



EUROPEAN GENERAL PRACTICE  
RESEARCH NETWORK



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## **Abstract Book**

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**12 - 15 May 2022**

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

# COLOPHON

Programme Book of the 94th European General Practice Research Network Meeting  
Istanbul, Turkey 12-15 May 2022

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## Foreword

### Optimizing the organization of family medicine practice

Dear Colleagues and the Members (and the potential future members) of EGPRN,

On behalf of the EGPRN and the local organizing committee we welcome you to the Meeting at İstanbul, in May 2022. The mission of WONCA Europe was mentioned as the development of GP/FM discipline in Region Europe by addressing the current challenges of health and healthcare. The theme of this meeting is "Optimizing the organization of family medicine practice" in order to accomplish this vision. When we checked the meaning of "organization" in the Webster dictionary, the words "forming a business for a particular purpose", "certain order to be found or used easily" and the "process of planning" emerged and attracted our attention. Because the crucial discussion describing primary care (PC) organization was based on exactly the same concepts (if we summarise the words as needs, structure and delivery) after many years.

Today the authors consolidated several frameworks and defined: 1) population needs; 2) organization and structure of PC practices; 3) delivery of PC services and 4) patient and population health outcomes as the four domains and added connecting constructs to link the domains: accessibility, appropriateness, productivity, efficiency, effectiveness, equity and integration. Knowledge about the relationship between structure and process (including the interpersonal and societal exchange/performance of GP/FP) and outcome derives from the organizational, behavioral and health care sciences. So we need to study in interprofessional and multisectoral teams in order to evaluate detailed research on PC organization.

We hope we will discuss the weaknesses and the strengths, opportunities and the threats of PC Organization in different conditions and develop many approaches during this meeting under the light of well-planned and applied trials or controlled observational studies, evidence, collaboration and collectivity in EGPRN-Istanbul.

Looking forward to seeing you in İstanbul!

Prof. Dr. Pemra CÖBEK UNALAN

### Host Organising Committee

- Prof. Dr. Mehmet UNGAN (Past President of WONCA Europe)
- Prof. Dr. Ayşe ÇAYLAN (EGPRN-National Representative of Turkey)
- Prof. Dr. Serdar ÖZTORA (TAHUD-Liason person)
- Assoc. Prof. Dr. Çiğdem APAYDIN KAYA (MARSEV-Liason person)
- Assoc. Prof. Dr. Ahmet KESKİN (TAHEV-Liason person)
- Assoc. Prof. Dr. Sabah TÜZÜN (TAHAD-Liason person)
- Dr. İkbâl Hümay ARMAN (VdGM-TR Liason person)

## Programme Overview

THURSDAY, 12th MAY 2022				
Time	Clinical Skills Lab. (Ground Floor)	Conference Hall (2nd Floor)	Room Z059 (Ground Floor)	Room Z013 (Ground Floor)
9:00	Executive Board Meeting 09:30-13:00		Workshop 1 09:00 - 12:30 Operational research in primary care: Opportunities for collaboration	Workshop 2 10:45 - 12:30 How to read a paper: critical appraisal skills for randomised controlled trials papers
9:30				
10:00				
10:30				
11:00				
12:00				
12:30				
13:00	Lunch (Price not included in conference fee)			
13:30	The IMOCAPV Study Group Meeting 13:30 - 15:30	Council Meeting 14:00-17:00	Workshop 3 13:30 - 17:00 Project Planning & Proposal Writing Workshop	Workshop 4 13:30 - 17:00 Research in a Primary Care in the Routine Primary Care Clinical Setting: A Closer Look to Research Methodology
14:00				
15:00				
15:30	Project on benzodiazepines and Z- drugs prescriptions 15:30-17:00			
15:30				
16:00				
17:00	PR & Communication Committee 17:00-18:00		Research Strategy Committee 17:00-18:00	Educational Committee 17:00-18:00
18:00				
19:00- 20:30	<p align="center"><b>Welcome Reception and Opening Cocktail</b> Pre-booking online is essential. Location: Lakerda Restaurant. Address: Cinar Mah. Turgut Ozal Bulv. No:83 Kucukyali - Istanbul</p>			



<b>FRIDAY, 13th MAY 2022</b>			
08:00-08:30	Registration (Ground Floor)		
	<b>Conference Hall (2nd Floor)</b>		
08:30-08:45	Opening of the Meeting by EGPRN Chairperson Tiny van Merode		
08:45-09:00	Welcome by Local Host Pemra C. Unalan		
09:00-09:40	International Keynote Lecture Prof. Zalika Klemenc Ketis Assessing the quality of primary care delivery		
09:40-11:10	Plenary Session - Theme Papers		
11:10-11:40	Blue Dot Coffee Break (For the first time attenders) - Foyer, 1st Floor		
11:10-11:40	Coffee Break (For the regular attenders) - Foyer, 2nd Floor		
	<b>Conference Hall (2nd Floor)</b>	<b>Room 1034 (1st Floor)</b>	<b>Room 1133 (1st Floor)</b>
11:40-13:10	Parallel Session A - Theme Papers: Cardiometabolic Diseases	Parallel Session B - Freestanding Papers: Miscellaneous I	Parallel Session C: Theme Papers: Digital Health
13:10-14:10	Lunch (Cafeteria of the School of Pharmacy)		
13:10-14:10		<b>Room 1034 (1st Floor)</b>	
		Elevator Pitch (Lunch boxes available)	
	<b>Conference Hall (2nd Floor)</b>	<b>Room 1034 (1st Floor)</b>	<b>Room 1133 (1st Floor)</b>
14:10-16:10	Parallel Session D - Theme Papers: Health Services Research	Parallel Session E - Freestanding Papers: Cardiometabolic Diseases I	Parallel Session F - Freestanding Papers: Miscellaneous II
16:10-16:30	Coffee Break - Foyer (1st and 2nd Floor)		
16:30-18:00	Parallel Session G - Theme Papers: Diabetes	Parallel Session H - Freestanding Papers: Miscellaneous III	Parallel Session I - Freestanding Papers: Medication & Vaccination
18:00-18:10	Summary of the day Prof. Zalika Klemenc Ketis		
18:10-19:40		Örenäs Study Group Meeting	Primary Health Care data on COVID-19 Pandemic in Europe (PHC-Eurodata-Covid19)
	<b>Practice Visits</b>		
18:15 - 20:00	Location: 4 different options. Online pre-registration required, space is limited. Please see <a href="https://meeting.egprn.org/page/practice-visits">https://meeting.egprn.org/page/practice-visits</a> for more details.		

