Bojaj, Jonila Gabrani, Christian Mallen, Liubovė Murauskienė, Milena Santric Milicevic, Emmily Schaubroeck, Stefanie Stark, Sara Willems

Ghent University, 9000 Ghent, Belgium. E-mail: Esther.VanPoel@UGent.be

**Keywords:** primary health care; general practice; outreach work; equity; vulnerable populations; community-oriented primary care; quality of care; PRICOV-19; COVID-19; international comparison

**Background:**

Vulnerable populations in need of care often experience barriers to accessing health care, which have become even worse since COVID-19. By proactively reaching out to them, general practices attempted to prevent the underutilization of their services.

**Research questions:**

(i) To what extent have general practices set up outreach work during the COVID-19 pandemic? (ii) How can we explain the variability of outreach work based on the practice and country characteristics?

**Method:**

Linear mixed model analyses with practices nested in countries were performed on the data of 4982 practices from 38 countries. A 4-item scale on outreach work was constructed as the outcome variable with a reliability of 0.77 and 0.97 at the practice and country level.

**Results:**

The results showed that many practices set up outreach work, including extracting at least one list of patients with chronic conditions from their electronic medical record (30.1%); and performing telephone outreach to patients with chronic conditions (62.8%), a psychological vulnerability (35.6%), or difficult situation of domestic violence or parenting (17.2%). Outreach work was positively related to the availability of an administrative assistant or practice manager ( $p < 0.05$ ) or paramedical support staff ( $p < 0.01$ ). No other practices or country characteristics were significantly associated with undertaking outreach activities.

**Conclusions:**

Policy and financial interventions supporting general practices to organize outreach work should focus on the range of personnel available to support such practice activities.

**Points for discussion:**

Are the study findings recognizable for your country/neighborhood?

What do you think is needed to support general practices to organize outreach work?

**Freestanding Paper / Published****Social participation and mental health of immunocompromised individuals during the COVID-19 pandemic – Results of a longitudinal observational study over three time points**

Gloria Heesen

Institute for General Practice, 37075 Göttingen, Germany. E-mail: gloria.heesen@gmail.com

**Keywords:** immunocompromised persons; social participation; mental health, quality of life; observational study; SARS-CoV-2 vaccination; pre/post design

**Background:**

The coronavirus disease 2019 (COVID-19) pandemic impacted how people perform their daily lives in manifold and sometimes massive ways. Particularly, individuals who are at high risk for a severe disease progression, like immunocompromised people, may have experienced drastic changes in social participation during the pandemic.

A COVID-19 basic vaccination may have changed their safety behavior in terms of infection risk and thereby influence social participation and mental wellbeing.

**Research questions:**

How does the self-perceived social participation change in immunocompromised individuals at baseline before and at follow-up one and six months after basic vaccination?

**Method:**

Beginning in March 2021, 274 immunocompromised persons 18 years or older were enrolled in the COVID-19 Contact Immune study in Lower Saxony, Germany. Measurements were performed at three time points regarding social participation (Index for the Assessment of Health Impairments [IMET]), mental health (Patient Health Questionnaire-4 [PHQ-4]), subjective health status (five-point Likert-scale) and quality of life (five-point Likert-scale).

**Results:**

In total, about 60% of the participants showed increasing social participation over time. The greatest increase in social participation was observed within the first month after basic vaccination ( $p < 0.001$ ). During the following five months, social participation remained stable. The domains "Social activities", "Recreation and leisure" and "Close personal relationships" were responsible for the overall change in social participation. No association was found between social participation, mental health, sociodemographic or medical factors (except hypertension).

**Conclusions:**

The protection expected of a COVID-19 vaccination is likely to have increased social participation. These results highlight the heterogeneity of changes in social participation during a similar time period. It is helpful for general practitioners to address health-related consequences of more social participation among immunocompromised persons. Further factors that might influence social participation need to be investigated in order to be able to advise and treat patients in standard care better and more individually.

**Points for discussion:**

Dealing with persons with a high risk for a severe COVID-19 course as GP

Social participation as an outcome in Primary Care Research

COVID-19 vaccination and its impact on the behaviour of persons with a high risk for a severe COVID-19 course

**Freestanding Paper / Published****Trapped in a double cage: Building resilience in cancer caregivers endangered by the COVID-19 pandemic.**

Sophie Opsomer

KU Leuven &amp; UGent, 3150 Tildonk, Belgium. E-mail: sophie.opsomer@kuleuven.be

**Keywords:** Resilience, advanced cancer, palliative care, cancer caregiving, COVID-19**Background:**

When confronting a potentially traumatic event (PTE) such as a partner's diagnosis of advanced cancer, caregivers seem often protected against severe psychological illness by resilience. However, during the COVID-19 pandemic, these caregiving partners were expected to deal concurrently with a second PTE characterized by a threat of exposure to the contagion, viral transmission, isolation, and fear of impending death.