<b>SATURDAY, 14th MAY 2022</b>				
<b>08:30-09:10</b>	<b>Conference Hall (2nd Floor)</b>			
	National Keynote Lecture Prof. Mehmet Akman Establishing Primary Care; Turkey and Azerbaijan Primary Care Organization			
<b>09:10-11:10</b>	<b>Conference Hall (2nd Floor)</b>	<b>Room 1034 (1st Floor)</b>	<b>Room 1133 (1st Floor)</b>	
	Parallel Session J - Theme Papers: Miscellaneous I	Parallel Session K - Freestanding Papers: Cardiometabolic Diseases II	Parallel Session L - Freestanding Papers: COVID-19	
<b>11:10-11:30</b>	Coffee Break - Foyer (1st and 2nd Floor)			
<b>Poster Sessions (Ground Floor)</b>				
<b>11:30-13:00</b>	Poster Session 1: Health Services Research	Poster Session 2: Chronic Diseases	Poster Session 3: COVID-19	Poster Session 4: Mental Health & Vaccination
	Poster Session 5: Training & Elderly Care	Poster Session 6: Miscellaneous I	Poster Session 7: Miscellaneous II	
<b>13:00-14:00</b>	Lunch (Cafeteria of the School of Pharmacy)			
<b>14:00-15:30</b>	<b>Conference Hall (2nd Floor)</b>	<b>Room 1034 (1st Floor)</b>	<b>Room 1133 (1st Floor)</b>	
	Parallel Session M - Theme Papers: Miscellaneous II	Parallel Session N - EGPRN Special Methodology Session	Parallel Session O - Research Course Presentations	
<b>15:30-15:50</b>	Coffee Break - Foyer (1st and 2nd Floor)			
<b>15:50-17:20</b>	<b>Conference Hall (2nd Floor)</b>	<b>Room 1034 (1st Floor)</b>	<b>Room 1133 (1st Floor)</b>	
	Parallel Session P - Theme Papers: Miscellaneous III	Parallel Session R - One Slide Five Minute Presentations	Parallel Session S - Freestanding Papers: Miscellaneous IV	
<b>17:20-17:30</b>	Summary of the day Prof. Dr. Mehmet Akman			
<b>17:30-17:50</b>	Chairperson's Report by EGPRN Chair Tiny van Merode			
<b>17:50-18:05</b>	Presentation of the Poster- Prize for the best poster presented			
<b>18:05-18:15</b>	Introduction to the next EGPRN meeting - Lieve Peremans			
<b>18:15</b>	Closing			
<b>20:00-23:30</b>	<b>Social Night</b>			
	Social Night with Dinner, Dance and Music! Pre-booking online is essential. Location: Elite World Asia Hotel Grill Restaurant Address: Aydınevler, İnönü Cd. No:22, 34854 Maltepe - İstanbul			

# Programme

## Thursday, 12 May 2022

- 09:00 - 12:30 **Workshop 1: Operational research in primary care: Opportunities for collaboration**  
Location: Room Z059 (Ground Floor)
- [Registration is required.](#)
- 09:30 - 13:00 **EGPRN Executive Board Meeting**  
Location: Clinical Skills Lab. (Ground Floor)
- Only for Members of the Executive Board
- 10:45 - 12:30 **Workshop 2: How to read a paper: critical appraisal skills for randomised controlled trials papers.**  
Location: Room Z013 (Ground Floor)
- [Registration is required.](#)
- 13:00 - 14:00 **Lunch**
- Price not included in conference fee. Lunchbox tickets for €5 will be available at the registration desk.
- 13:30 - 15:30 **The IMOCAFV Group Meeting**  
Location: Clinical Skills Lab. (Ground Floor)
- 13:30 - 17:00 **Workshop 3: Project Planning & Proposal Writing Workshop**  
Location: Room Z059 (Ground Floor)
- [Registration is required.](#)
- 13:30 - 17:00 **Workshop 4: Research in a Primary Care in the Routine Primary Care Clinical Setting: A Closer Look to Research Methodology**  
Location: Room Z013 (Ground Floor)
- [Registration is required.](#)
- 14:00 - 17:00 **EGPRN Council Meeting**  
Location: Conference Hall (2nd Floor)
- Only for EGPRN Executive Board and EGPRN Council members.

15:30 - 17:00

**Project on Benzodiazepines and Z-Drugs Prescriptions Group Meeting**

Location: Clinical Skills Lab. (Ground Floor)

17:00 - 18:00

**EGPRN Committee Meetings**

- EGPRN Educational Committee - Room Z013 (Ground Floor)
- EGPRN Research Strategy Committee - Room Z059 (Ground Floor)
- EGPRN PR & Communication Committee - Clinical Skills Lab. (Ground Floor)

19:00 - 20:30

**Welcome Reception and Opening Cocktail**

Pre-booking online is essential. Shuttles will leave the event venue at 18:30 to take the participants to the restaurant.

Location: [Lakerda Restaurant](#)Address: [Çınar Mah. Turgut Özal Blv. No:83 Küçükyalı - İstanbul](#)

**Friday, 13 May 2022**

08:00 - 08:30

**Registration**

Location: Ground Floor

Shuttles will leave the hotels at 7:45 (7:30 for Titanic Business Kartal)

08:30 - 08:45

**Opening of the Meeting by EGPRN Chairperson**

Location: Conference Hall (2nd Floor)

- Tiny Van Merode (Speaker)

08:45 - 09:00

**Welcome by Local Host**

Location: Conference Hall (2nd Floor)

- Pemra C. Unalan (Speaker)

09:00 - 09:40

**International Keynote Lecture: Assessing the quality of primary care delivery**

Location: Conference Hall (2nd Floor)

- Tiny Van Merode (Chair)
- Zalika Klemenc-Ketiš (Keynote Speaker)

09:40 - 11:10

**Plenary Session - Theme Papers**

Location: Conference Hall (2nd Floor)

- Tiny Van Merode (Chair)
- Healthcare Demand Estimation Using Time Series Analysis in a Family Medicine Practice - Erkan Tiyekli
- Higher patient waiting times are associated with higher chronic stress of general practice personnel: Results of the cluster-randomized IMPROVEjob study - Julian Göbel
- The EGPRN Research Strategy for General Practice in Europe 2021 - Claire Collins

11:10 - 11:40

**Blue Dot Coffee Break**

Location: Foyer, 1st Floor

For the first time attenders

11:10 - 11:40

**Coffee Break**

Location: Foyer (2nd Floor)

For the regular attenders

11:40 - 13:10

**Parallel Session A - Theme Papers: Cardiometabolic Diseases**

Location: Conference Hall (2nd Floor)

- Ferdinando Petrazzuoli (Chair)
- Cardiovascular Disease Risk and Its Relationship with Night Eating Syndrome in Patients Applying to the Family Medicine Outpatient Clinic - Meryem Meci Çiftci
- Effectiveness of combining patient follow-up with an educational intervention on self management skills of Type 2 Diabetes Mellitus patients: a primary care pragmatic trial - Saliha Serap Çifçili
- Follow-Up And Treatment Compliance Of Hypertension Patients During The COVID-19 Pandemic Period - Pinar Döner Güner

11:40 - 13:10

**Parallel Session B - Freestanding Papers: Miscellaneous I**

Location: Room 1034 (1st Floor)

- Sophia Eilat-Tsanani (Chair)
- Adaptation of the Evidence-Based Practices Attitude Scale-15 in Turkish Family Medicine Residents - Duygu A. Başer
- Have the Turkish peoples adopted the family medicine model? Evidence from Google trends - Bekir Aktura

11:40 - 13:10

**Parallel Session C: Theme Papers: Digital Health**

Location: Room 1133 (1st Floor)

- Torunn Bjerne Eide (Chair)
- Evaluation of the Opinions of Family Physicians About Online Visual Examination Usage at the Follow-Up of Chronic Diseases - Elif Ender
- Perspectives on communicative barriers and resources of digital communication between Nursing Homes and Family Practices: a mixed methods study - Kathleen Denny
- Utilizing Google Trends to Assess Global Interest for Cancer Screening Tests - Eda Yaldirak

13:10 - 14:10

**Elevator Pitch**

Location: Room 1034 (1st Floor)

(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 Istanbul 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: Cafeteria of the School of Pharmacy

14:10 - 16:10

**Parallel Session D - Theme Papers: Health Services Research**

Location: Conference Hall (2nd Floor)

- Philippe-Richard Domeyer (Chair)
- A scoping review to identify strategies and interventions improving interprofessional collaboration and integration (IPCI) in primary care. - Muhammed Mustafa Sirimsi
- GPs intentions to use organizational practice changes from the pandemic prospectively - Yelda Idik
- Interprofessional team meeting in Multiprofessional health care centres. A quantitative descriptive study in France. - Emmanuel Allory
- The desire to be a better doctor versus the lack of time and resources; Promoters and inhibitors for quality improvement work in general practice. A qualitative analysis of 2715 free-text replies from participants in a quality improvement project. - Torunn Bjerne Eide

14:10 - 16:10

**Parallel Session E - Freestanding Papers: Cardiometabolic Diseases I**

Location: Room 1034 (1st Floor)

- Thomas Frese (Chair)
- Acute Coronary Events Following Treatment with NSAIDs and Alternative Analgesic Agents for Acute Pain – A Nested Case Control Study among Members of Clalit Health Services, Israel - Yochai Schonmann
- Concordance of comorbidity in diabetes and the burden of the disease – 11 years cohort - Sophia Eilat-Tsanani
- Orthopaedic corticosteroid injection and risk of acute coronary syndrome : a case control study - Katharine Thomas

- The effect of BATHE interview technique on adherence to hypertension treatment in primary care: Open-label, parallel group, randomized controlled trial - Vildan Mevsim

14:10 - 16:10

**Parallel Session F - Freestanding Papers: Miscellaneous II**

Location: Room 1133 (1st Floor)

- Ayse Caylan (Chair)
- A Study on the Effect of COVID-19 on the Healthcare Workers of a University Hospital - İkbal Hümay Arman
- Analysis of the implementation of family medicine practice in Tajikistan - Ilker Dastan
- Perspectives of GPs supporting young people who self-harm in England: a qualitative study - Faraz Mughal
- Towards de-identification of general practitioners' electronic medical records for secondary research - Johannes Hauswaldt

16:10 - 16:30

**Coffee Break**

Location: Foyers (1st and 2nd Floor)

16:30 - 18:00

**Parallel Session G - Theme Papers: Diabetes**

Location: Conference Hall (2nd Floor)

- Marija Petek Šter (Chair)
- Quality and Outcome of Diabetes Care During the COVID-19 Pandemic in a Primary Care Setting in Switzerland - Benjamin Sebastian Lüthi
- Quality indicators of type 2 diabetes management in Greek primary care: A Delphi study - Philippe-Richard Domeyer
- The Effect of Basic Carbohydrate Counting on HbA1c in Type 2 Diabetic Patients: A Non-Randomized Controlled Trial - Hamide Vural

16:30 - 18:00

**Parallel Session H - Freestanding Papers: Miscellaneous III**

Location: Room 1034 (1st Floor)

- Ana Clavería (Chair)
- GP's at the Edge: The GATE study of the Experience of Delivering Care Irish Rural General Practice - Robyn Homeniuk
- Person-centred care and family-centred care in primary care: Perspectives of patients, professionals, and family members - Itxaso Respaldiza Berroeta
- The Relationship Between Health Screening Behaviors, Practices and Workload of Family Physicians - Gizem Limnili

16:30 - 18:00

**Parallel Session I - Freestanding Papers: Medication & Vaccination**

Location: Room 1133 (1st Floor)

- Peter Torzsa (Chair)
- Effectiveness of STOPP/START Criteria in Primary Prevention of Polypharmacy and Under-treatment in Older Patients - Süleyman Ersoy
- Knowledge and Attitudes of Family Physicians Regarding Levothyroxine Use - Şenay Koçakoğlu
- Pneumococcal vaccination coverage and adherence to recommended dosing schedules in adults: a repeated cross-sectional study in the INTEGO morbidity registry - Bert Vaes

18:00 - 18:10

**Summary of the day**

Location: Conference Hall (2nd Floor)

- Zalika Klemenc-Ketiš (Keynote Speaker)

18:10 - 19:40

**Örenäs Study Group Meeting**

Location: Room 1034 (1st Floor)

18:10 - 19:40

**Primary Health Care data on COVID-19 Pandemic in Europe (PHC-Eurodata-Covid19)  
Group Meeting**

Location: Room 1133 (1st Floor)

18:15 - 20:00

**Practice Visits**

Location: 4 different options

Online pre-registration required, space is limited. Shuttles to practice visits will leave the event venue at 18:15

Please see <https://meeting.egprn.org/page/practice-visits> for more details.



**Saturday, 14 May 2022**

08:30 - 09:10

**National Keynote Lecture**

Location: Conference Hall (2nd Floor)

- Pemra C. Unalan (Chair)
- Establishing Primary Care; Turkey and Azerbaijan Primary Care Organization - Mehmet Akman (National Keynote Lecturer)

09:10 - 11:10

**Parallel Session J - Theme Papers: Miscellaneous I**

Location: Conference Hall (2nd Floor)

- Hans Thulesius (Chair)
- Can we improve patient reported accessibility with Integrated Primary Care Teams? - Arnaud Duhoux
- Characteristics of the Visits to a Family Health Center in a District of Istanbul During Covid-19 Pandemics - Bengisu Olgun Bekman
- Developing a tool for implementation of good practices in Family Violence care. - Lodewijk Pas
- Experiences of Family Physicians Who Encountered with Cases of Child Abuse/Neglect in Turkey - Cigdem Apaydin Kaya

09:10 - 11:10

**Parallel Session K - Freestanding Papers: Cardiometabolic Diseases II**

Location: Room 1034 (1st Floor)