**Research questions:**

What are the experiences of partners taking care of a person with advanced cancer during the COVID-19 pandemic?

**Method:**

An interview study with interpretative phenomenological approach of nine partners' lived experiences.

**Results:**

Dealing with two PTEs at a time was experienced as 'living in a double cage'. The partners talked about how they no longer managed to escape from the cancer and how their lives came to a halt as the patient's life raced toward death. On the other hand, the quality time with the partner, resulting indirectly from the imposed measures was much appreciated.

The pandemic emphasized the dynamic features of resilience. The vulnerability of the resilience resources, both the individual characteristics and the availability of professional and personal support, was magnified, whereas the pandemic seemed to be a catalyst for moderating coping strategies such as maintaining normality, assuming responsibility and managing or mastering the situation. Overall, a resilience process seemed promoted and a new equilibrium was established.

**Conclusions:**

In dealing with major stressors, partners seem to employ an array of inventive and balanced coping strategies. These strategies, predominantly personal in nature, seem to set the stage for a resilient outcome, even in the presence of extreme environmental constraints. However balanced and creative, the coping strategies are also close related to fight and flight reactions. Hence, the risk for exhaustion should be considered. Nevertheless, permanent support by HCPs should be guaranteed, albeit technology-driven whenever face-to-face contact is not possible.

**Points for discussion:**

How can we, HCPs, guide partners of patients with advanced cancer in developing a resilience process throughout cancer caregiving?

What is the impact of any second PTE on existing resilience promoting characteristics and context features?

How can HCPs detect and bring to the forefront those resilience-supporting characteristics and features that are still intact?

**Theme Paper / Ongoing study with preliminary results****Cocreating a person-centred integrated care for people of low socio-economic status.**

Hester Van Bommel, Tessa Van Loenen, Jako Burgers, Maria Van Den Muijsenbergh, Erik Bischoff

Pharos, Dutch Centre of Expertise on Health Disparities, 3511 MJ Utrecht, Netherlands. E-mail: h.vanbommel@pharos.nl

**Keywords:** low socioeconomic status, health literacy, health disparities, co-creation, design-thinking

**Background:**

People with low socioeconomic status (SES) often suffer from chronic diseases and low health literacy as well as social problems. A person-centred integrated-care (PC-IC) approach in general practice seems promising but should be tailored to these patients' specific needs, expectations and capabilities.

**Research questions:**

Which elements in a PC-IC approach make it suited to the needs and capabilities of people with low-SES?

**Method:**

A recently developed PC-IC intervention was adjusted to low-SES patients using an iterative co-creation process. Participatory learning and action (PLA) techniques were used to facilitate the process. These techniques ensure meaningful and equal input of participants with different knowledge and power levels. Participants were 5 general practitioners and nurses and 4 low literate patients. Three PLA-moderated sessions took place to reach the adjusted program.

**Results:**

In the sessions, it was concluded that the existing PC-IC intervention appeared to be less suitable for low-SES patients as concepts, materials and questionnaires were difficult to understand. Care providers were not aware and had limited knowledge about low-SES patients who often have limited health literacy. They reported that visual materials are helpful instead of written text or questionnaires. To support communication a visual conversation map and an easy to understand visual model of the PC-IC intervention were developed. For the healthcare providers a training for providing person-centred and integrated care to low-SES patients would be useful.

**Conclusions:**

To ensure an PC-IC approach can be tailored to low-SES patients, visual materials and easy to understand procedures as well as specific guidance for care providers should be developed in close collaboration with these patients.

**Points for discussion:**

1. Person-centered care is tailored care to the knowledge and needs of patients. However, materials and information are often too difficult to understand for many patients. How could healthcare providers communicate with all patients in an understandable way?
2. Using visual materials for all patients can be perceived as childish. How can we address this problem?
3. Increasing use of digital care (e.g., e-consultations) can increase inequity due to limited digital skills. How can we still provide person-centred care in the digital era?

**Theme Paper / Finished study****Exploring the general practitioners' point of view about clinical scores: a qualitative study**

Maxime Pautrat

maison de santé pluridisciplinaire, médecine générale, 37240 LIGUEIL, France. E-mail: lamibaryton@hotmail.fr

**Keywords:** Decision aids, psychometrics, primary health care, qualitative research.**Background:**

Clinical Scores help physicians to make clinical decisions, and some are recommended by health authorities for primary care use. As an increasing number of scores are becoming available, there is a need to understand general practitioner expectations for their use in primary care.