- Lieve Peremans (Chair)
- A secondary analysis of patient outcomes in Heartwatch, the Irish Cardiovascular secondary prevention programme in primary care - Fintan Stanley
- Multicomponent intervention for primary prevention of cardiovascular diseases in general practitioner practices and community settings: lessons from the SPICES project in Belgium - Hamid Hassen
- The effect of armodafinil on drowsiness level in patients with high BMI - Victoria Tkachenko
- The SPICES Cardiovascular risk assessment in general population: quantitative data and implantation clues - Delphine Le Goff

09:10 - 11:10

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

Location: Room 1133 (1st Floor)

- Radost Assenova (Chair)
- Communication channels of German GPs in the pandemic: results of the nationwide egePan study - Simon Kugai
- COVID-19 severity prediction based on patient risk factors and number of vaccines received - Shlomo Vinker
- Distress and wellbeing among general practitioners during COVID-19: results from the cross-sectional PRICOV-19 study. - Claire Collins

11:10 - 11:30

**Coffee Break**

Location: Foyers (1st and 2nd Floor)

11:30 - 13:00

**Poster Session 1: Health Services Research**

Location: Ground Floor

- Anthony Heymann (Chair)
- Distribution of medical and nursing consultations in primary care: Portugal Trend and Seasonality - Cátia Dias
- Effectiveness and cost-effectiveness of a virtual Community of Practice in the empowerment of patients with ischemic heart disease: An ongoing randomized controlled trial. - Ana Isabel Gonzalez
- Factors Affecting Utilization of an Urban Community Health Center in the Philippines: A Cross-Sectional Study - Lissa Luz Calimag

- From theory to an understanding on how primary care providers and managers operationalize goal-oriented care in three international primary care settings - Dagje Boeykens
- Healthcare and social needs associated with COVID-19: An evidence map - Mariana Aparicio Betancourt
- Opinions of Primary Care Family Physicians in İstanbul about The New National Noncommunicable Chronic Diseases Management Programme - Hilal Özkaya

11:30 - 13:00

**Poster Session 2: Chronic Diseases**

Location: Ground Floor

- Johannes Hauswaldt (Chair)
- Arterial stiffness measurements for lower extremities arterial disease identification in general practice. - Anna Kamińska
- Assessment of Chronic Illness Care in Family Medicine Patients - Özge Nur Olgun
- COVID-19 Influence on NCD Prevention, Care and Research in Primary Care: Multi-Case study of Belgium and Slovenia - Monika Martens
- Do Bulgarian patients with cardiovascular diseases collide access limitations to primary healthcare services during lockdown in Bulgaria? - Nevena Ivanova
- Management of Type-2-Diabetes patients at Family Medicine Practices at the Community Health Centre Ljubljana (Slovenia): A Protocol of a Cross-Sectional Study - Črt Zavrnik

11:30 - 13:00

**Poster Session 3: COVID-19**

Location: Ground Floor

- Vildan Mevsim (Chair)
- Acceptability and feasibility of self-organized blood sample collection for SARS-CoV-2 antibody screening in persons with a high risk for a severe COVID-19 disease progression - Dominik Schröder
- Assessment of Confirmed Covid 19 Cases-Part II - Dimitra-Iosifina Papageorgiou
- Clinical characteristics of vaccine-naive COVID-19 patients hospitalized during the first peak of the pandemic (March -May 2020) - Pinar Topsever
- Longitudinal study of Quality of Life Assessment in primary care during COVID-19 pandemic using EuroQol - Alba Pons Revuelta
- Primary care COVID-19 pathways in European countries, preliminary results from a qualitative study - Sara Ares Blanco
- Primary health care influencing policy actions: Prevalence of SARS-CoV-2 antibodies among Primary care attendees - Beesan Maraqa

11:30 - 13:00

**Poster Session 4: Mental Health & Vaccination**

Location: Ground Floor

- Delphine Le Goff (Chair)
- Comparison of the benzodiazepines users with the general practitioners experiences - Jelizaveta Narodicka
- Identifying patients with psychosocial problems in general practice: a scoping review - Rosemarie Schwenker
- Intermediate care in caring for dementia, the point of view of General Practitioners: a key informant survey across Europe - Ferdinando Petrazzuoli
- Reanalysis of a randomized controlled trial on promoting influenza vaccination in general practice waiting rooms. A Zelen Design - Christophe Berkhout
- Somatic symptom disorders and utilization of health services among Palestinian primary health care attendees: a cross-sectional study - Zaher Nazzal

11:30 - 13:00

**Poster Session 5: Training & Elderly Care**

Location: Ground Floor

- Serap Çiğçili (Chair)
- Is a Family Doctors' and Nurses' Training a Good Way for Changing Their Attitude Towards Covid-19 Vaccination? - Pavlo Kolesnyk

- Is it possible to optimize the undergraduate teaching process and research regarding to everyday life as general practitioner? - Zelko Erika
- Knowledge and Attitude of Students About Breast Cancer and Breast Self-Examination in a Medical Faculty - Nurver Sipahioğlu
- Poly-pharmacy in the elderly as a risk factor for cognitive impairment - Marta Tundzeva
- Quality of life and physical activity in prefrail individuals over 70 years in primary care - Victoria Castell-Alcala
- Very simple PDF-based online aging game equivalent enhances medical students' understanding for elderly patients - Tobias Deutsch

11:30 - 13:00

**Poster Session 6: Miscellaneous I**

Location: Ground Floor

- Snežana Knežević (Chair)
- Adaptation of the Short Form of the Tobacco Craving Questionnaire into Turkish - Huseyin Elbi
- Evaluation of Drug Use Status, Rational Drug Use Level and Interaction Status Between Drugs of Patients Who Have a Chronic Disease and Apply to The Education Family Health Center(FHC) to Prescribe Drugs - Şems Azra Kaya Göktaş
- German primary care data collection projects: a scoping review - Janka Massag
- Management of tick bites and suspicion of Lyme disease in Belgian primary care : compliance with national guidelines - Sherihane Bensemmane
- Promoting health critical thinking by and for students: utopia or reality? The example of the Critical Thinking Days in Nice - Gabriel Perraud
- What's in Their Mind? High School Students' Perspective of Vaccination - Pemra C. Unalan

11:30 - 13:00

**Poster Session 7: Miscellaneous II**

Location: Ground Floor

- Canan Tuz (Chair)
- Are primary care providers ready to implement goal-oriented care? An explorative study using the Normalization Process Theory - Ine Huybrechts
- Does Any Transverse and Invariable Barrier for Writing and Carrying Out an Advance Directive Exist? - Patrice Nabbe
- Intelligent Monitoring Systems applied to Health. Opinion of the actors involved: patients, carers and professionals. TeNDER Study - 875325 - Cristina María Lozano Hernandez
- Investigation of Asthma and Allergy Risk and Affecting Factors in School-Age Children (7-14 Years) - Zeynep Yağmur Ertürk
- Motivational Interviewing for alcohol abuse - a systematic review - Carla Dietrich
- Quality control of the laboratory examinations of the Microbiological laboratory of Health Center of Vari - Michael Dandoulakis

13:00 - 14:00

**Lunch**

Location: Cafeteria of the School of Pharmacy

14:00 - 15:30

**Parallel Session M - Theme Papers: Miscellaneous II**

Location: Conference Hall (2nd Floor)

- Christophe Berkhout (Chair)
- Adequate surveillance in Maternal Health in Primary Care - Quality improvement work - Inês Sampaio Lima
- Contextual factors associated with successful implementation of the evidence-based health promotion intervention Prescribe Vida Saludable - Heather L Rogers
- Exploring the views of primary care paramedics on the screening of addictive disorders - Maxime Pautrat

14:00 - 15:30

**Parallel Session N - EGPRN Special Methodology Session**

Location: Room 1034 (1st Floor)

- Jean Karl Soler (Chair)
- A More Functional and Effective Family Medicine Practice Is Possible - Fatih Özcan
- Coronavirus Anxiety in Teachers Working in Primary and Secondary Education - Onur Bakıcı

14:00 - 15:30

### **Parallel Session O - Research Course Presentations**

Location: Room 1133 (1st Floor)

- Ferdinando Petrazzuoli (Chair)
- Shlomo Vinker (Chair)
- Opinions of family medicine residents about health advocacy training in residency training. - Ayşenur Duman Dilbaz
- The effect of telemedicine usage among hypertension patients in a primary care centre; randomized controlled study - Canan Tuz
- The Emotions Experienced by Family Medicine Residents and Final Year Medical Students During Their Patient Encounters: A Qualitative Study - Ozlem Tanriover

15:30 - 15:50

### **Coffee Break**

Location: Foyers (1st and 2nd Floor)

15:50 - 17:20

### **Parallel Session P - Theme Papers: Miscellaneous III**

Location: Conference Hall (2nd Floor)

- Paul Van Royen (Chair)
- Issues patients with mild COVID-19 faced during home isolation: a qualitative research in Greece - Emmanouil Smyrnakis
- Participation of transgender and gender diverse people in the development of primary health care based on the free and informed consent model: A thematic synthesis of community resources - Anna Baleige
- The process of diagnosis of cancer and the effect of the primary care in this process: a single center survey analysis - Ayşenur Duman Dilbaz

15:50 - 17:20

### **Parallel Session R - One Slide Five Minute Presentations**

Location: Room 1034 (1st Floor)

- Ferdinando Petrazzuoli (Chair)
- Shlomo Vinker (Chair)
- Are Thoughts, Attitudes, and Perceptions Regarding Sexual Risks Same Among Different Ethnic Groups of Foreign Medical Students in Ukraine? - Pavlo Kolesnyk
- Artificial intelligence supported web application design and development for supporting rational drug use - Şeyma Handan Akyön
- Brightest brains in drain: Is the intention of immigration increasing among family medicine trainees? A cross-sectional study in Turkey - Sirma Yalaz
- Effectiveness of exercise interventions to improve long-term patient-relevant cognitive and non-cognitive outcomes in patients with mild cognitive impairment: protocol of a systematic review. - Ana Isabel Gonzalez Gonzalez
- Evaluation of paediatric patients with recurrent abdominal pain using C-RADS questionnaire - Safiye Busra Ozturk
- Factors Affecting Cognitive Functions In Elderly People - Erva Ucuncu
- Implementation of blood pressure and blood glucose telemonitoring in elderly patients with hypertension and type 2 diabetes at primary care level in Slovenia - Matic Mihevc
- Implementation of peer support for optimisation of integrated primary care in patients with concomitant diabetes and arterial hypertension - Tina Vrtič
- Improvement of participation rate in colo-rectal cancer (CRC) screening by training general practitioners in motivational interviewing (AmDepCCR) - Paul Aujoulat
- Oniros : Does a numeric sleep diary improve the appropriation of this tool for patients with sleep disorders in general practice, compared to a paper tool? - Juliette Chambe
- Population health management through integrated data monitoring - Josefien Van Olmen

- Supporting proactive and integrated chronic care in primary care practices in Belgium - Katrien Danhieux
- The effectiveness of a school-based intervention to decrease the risk of obesity in primary school children: non-randomized clinical study - Arzu Uzuner
- The evaluation of the insulin dose changes in children with Type 1 Diabetes Mellitus diagnosed with vitamin D deficiency/insufficiency following replacement therapy - Batuhan Çiftci
- Turkish Adaptation of General Practice Assessment Questionnaire (GPAQ) : Validity and Reliability Study - Gökçe İşcan
- Why non-urgent patients go to the Emergency Department? - study at a portuguese Primary Healthcare Center - Vitória Aleixo

15:50 - 17:20

**Parallel Session S - Freestanding Papers: Miscellaneous IV**

Location: Room 1133 (1st Floor)

- Marta Tundzeva (Chair)
- Benefits and limitations of the transfer online of Irish College General Practice (ICGP) continuing medical education (CME) small group learning (SGL) during the COVID pandemic: A national Delphi study. - Finola Minihan
- Developing a Serbian Strategy to improve implementation of primary family violence care - Snežana Knežević
- Treatment outcomes of acute streptococcal tonsillitis according to antibiotic treatment. A retrospective analysis of 242,366 GABHS tonsillitis cases treated in the community. - Mattan Bar-Yishay

17:20 - 17:30

**Summary of the day**

Location: Conference Hall (2nd Floor)

- Mehmet Akman (National Keynote Speaker)

17:30 - 17:50

**Chairperson's Report by EGPRN Chair**

Location: Conference Hall (2nd Floor)

- Tiny Van Merode (Speaker)

17:50 - 18:05

**Presentation of the Poster-Prizer**

Location: Conference Hall (2nd Floor)

- Pemra C. Unalan (Speaker)

18:05 - 18:15

**Introduction to the next EGPRN Meeting**

Location: Conference Hall (2nd Floor)

- Lieve Peremans (Speaker)

18:15 - 18:20

**Closing**

20:00 - 23:00

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

Pre-booking online is essential. A shuttle will stop at Titanic Business Kartal and Days Hotel By Wyndham Maltepe to pick up attendees to the Social Night. The shuttle departure times are to be determined and will be announced later.

Location: [Elite World Asia Hotel Grill Restaurant](#)

Address: [Aydınevler, İnönü Cd. No:22, 34854 Maltepe - İstanbul](#)

**Sunday, 15 May 2022**

09:30 - 12:00

**EGPRN Executive Board Meeting**

Location: Elite World Hotels Asia, Burgazada Room

Only for Members of the Executive Board

# International Keynote Lecture

## Assessing the quality of primary care delivery

**Prof. Dr. Zalika Klemenc Ketiš**

The Department of Family Medicine, The Sackler School of Medicine, University of Tel Aviv, Israel

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes. In 1966, Donabedian put forward a conceptual model that provided a framework for examining health care services and evaluating quality of health care. According to that model, quality of care can be evaluated based on three categories: structure, process, and outcome. In primary care, several frameworks for assessing the quality and performance were developed, but all are based on those three categories.