**Research questions:**

The aim of this study was to explore general practitioner opinions about using scores in general practice

**Method:**

This qualitative study, with a grounded theory approach, used focus groups with general practitioners recruited from their own surgeries to obtain verbatim. Two investigators performed verbatim analysis to ensure data triangulation. The verbatim was double-blind labeled for inductive categorization to conceptualize score use in general practice

**Results:**

Five focus groups were planned, 21 general practitioners from central France participated. Participants appreciated scores for their clinical efficacy but felt that they were difficult to use in primary care. Their opinions revolved around validity, acceptability, and feasibility. Participants have little regard for score validity, they felt many scores are difficult to accept and do not capture contextual and human elements. Participants also felt that scores are unfeasible for primary care use. There are too many, they are hard to find, and either too short or too long. They also felt that scores were complex to administer and took up time for both patient and physician. Many participants felt learned societies should choose appropriate scores.

**Conclusions:**

This study conceptualizes general practitioner opinions about score use in primary care. The participants weighed up score effectiveness with efficiency. For some participants, scores helped make decisions faster, others expressed being disappointed with the lack of patient-centeredness and limited bio-psycho-social approach.

**Points for discussion:**

These results highlight the gap between psychometric properties and EBM components: how can a test be designed to include contextual items, for example?

Can the items that define person-centred care be included in a clinical score?

What is the place of clinical scores in a person-centred practice?

**Theme Paper / Almost finished study****Patient-centred interprofessional collaboration and integration in primary care. A qualitative study.**

Muhammed Mustafa Sirimsi, Kris Van Den Broeck, Hans De Loof, Kristel De Vliegheer, Peter Van Bogaert

University of Antwerp, 2170 Merksem, Belgium. E-mail: muhammedmustafa.sirimsi@uantwerpen.be

**Keywords:** Integrated care, interprofessional collaboration, patient-centred care, health economics, primary care, public health

**Background:**

Interprofessional collaboration and integration (IPC&I) is a crucial aspect of primary care (PC) where patients often require the coordinated efforts of multiple caregivers. To achieve this, effective and patient-centred communication (PCC) is necessary to ensure that the patient's needs and preferences are central to the care process. PCC has been shown to enhance patient satisfaction and improve health outcomes.

**Research questions:**

How do caregivers experience the treatment of chronic patients regarding patient-centred IPC&I in PC?  
What are the needs and preferences of caregivers to improve IPC&I in PC?  
How to establish a patient-centred IPC&I in PC?

**Method:**

This study used a qualitative descriptive design with thematic analysis and explored caregivers' experiences regarding IPC&I in PC. In total, five focus groups (FGs) were performed in three waves, with in total 36 caregivers, academics, policymakers and members of patient organisations, using maximum variation sampling. Wave one included an FG with five participants (academics and/or caregivers), wave two consisted of three separate FGs, with 23 participants (academics, patient organisations, and policymakers), and wave three was performed with seven participants chosen from the second wave.

**Results:**

The participants represented a broad range of disciplines working in PC ensuring a multidisciplinary character of the FGs. The interviews lasted between 68 and 123 min, and the research resulted in the following five themes: (i) Readiness and attitude towards IPC&I, (ii) IPC&I to improve the quality of care, (iii) having a patient-centred IPC&I, (iv) the need for education to normalise IPC&I, and (v) financial systems - practice organisation.

**Conclusions:**

Overall, the study provides valuable insights into the experiences of caregivers in treating chronic patients in PC through patient-centred IPC&I and the need for improvement in this area. The findings of this study can inform the development of policies and education programs to improve the quality of care for chronic patients in PC.

**Points for discussion:**

Achieving a patient-centred interprofessional collaboration and integration in primary care

To facilitate patient-centered care, appropriate financial systems need to be in place.

The relationship between interprofessional collaboration and quality of care.

**Freestanding Paper / Finished study****A COVID-19 Conundrum – Can the reported skin manifestations of COVID-19 be explained by re-activation of herpes virus?**

Itamar Getzler

Maccabi Health Services, 4428840 Kfar Saba, Israel. E-mail: itamargetzler@gmail.com

**Keywords:** COVID-19, Herpes, Herpesviridae, SARS-COV-2**Background:**

Since COVID-19 outbreak, numerous reports concerning COVID-19 skin manifestations have emerged. A debate has ensued, with lacking evidence to support whether these skin manifestations are unique, or represent a form of re-activation with Herpesviridae viruses.

**Research questions:**

The goal of this research was to compare the incidence of herpetic skin lesions between COVID-19 group, Vaccinated group, and their respective control, considering Herpesviridae carrier status.

**Method:**

Maccabi Health Services' database was digitally scanned, and a cohort of both verified COVID-19 and SARS-COV-2 vaccinated patients were extracted in respect to the study timeframe. Random control cohorts were pulled from the database to be matched to the cohorts. All patient records of the cohort were then analyzed to find occurrences of clinically diagnosed herpetic lesions during and before the study timeframe.