Valid and reliable measures of structures and processes in primary care are needed in order to accurately reflect upon performance/outcomes of primary care. In this presentation, I will focus on the process dimension of primary care.

Process/delivery of primary care services is described as the processes that involve actions by the practitioners in the system, as well as the actions of the populations and patients, and manner by which health care services are delivered by the providers, actions taken and processes of care received by patients, families and communities. Different models of primary care suggest different elements of primary care delivery which describe quality of care. They can be summarised to seven key elements: first contact, continuity, coordination, interpersonal care, comprehensive care, interprofessional care, and community orientation. A recent umbrella review of primary care quality indicators by Ramalho et al found 542 indicators that assess the quality of the primary care processes.

Studies showed that key elements of primary care delivery directly or indirectly affect quality of care, health outcomes (better health of population, lower mortality rates, better quality of life), performance (lower hospitalisation rates, less deterioration of chronic diseases), safety (higher prescription quality, less foregone care, lower risk for safety incidents, shorter time to diagnosis, less fragmentation of care), costs (lower costs for healthcare), and better equity of care.

## Local Keynote Lecture

### Establishing Primary Care; Turkey and Azerbaijan Primary Care Organization

**Mehmet Akman, MD, MPH**

Professor of Family Medicine, Marmara University School of Medicine, Department of Family Medicine, Istanbul, Turkey

Health systems built on the basis of primary health care are fundamental to succeeding universal health coverage (WHO and UNICEF, 2020). Well-organized primary health care services can play a basic role in improving population health as well as the well-being of the population (Starfield, 2011). Although significant improvements in the health outcomes of the global population during the era of the Millennium Development Goals, nearly half of the population cannot access the health services they need. Health is central to the 2030 Agenda for Sustainable Development as it relates to many of the Sustainable Development Goals and is the specific focus of Goal 3 (WHO, 2015; WHO and UNICEF, 2020). Outbreaks of global pandemics or emergencies like COVID-19 are the biggest challenges to the “resilience” of primary care systems. Therefore, countries need to establish a regular system of facility assessments to provide objective measures for evaluating the availability, readiness, quality, and safety of health services, including measures to evaluate preparedness and response capacities (WHO and UNICEF, 2020).

Barbara Starfield was the first author who started to explore the context of primary care organization (PCO). She mentioned that organization of primary care includes four main primary care domains: first contact care, comprehensiveness, continuity, and coordination (Starfield, 1979; Starfield, 1994). In 2008 Hogg et al. proposed that the conceptual framework for PCO consist of structural and performance domains and this domain classification influenced new authors of the subject until today. The structural domain includes three components; the health care system, the practice context and the organization of the practice, and the performance domain include two components; health care service delivery, and technical quality of clinical care (Hogg, 2008). According to Kringos et al., the structure of primary care consists of three dimensions: primary care governance; financing of primary care; and primary care workforce development. They determined the primary care process by four dimensions: accessibility of primary care; comprehensiveness of primary care; continuity of primary care; and coordination of primary care (Kringos, 2013).

Senn et al. proposed a consolidated which is particularly beneficial for primary care organization designing and implementing well-defined monitoring activities (Senn, 2021). With the addition of contexts such as socio-cultural, economic and biological, the framework became multidimensional and in-depth. Inclusion of needs and outcomes of patients and the population has the potential to cover the productivity of the given organization.

Strong primary care requires well-developed organizational planning between levels of care. Primary care-oriented health systems are required to effectively handle the unmet health needs of the population and an efficient primary care organization is very important for the achievement of a primary care-oriented health system. In this keynote, the key aspects and benchmarks of PCO will be explored based on previously mentioned frameworks and domains.

As an example of health systems in transition, Turkey and Azerbaijan are reforming their health systems including primary care services. Turkey has completed the implementation of several interventions in the structural component of primary care, however, there is still room for development in the process components. Azerbaijan has established a state health insurance scheme and set up family health centers as primary care facilities serving a defined population. However, there is still serious structural reforms are needed for a functional primary care service accessible to the whole nation. This keynote will also cover more information on recent primary care reforms in both countries. The frameworks provided above will serve as tools for the analysis of primary care in these countries.



**Theme Paper / Ongoing study with preliminary results****Healthcare Demand Estimation Using Time Series Analysis in a Family Medicine Practice**

Zeliha Yelda Özer, Erkan Tiyekli, Hatice Kurdak

Cukurova University, 01330 Adana, Turkey. E-mail: hkurdak@gmail.com

**Keywords:** Family Practice, Time Series Analysis, Estimation, Forecasting, Health Care Demand, Optimization

**Background:**

There is a substantial increase in the number of patients and the need for services in health institutions. Therefore, healthcare leaders regard this increase among significant problems and need forecast data. Making the necessary amount of preparation according to the demand intensity is essential in increasing patient satisfaction and optimizing outpatient clinic services. Time series analysis is the series formed by ordering the observation values of any event according to time and is one of the models that can be used effectively in short and long-term demand forecasts.

**Research questions:**

This study aims to forecast healthcare demand for a Family Medicine Practice (FMP) with a time series analysis of at least four years of data.

**Method:**

Two years of data were drawn from the FMP database, established on 28 June 2018. Healthcare demand forecasts were produced as prescription, physical examination, sick-leave reports, health reports, immunization, periodic health exams for reproductive-age women, infant-child follow-ups, school-aged children follow-ups from FMP big data. The data were made stationary, and the autoregressive integrated moving average (ARIMA) was used for demand estimation. A preliminary 6-month healthcare demand estimation for the first half of 2022 was simulated with the model created with the last two-years data.

**Results:**

Partial-autocorrelation was used to determine the autoregressive (AR) terms of the ARIMA models. The autocorrelation functions were used to determine the moving average (MA) terms. By comparing MSE criteria, the most suitable model for the data set was selected among the models created for daily data (p values for Constant:0.007, AR{1}:0.01, AR{2}:0.002, MA{1}:0.0011, MA{2}:0.01). As a result, among these models, it was deemed appropriate to use the autoregressive integrated moving average model ARIMA (2,2,2) for daily data.

**Conclusions:**

Although the preliminary results seem satisfactory with two-year data, a more robust model can be obtained with a more extended time series.

**Points for discussion:**

Can this demand estimation be used for the optimization of the training schedule of the FMP?

Can an optimization model be developed for appropriate personnel shifts based on the demand frequency of family medicine practice?

Can this model be used with live script without creating a new model?

**Theme Paper / Finished study****Higher patient waiting times are associated with higher chronic stress of general practice personnel: Results of the cluster-randomized IMPROVEjob study**

Julian Göbel, Karen Linden, Matthias Grot, Brigitte Werners, Lukas Degen, Tanja Seifried-Dübon, Esther Rind, Anna-Lisa Eilerts, Claudia Pieper, Verena Schröder, Monika A. Rieger, Birgitta Weltermann

Institute of General Practice and Family Medicine, 53127 Bonn, Germany. E-mail: julian.goebel@ukbonn.de

**Keywords:** waiting times, stress, general practitioners, practice personell

**Background:**

Studies showed that higher waiting times in general practices lower patients' satisfaction with care. Yet, there are little data on associations between patients' waiting times and chronic stress of practice personnel. We used baseline data of the cluster-randomized IMPROVEjob study with 60 German general practices to address this question.

**Research questions:**

We aimed to assess associations between chronic stress of practice personnel and personnel-reported waiting times.

**Method:**

The IMPROVEjob study included 366 professionals from 60 practices in the German North-Rhine region: 84 practice leaders, 28 employed physicians and 254 practice assistants. Perceived chronic stress was measured with the validated TICS-SSCS questionnaire (scale 0=low to 48=high). The waiting time was surveyed with a self-developed item ("On average, how long do patients wait in your practice?") offering 6 answer options: "5-15 minutes", "16-30 minutes", "31-45 minutes", "46-60 minutes", "over 1 hour", "over 2 hours". A multilevel regression model analyzed for associations between personnel's perceived chronic stress and the reported waiting time while respecting the clustered data.

**Results:**

The reported waiting times were: 5-15 minutes: 11.0%, 16-30 minutes: 35.8%, 31-45 minutes: 30.3%, 46-60 minutes: 12.1%, over 1 hour: 7.5%, over 2 hours: 3.2%. The average TICS-SSCS sum score across all 3 occupational groups was 19 out of 48 (SD = 8.78). Higher waiting times correlated with higher chronic stress of personnel on individual level ( $r$  all staff = 0.25;  $r$  practice leader = 0.24;  $r$  employed physician = 0.40;  $r$  practice assistants = 0.22). In the regression model, each waiting time shift from a shorter to a longer waiting time was associated with a significant increase in chronic stress (+1.72 points on the TICS SCS scale).

**Conclusions:**

Higher patient waiting times are associated with a negative effect on practice staff's wellbeing. Optimized work processes are needed to reduce waiting times and personnel's chronic stress.

**Points for discussion:**

What is your experience from your practice? Do you feel stressed when patients wait for a long time?

Do you have experience with trainings improving workflows to avoid or reduce waiting times?

**Theme Paper / Finished study****The EGPRN Research Strategy for General Practice in Europe 2021**

Claire Collins

Irish College of General Practitioners, Research, D02XR68 Dublin, Ireland. E-mail: [claire.collins@icgp.ie](mailto:claire.collins@icgp.ie)**Keywords:** general practice, family medicine, research, strategy, impact**Background:**

A strong research basis is a necessity to provide effective health care; and research in general practice/family medicine (GP/FM) is important in terms of improving patient outcomes effectively.

In 2021, the EGPRN published its updated research agenda, now framed as a research strategy providing an overall plan with guidance to achieve specific goals. Based on a review of research in GP/FM 2010-2019 and on a proposed modified research wheel, recommendations are suggested to advance research in GP/FM. Within the strategy, a framework is presented to be adapted by those involved in research in GP/FM in individual countries.

**Research questions:**

In this session, the strategy will be summarised and we will discuss how the EGPRN recommendations can be best applied in your context.

**Conclusions:**

This workshop aims to create a sense of community and common purpose working together and assisting one another to both apply and monitor the progress of our efforts to contribute to the strategic development and growth of research and innovation across the European GP/FM research community.

Presentation on 13/05/2022 09:40 in "Plenary Session - Theme Papers" by Claire Collins.

**Theme Paper / Ongoing study with preliminary results****Cardiovascular Disease Risk and Its Relationship with Night Eating Syndrome in Patients Applying to the Family Medicine Outpatient Clinic**

Meryem Meci Çiftci, Sibel Baktır Altuntaş, Başak Korkmazer, Hilal Özkaya

Başakşehir Çam and Sakura City Hospital, 34480 İstanbul, Turkey. E-mail: mariiecurie@gmail.com

**Keywords:** cardiovascular risk, family practice, night eating syndrome

**Background:**

Cardiovascular diseases (CVD) are among the leading causes of death. Smoking, high systolic blood pressure, and hyperlipidemia are among the modifiable risk factors for CVD. Knowing the factors responsible for the formation of risk factors can provide primary prevention. The relationship between CVD and Night Eating Syndrome (NES), whose effect on obesity development has been investigated, is not clear.

**Research questions:**

Does night eating syndrome cause an increase in cardiovascular risk?

**Method:**

The study was planned to be conducted between January 15 and May 1, 2022 in the form of a descriptive cross-sectional face-to-face survey.

HeartScore risk analysis was performed on patients aged 40-65 years who applied to the Family Medicine Outpatient Clinic. A 31-item Night Eating Questionnaire (NEQ) was administered face-to-face to screen the sociodemographic characteristics and NES of the patients.

Statistical analyzes were performed using SPSS version 25.0. A  $p < 0.05$  was considered statistically significant.

**Results:**

81 participants were included in the study. The mean body mass index was  $28.84 \pm 5.51$  (min:17.97 max:47.84), 25 of whom were obese. According to the HeartScore risk analysis, n:74 people had 1-4% CV risk (moderate risk), n:7 people had 5-9% CV risk (high risk).

CV risk was higher in married and divorced individuals. It was statistically significant ( $p:0.001$ ).

The mean NEQ score was  $13.21 \pm 6.93$  (min:3 max:34). N: 12 (14.8%) people scored above 25 points in NEQ. NES was more common in women and was statistically significant ( $p:0.015$ ).

There was no statistically significant relationship between CV risk and NES ( $p > 0.05$ ).

The study is in the data collection phase and hasn't yet been completed.

**Conclusions:**

The etiology of CVD is multifactorial, it is important to evaluate risk factors together.

Identifying individuals with NES will contribute to the fight against DM, obesity and CVD.

**Points for discussion:**

What is the purpose of calculating the CV risk in the family medicine outpatient clinic?

Should NES be questioned in family practice?

Should NES be considered in patients with high CV risk?

**Theme Paper / Finished study****Effectiveness of combining patient follow-up with an educational intervention on self management skills of Type 2 Diabetes Mellitus patients: a primary care pragmatic trial**

Ayşenur Aktemur, Güldeniz Kılıç, Handenur Tan Doğrusever, Saliha Serap Çifçili

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**Keywords:** type 2 diabetes mellitus, self-management, intervention, patient-empowerment

**Background:**

Self-management tools and programs have been developed to help Diabetes Mellitus (DM) patients manage their disease. However, these methods may not be very effective in patients with low health literacy.

**Research questions:**

Can a shared follow-up plan combined with education, facilitate patients' diabetes self-management skills in primary care? Is this effect affected by patients' current health literacy levels?