**Results:**

105,000 patients were recruited to each cohort. For the COVID-19 cohort, we've demonstrated nonsignificant difference between both groups for developing herpetic skin lesions. A logistic regression demonstrated that the Interaction of COVID-19 with History of Herpes is statistically significant with an odds ratio of 0.51 ( $p < 0.001$ ). For the 'Vaccination' cohort, the data shows statistically significant differences between groups in herpetic frequencies, but contrary to the COVID-19 disease, the interaction of the vaccine with the 'history of herpes' is not significant with an odds ratio of 0.74 ( $p < 0.070$ ).

**Conclusions:**

We can infer that COVID-19 has a low or non-significant impact on the development of clinically diagnosed herpetic lesions within one month of diagnosis. This result diminishes the idea of COVID-19 contributing to unique skin lesions. However, because of the meaningful interaction of the COVID-19 disease with the History of herpes variable, we can suggest that COVID-19 has a role in reactivation of latent Herpesviridae infections. The SARS-COV-2 vaccine can increase the odds of developing herpetic infection almost 2-fold relative to those who did not get the vaccine.

**Points for discussion:**

Results of the study proposal presented on the EGPRN's 93rd meeting.

Presentation on 13/05/2023 15:50 in "Parallel Session L: Special Methodology Session" by Itamar Getzler.



**Theme Paper / Finished study****An IMP to "take care" of COPD!**

Francisco Santos Coelho, Patrícia Tuna, Catarina Rego Carvalho, Tiago Pinto Neto, Bárbara Reis, Anabela Pereira

USF Valongo (Family Healthcare Unit of Valongo), 4440-563 Valongo, Portugal. E-mail: franciscoscoelho@hotmail.com

**Keywords:** COPD; Chronic Obstructive Pulmonary Disease; Internal Monitoring Plan; Continuous Improvement; Primary Healthcare

**Background:**

Chronic Obstructive Pulmonary Disease (COPD) is a disease with high morbidity and mortality. Its prevalence in Portugal is around 14% in individuals over 40 years old. An Internal Monitoring Plan (IMP) was developed in order to improve the approach to patients with COPD.

**Research questions:**

Evaluate and ensure the quality of care for patients with COPD, adopting corrective measures to improve the services provided.

Achieving and maintaining a Global Quality Standard (GQS) of at least 80% in all evaluated criteria.

**Method:**

Observational study (2019-2022). All patients diagnosed with COPD at USF Valongo (USFV) until 2022 were eligible. Ten of these patients were randomly selected from each physician's list. 16 indicators were evaluated through regular audits. Thereafter, they were discussed and corrective measures were applied. The GQS was calculated at the end of each evaluation and compared with the previous years. The data were analyzed using Excel®.

**Results:**

The prevalence of COPD in USFV is 1.12%. In the last evaluation (1stSemester2022), all 16 indicators achieved a Fulfillment Index  $\geq 80\%$ , which corresponded to a GQS=100%. This value symbolized an increase of 75 percentage points relative to the first assessment (1stSemester2019) and 60 percentage points relative to the Annual2021.

**Conclusions:**

COPD has a high impact on patient's quality of life.

Projects like this are essential to improve the quality of healthcare, highlighting the role of the joint work of healthcare teams. A major improvement in our results was obtained, with the fulfillment of all the analyzed indicators. This was owing to a concerted effort by the team, especially in a post-pandemic context - reason of great satisfaction.

However, the prevalence of COPD in USFV is clearly below the Portuguese national level, which may be due to underdiagnosis/undercoding. Therefore, it is essential to increase the index of suspicion for the disease and to be proactive in its diagnosis.

**Points for discussion:**

Relevance of IMPs on Continuous Improvement of healthcare teams.

Impact and relevance of COPD on Primary Care.

The role of the joint work of healthcare teams.

**Freestanding Paper / Almost finished study****Arterial stiffness and lower extremities arterial disease – cross-sectional study of general practice patients**

Anna Kamińska, Aleksandra Danieluk, Marta Maria Niwińska, Sławomir Chlabicz

Medical University of Białystok, 15-084 Białystok, Poland. E-mail: anna.kaminska@onet.eu

**Keywords:** atherosclerosis, lower extremities arterial disease, arterial stiffness

**Background:**

The early diagnosis of atherosclerosis remains an important task for family medicine doctors. Lower extremities arterial disease (LEAD) is one of clinical presentations of peripheral atherosclerosis. The diagnosis of LEAD in primary care is based on history of claudication, physical examination (weakened or absent peripheral pulses) and decreased ankle-brachial index (ABI).

**Research questions:**

Could arterial stiffness parameters be useful in early detection of LEAD?

**Method:**

A cross-sectional study was performed among general practice patients over 50 years of age. We collected information about risk factors for cardiovascular disease and about established cardiovascular disease. All participants were interviewed with Edinburgh Claudication Questionnaire. We also performed pulse wave velocity (PWV) evaluation with Mobil-O-Graph Pulse Wave Analyser (PWA) and ABI measurements with Huntleigh-Dopplex. We compared PWV with ABI measurements and occurrence of other cardiovascular risk factors, history of established cardiovascular disease, clinical symptoms and signs of LEAD and score on Edinburgh Claudication Questionnaire. The statistical analysis was performed with the use of IBM SPSS Statistics 25.

**Results:**

A study including 290 participants revealed that increased PWV over a set threshold over 10m/s correlated positively with older age ( $\chi^2 = 101,93$ ;  $p < 0,001$ ), presence of diabetes mellitus ( $\chi^2 = 8,27$ ;  $p = 0,004$ ), presence of elevated blood pressure ( $\chi^2 = 12,70$ ;  $p < 0,001$ ) and absence of posterior tibial pulse ( $\chi^2 = 3,86$ ;  $p = 0,049$ ) as well as with decreased ABI ( $\chi^2 = 5,80$ ;  $p = 0,016$ ). We found no correlation between elevated PWV and coronary artery disease ( $\chi^2 = 2,59$ ;  $p = 0,108$ ), smoking ( $\chi^2 = 5,61$ ;  $p = 0,060$ ), presence of claudication ( $\chi^2 = 0,94$ ;  $p = 0,334$ ).

**Conclusions:**

Pulse wave velocity may be an additional parameter in early identification of lower extremities arterial disease as it correlates with other well verified risk factors.

**Points for discussion:**

Can we measure arterial stiffness parameters in family medicine consulting room?

Is arterial stiffness a new cardiovascular risk factor to detect in primary care?

Is ankle brachial index to be deposited as LEAD index?

**Author Index**

Abazaj, Erjona	27, 48	Castermans, Maxime	49
Adler, Limor	29, 59	Cerovečki, Venija	22, 74
Aerts, Naomi	49	Ceyhun Peker, Ayşe Gülsen	39
Aggelakou-Vaitsi, Stamatina	73	Charalambous, Andreas	83
Aïm-Eusébi, Amélie	31, 90	Charalambous, George	64
Albertsson, Daniel	84	Chlabicz, Slawomir	106
Alvunger, Lisa	84	Christelle, Chamant	89
Angeleska, Ruzica	88	Cifuentes, Patricia	55
Antunes, Ricardo	54	Çimen Korkmaz, Büşra	59
Arcarons Martí, Marta	75	Clary, Bernard	31
Ares Blanco, Sara	22, 59, 63	Clavería, Ana	83
Assenova, Radost	22, 83	Cojic, Milena	27
Astier-Peña, Maria Pilar	59	Collins, Claire	22, 98
Atanasova, Gergana	93	Ćosić Divjak, Asja	63
Ateş Neng, Serap	78	Coteur, Kristien	23, 27, 48
Athanasiadis, Loukas	50	Csatlós, Dalma	34
Atijas, Daniel	27	Dahli, Mina	22
Auger, Isabelle	31, 90	Dalnoki, Laura	34
Aujoulat, Paul	32	Dan, Sorin-Adrian	79
Azeredo, Joana	22	Danieluk, Aleksandra	106
Azuri, Joseph	65	Danilenko, Jelena	27, 48
Bagro, Taisiia	66	Dardavesis, Theodoros	50
Bakola, Maria	59, 64, 73	De Lepeleire, Jan	29
Barais, Marie	32	De Loof, Hans	103
Bastiaens, Hilde	49	De Prez, Vincent	22
Batenburg, Ronald	79	De Schreye, Robrecht	70
Bauch, Felix	48	De Vliegheer, Kristel	103
Bayen, Sabine	22, 59	Delory, Tristan	90
Belluto, Martina	80	Derriennic, Jérémy	32
Benoy, Charles	60	Descamps, Axel	51
Bensemmane, Sherihane	59, 70	Di Gangi, Stefania	25
Bergman, Elina	44	Dibao, Clarisse	29, 38
Berkhout, Christophe	51	Díez García, Lorena	75
Bernartz, Kerstin	71	Dimitrov, Hristo	27
Billieux, Joel	60	Divjak, Asja Ćosić	59
Bischoff, Erik	101	Dolan, Miriam	43
Bjerve Eide, Torunn	22, 97	Domagala, Alicja	79
Blumfelds, Jānis	30	Domeyer, Philippe-Richard	59, 83
Bojaj, Gazmend	98	Dopfer-Jablonka, Alexandra	26
Borellini, Erika	42	Drakopoulou, Maria	73
Bosnar, Lorena	45	Dreischulte, Tobias	33, 71
Botaya, Magallon	22	Dubas-Jakobczyk, Katarzyna	79
Bouziane, Antoinette	31	Dumitra, Gindrovel	29
Bralić Lang, Valerija	40, 45, 52, 63	Eberhardt, Yvonne	71
Brisnik, Vita	71	Eggertsen, Robert	84
Brovč, Monika	27, 48	Engler, Jennifer	87
Bruetting, Christine	48	Eory, Ajandek	34
Bruschi, Irene	80	Escalé Besa, Anna	75
Brutskaya-Stempkovskaya, Elena	59	Escribano Sanz, Ana	75
Brütting, Christine	27	Esquivel, Sofia	41
Buczowski, Krzysztof	93	Etcheberry, Julie	90
Bühner, Markus	33	Evers, Sinah Afra Noemi	43
Bulilete, Oana	67	Fadnes Jacobsen, Frode	97
Buono, Nicola	27, 48, 93	Falanga, Rosario	29
Burgers, Jako	24, 101	Feldmane, Sabine	59
Busneag, Iliana-Carmen	22, 27, 59	Feltri, Gaetano	42
C. Unalan, Pemra	78, 96	Fenercioğlu, Ayşen	56
Carvalho, Joana	46, 85	Fernandez Segura, Francisco Javier	75
		Fevzi Dikici, Mustafa	27
		Fitzgerald, Louise	59

Flinterman, Linda	79	Israel, Ariel Yehuda	47
Foley, Tony	29	Ivanna, Shushman	59
Fornarciari, Davide	42	Jacquet, Jean Pierre	43
Forte, Viviana	80	Jandric-Kocic, Marijana	59
Freche, Bernard	31	Janevska, Sashka	57, 72, 88
Frese, Thomas	22	Jansen, Pieter	23
Frey, Silke	82	Järveläinen, Hannu	58
Gabrani, Jonila	98	Jatic, Zaim	27
Gadot, Tzipi	65	Javorská, Katerina	43
García Moreno, Aitor	37	Jean-Mairet I Soler, Christian	67
García, Javier	55	Jelastopulu, Eleni	64, 73
Gefuell, Ileana	30, 59	Jennings, Aisling	29
Gensichen, Jochen	33	Jug, Juraj	69
Getzler, Itamar	104	Jungo, Katharina Tabea	22
Ghirotto, Luca	42, 80	Kafadar, Didem	56
Gicic, Azra	57, 72, 88	Kamieńska, Anna	106
Gidding-Slok, Annerika	24	Kareli, Ana	29
Giezendanner, Stéphanie	29	Kaufmann-Kolle, Petra	71
Gjorgjievski, Dragan	59	Kenkre, Joyce	43
Golan Cohen, Avivit	47	Keppeler, Simon	33
Gomes, Barbara	94	Kermc, Ino	74
Gomez Bravo, Raquel	59, 60, 63	Kersten, Susanne	86, 87
Gonzalez-Gonzalez, Ana Isabel	55	Kersting, Christine	86, 87
González-Lama, Jesús	22	Kirkovski, Aleksandar	59
Gonzalez, Ana Isabel	79	Kirov, Lyubomir	27
Görpeliöğlu, Süleyman	39	Kitsou, Konstantina Sultana	64, 73
Gosak, Lucija	68	Klasing, Sophia	71
Gouveia, Alexandre	22	Klawonn, Frank	26
Green, Ilan	47	Klemenc Ketis, Zalika	22
Groenewegen, Peter	98	Kloppe, Thomas	43
Gruiskens, Jeroen	24	Knežević, Snežana	59
Guillou, Morgane	32	Koatz, Débora	55
Guisado Clavero, Marina	59	Kolesnyk, Pavlo	92
Haidich, Bettina	50	Koller, Michael	71
Hanževački, Miro	22, 63	Kolšek, Marko	95
Hanževački, Miroslav	59	Kondova -Topuzovska, Irena	88
Härdtlein, Annette	71	Korhonen, Päivi	44
Hargittay, Csenge	34, 91	Kostic, Milena	22, 27, 59
Harris, Michael	30, 48, 93	Kovachevikj, Katerina	57, 72, 88
Heaster, Cindy	29	Kozlovska, Liga	59
Heesen, Gloria	26, 99	Kranjčević, Ksenija	63
Heinemann, Stephanie	26	Kreitmayer, Sanda	22, 29
Heithorst, Nadine	33	Kretzschmann, Christian	87
Heleno, Bruno	22, 59	Krztoń-Królewiecka, Anna	59
Henigsman, Karmen	95	Kurotschka, Peter	42
Henriques, Hélder	41	Kurpas, Donata	29, 43
Herrmann, Wolfram	43	Kuschick, Doreen	87
Heymann, Anthony	28	Laine, Merja	58
Hočevar, Tadeja	95	Lakó-Futó, Zoltán	62, 91
Hoffman, Robert	93	Lamper, Cynthia	24
Hoffmann, Kathryn	22, 59	Lazic, Vanja	27, 29, 48, 61
Hoogeboom, Thomas	24	Le Bel, Josselin	90
Hrabac, Pero	74	Le Breton, Julien	31
Huijnen, Ivan	24	Le Goff, Delphine	32
Hülsmann, Julia	86	Le Reste, Jean Yves	32, 83
Huppertz, Gunnar	71	Lenzotti, Luca	80
Ilkov, Oksana	30, 59	Lepenies, Laura K.	71
Infanti, Alexandre	60	Lerma Irureta, David	22
Insight Group, On Behalf Of The	46, 85	Lesac Brizić, Ana	48, 61
Isfort, Jana	86	Levy-Shraga, Yael	35

Likic, Robert	79	Penakacherla, Nagu	59
Lindgren, Anna	84	Pereira, Anabela	105
Lingner, Heidrun	22, 27, 48, 59	Peremans, Lieve	49, 51
Llagostera Estruch, Marta	75	Perestelo-Pérez, Lilisbeth	55
Llobera Canaves, Joan	67	Perjés, Ábel	59
Lokvenec, Filip	22	Perraud, Gabriel	32
López Caballero, Sandra	37	Petek Šter, Marija	77, 93
López Rey, Marga	37	Petek, Davorina	22, 59
López, Noemí	83	Peter, Sophie	71
Lorber, Mateja	68	Peters, Sanne	23
Maas, Michaela	71	Petovka, Daniela	92
Majnaric, Ljiljana	83	Petrazzuoli, Ferdinando	29, 43, 59, 84
Mallen, Christian	29, 98	Petricek, Goranka	22, 59, 63
Markkula, Juha	44	Petrov Kiurski, Miloranka	27
Márkus, Bernadett	91	Pinheiro, Inês	41
Martí I Oltra, Zulema	75	Pinto Neto, Tiago	105
Martí Lluch, Ruth	67	Pires Núñez, Pablo	75
Martinez Satorres, Alba	75	Plate, Andreas	25
Marzo-Castillejo, Mercè	93	Polanc, Andreas	87
Mavridou, Konstantina	73	Poljičanin, Tamara	63
Mazicioglu, Mumtaz M	27	Ponzel, Nataliia	30
Medina Bombardo, David	67	Portugal Martínez, Ander	37
Méndez-López, Fátima	22	Prazeres, Filipe	94
Mendive, Juan Manuel	43	Puia, Aida	93
Mercier, Alain	90	Puzhko, Svetlana	71
Merzon, Eugene	47	Quersin, François	51
Mevsim, Vildan	22	Rađa, Marko	22
Mihajlova, Marija	22	Rakic Matic, Jelena	22
Milicic, Davor	74	Ramasaco, Liljana	27, 48
Missiou, Aristeia	29	Ramírez Manent, José Ignacio	67
Modan-Moses, Dalit	35	Ramos Del Río, Lourdes	59
Moecker, Robert	71	Ramos, Vanesa	55
Mortsiefer, Achim	71, 86	Randall-Smith, Jane	43
Mrduljaš-Đujić, Nataša	43	Rantanen, Ansa	44
Mueller, Frank	26	Rautava, Päivi	58
Muñoz González, M <sup>a</sup> Cruz	37	Rego Carvalho, Catarina	105
Murauskienė, Liubovė	59, 98	Reiner, Zeljko	74
Muris, Jean	24	Reis, Bárbara	105
Muth, Christiane	71	Rener Sitar, Ksenija	77
Nessler, Katarzyna	22, 59	Respaldiza Berroeta, Itxaso	37
Neves, Ana Luisa	46, 59, 82, 85	Riccomi, Silvia	42
Niwińska, Marta Maria	106	Richter, Manon	27
Oger, Caroline	29	Righi, Elena	42
Oliva Fanlo, Bernardino	93	Ritzen, Mark	60
Oliver, Senn	59	Robins, Joanne	43
Opsomer, Sophie	100	Rodríguez Salvador, Juan José	37
Orrego, Carola	55	Rogers, Heather L	22, 37
Ouvrard, Patrick	43	Roos, Marco	33
Özden, İbrahim Halil	78	Rueda Merino, Amaia	37
Özkaya, Hilal	36	Sahin, Mustafa Kursat	27
Ozvacic Adzic, Zlata	22, 93	Samardzic, Jure	74
Pacheco, Valeria	55	Sanftenberg, Linda	33
Pagkozidis, Ilias	50	Santos Coelho, Francisco	105
Palandri, Lucia	42	Santos, Anthea	55
Papageorgiou, Dimitra Iosifina	93	Santric Milicevic, Milena	98
Parisi, Giuseppe	80	Sarica Čevik, Hüsna	39
Pasdeloup, Emeline	89	Sattler, Martin	59
Pasquini, Mirko	80	Saurek-Aleksandrovska, Natalija	59
Pautrat, Maxime	102	Schaubroeck, Emmily	98
Peña, Maryher Delphin	59	Schmitz, Annika	82

Schoenmakers, Birgitte	23	Vaitsis, Nikolaos	73
Schröder, Dominik	26	Valinsky, Danna	28
Sckopke, Philipp	33	Vall-Roque, Helena	55
Segernäs Kvitting, Anna	59, 84	Van Assche, Kristof	49
Seiça Cardoso, Carlos	94	Van Bogaert, Peter	103
Seidling, Hanna M.	71	Van Bommel, Hester	101
Seifert, Bohumil	22	Van Den Broeck, Kris	103
Seifert, Martin	53	Van Den Muijsenbergh, Maria	101
Seils, Laura Alexandra	79	Van Loenen, Tessa	101
Sekri, Karima	31	Van Meulenbroek, Thijs	24
Şener, Beyza Sena	36	Van Nuland, Marc	23
Senn, Oliver	25	Van Poel, Esther	22, 62, 97, 98
Sentker, Theresa	59	Van Royen, Paul	49, 51
Serafini, Alice	42, 59, 80	Vanella, Patrizio	71
Serrano Ripoll, Maria Jesus	67	Varjonen, Juha-Matti	58
Sipahioğlu, Nurver	56	Velikj Stefanovska, Vesna	72
Sirimsi, Muhammed Mustafa	103	Verbunt, Jeanine	24
Sjölander, Moses	84	Vermond-Engel, Debbie	22
Skenderi, Fatbardha	27, 48	Vicens Caldentey, Catalina	67
Skuja, Ilze	93	Vidal Arboiro, José Manuel	37
Smyrnakis, Emmanouil	93	Viegas Dias, Catarina	54
Soleski, Kiril	22	Viegas, Rita	29
Spoelder-Merkens, Marcia	24	Vielma, Markku	58
Spreeuwenberg, Peter	98	Vinker, Shlomo	39, 47, 59
Stark, Stefanie	98	Vlah Tomičević, Sunčana	40, 52
Stavrikj, Katarina	22, 57, 72, 88	Vögele, Claus	60
Stefani, Elisa	42	Voggenberger, Lisa	76
Steimle, Tim	71	Vörös, Krisztián	62, 91
Steinkat, Nadine	71	Vuletic, Gorka	22
Stepanović, Aleksander	27	Wagner, Carolina Allegra	75
Stiglic, Gregor	68	Wanby, Pär	84
Stoleski, Sasho	57	Weckbecker, Klaus	86
Streit, Sven	22, 59	Weintrob, Ilana	35
Studzinski, Krzysztof	22	Weltermann, Birgitta	82
Sukriev, Ljubin	27, 72	Wiertz, Carlijn	24
Teneur, Alix	51	Willems, Sara	22, 62, 97, 98
Thulesius, Hans	84, 93	Windak, Adam	22
Thymara, Paraskevi	64	Zacay, Galia	28, 35
Ticmane, Gunta	59	Zafirovska, Marija	27, 48, 93
Tillmann, Judith	86	Zafirovski, Aleksandar	27, 48
Tkachenko, Victoria	29, 66	Založnik, Pika	95
Toledo, Ana	55	Zelko, Erika	22, 76
Tomicic, Marion	22, 63	Zeman, Florian	71
Torres, Alexandra	55	Zharkova, Albina	81
Torzsa, Gergely Marton	34	Zwart, Dorien	22
Torzsa, Peter	22, 29, 34, 59, 62, 83, 91		
Tsimtsiou, Zoi	22, 50		
Tuna, Patrícia	105		
Tundzeva, Marta	57, 72, 88		
Turmo Tristan, Nuria	75		
Tusek Bunc, Ksenija	22		
Tuz, Canan	22		
Ucuncu, Erva	59		
Ugolini, Giulia	42		
Ummels, Darcy	24		
Ungan, Mehmet	22, 39		
Ustun, Meryem Seda	96		
Uzuner, Arzu	96		
Vaes, Bert	59		

**Abstract Book of the 96th EGPRN Meeting**  
**Split, Croatia 11 - 14 May 2023**  
ISBN: 978-90-833732-1-8