**Method:**

This is a non-randomized controlled clinical trial. We enrolled 84 Type 2 DM patients from three primary care centers in İstanbul, at least 40 participants being in the intervention (IG) and control groups (CG) (%80 power and %95 confidence level). A set of questions including patient characteristics, diabetes self-management scale and health literacy scale were used. Patients in the IG had three meetings with the researcher, in which, a "DM Identity Card" and a "DM Diary" developed by the researchers were given to the patients combined with an education session. The participants in the CG, were called by the researcher three times and briefly informed about DM. Diabetes self-management scale and health literacy scale were used.

**Results:**

The mean age of IG was 55,10( $\pm$ 8,40) and the CG was 59,51( $\pm$ 9,04). The participants of the both groups were predominantly female (IG: %58,5-CG: %60,5). After a three-months follow-up, the mean self-management score of the IG increased from 65.53(SD=11,69) to 73.64(SD=11,50) ( $p < 0,05$ ), whereas the mean score of the CG increased from 57.3(SD=11,72) to 58.3(SD=9,36). No statistically significant relationship was found between the increase in self-management scores and the current health literacy of the participant ( $r=0,11$   $p > 0,05$ ).

**Conclusions:**

In conclusion, the follow-up method we developed with this study may increase the Type 2 DM patients' self-management skills regardless of the level of health literacy in primary care.

**Points for discussion:**

Is there any other analysis needed?

Could this intervention method be used in other populations?

**Theme Paper / Finished study****Follow-Up And Treatment Compliance Of Hypertension Patients During The COVID-19 Pandemic Period**

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**Keywords:** Compliance scale for hypertension treatment, COVID-19 Pandemic, hypertension, follow-up of chronic diseases, primary care

**Background:**

The follow-up and control of hypertension(HT) patients has been affected by the COVID-19 pandemic. Besides, the continuity and quality of care of chronic patients is affected due to pandemic conditions and in addition complications of HT are increased.

**Research questions:**

The aim of the study is to determine the compliance with the treatment of HT patients who apply to primary health care services during the pandemic process and the status of their controls during the pandemic process.

**Method:**

The cross-sectional study was conducted on HT patients who applied to certain primary care centers in Hatay province between February 1 and April 30, 2021 for any reason. In the study, a questionnaire asking about sociodemographic and hypertension disease characteristics and the Hill-Bone Hypertension Treatment Compliance Scale (HBHTCS) were used.

**Results:**

There are 361 participants in the study. It was found that 50.1 %of the participants maintained their visit to the doctor at the same level before and during the pandemic, while 48.8 % of the participants increased the frequency of control. Participants who reduced the amount of smoking during the pandemic period had higher adherence to treatment (participants who increased-decreased  $p=0.04$ , those who increased-decreased  $p=0.01$ ). Among the lifestyle changes, those who followed a salt-free diet ( $p<0.001$ ), those who said they had both diet and exercise ( $p=0.001$ ), and those who applied at least one of these options ( $p=0,01$ ) had significantly lower (HBHTCS) total scores. It was observed that the (HBHTCS) medical, interview and total scores of those who regularly went to control for HT disease before the pandemic were lower ( $p=0.005$ ,  $p<0.001$ , $p<0.001$ ).

**Conclusions:**

Compared to the studies in the literature, the rates of adherence to treatment according to the (HBHTCS) of the participants during the pandemic period were found to be lower. More efforts are needed to increase the compliance of our physicians and patients to treatment.

**Points for discussion:**

How can we provide regular follow-ups of Hypertension?

How can we reduce the negative effects of the COVID 19 Pandemic on chronic disease follow-up and treatment?

What kind of facilitators can health system managers offer in the organization while providing health services to prevent disruptions in chronic disease follow-ups during the Pandemic?

**Freestanding Paper / Finished study****Adaptation of the Evidence-Based Practices Attitude Scale-15 in Turkish Family Medicine Residents**

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**Keywords:** Family Medicine, Evidence-Based Practices Attitude Scale, Evidence-Based Practices, Scale Adaptation, Turkey

**Background:**

The evidence-based practice (EBP) is the bridge between research and practice and it is necessary to understand attitudes toward EBPs of physicians. Evaluation of family medicine residents' attitudes is essential to enable them to make more informed clinical decisions in clinical practice. Aim of this study is to translate the Evidence-Based Practice Attitude Scale (EBPAS-15) in Turkish and to test its factor structure, reliability, and validity with a sample of family medicine residents.

**Research questions:**

Is EBPAS reliable and valid in Turkish family medicine residents?

**Method:**

This study was planned and applied as a methodological study. The original EBPAS-15 (a questionnaire assessing health professionals' attitudes to implementation of evidence-based practice) was translated into Turkish. To assess its validity and reliability, 151 family medicine residents answered the EBPAS-15 by web-based survey. In addition, relationships of family medicine residents' characteristics with EBPAS-15 total scores are examined.

**Results:**

The results showed that the EBPAS-15 has good internal consistency and re-liability. The Cronbach's alpha value for EBPAS-15 was 0.828. The scores of the two scales were highly correlated ( $\rho= 0.72$ ). In the scale, there was no item with a total correlation value of less than 0.40. For this reason, no item was removed due to the high reliability value of all 15 items.

**Conclusions:**

The Turkish version of the EBPAS-15 shows mainly good validity and reliability. While our sample consisted of family medicine residents, our findings may not generalise to all physicians.

**Points for discussion:**

What are the limitations of this study?

What are the aspects of this study that could be improved?

**Freestanding Paper / Almost finished study****Have the Turkish peoples adopted the family medicine model? Evidence from Google trends**

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**Keywords:** Turkey, family medicine model, primary healthcare

**Background:**

The old primary healthcare model in Turkey at the end of 2010 completed the transition to a new family medicine model.

**Research questions:**

Were people adopting this new health system model in Turkey?

**Method:**

We are focused on GT data covering the years from 2012 to 2019 throughout Turkey for his ecological study . We identified keywords representing the old primary healthcare model and the new family medicine model to measure adoption of the new family medicine model.

**Results:**

The adoption ratio of the new family medicine model, which was 75,6% in 2012, decreased to 46,5% as it came to 2019.

**Conclusions:**

The adoption of the new family medicine model has fallen behind the old primary health care model since 2017. It should be studied extensively.

**Points for discussion:**

Adoption of the family medicine model in Turkey is dwindling.



**Theme Paper / Ongoing study with preliminary results****Evaluation of the Opinions of Family Physicians About Online Visual Examination Usage at the Follow-Up of Chronic Diseases**

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**Keywords:** chronic disease, follow up, online examination

**Background:**

The reluctance of individuals to visit the hospital due to the pandemic has caused disruptions in the follow-up of patients with chronic disease, and the use of alternative methods has been started to be considered. Online visual examination(OVE) of patients is an example. In our study, we aimed to evaluate the opinions of family physicians about OVE usage in chronic disease follow-up.

**Research questions:**

What do family physicians think about the usage of OVE in chronic disease follow-up? What are the positive and negative features of OVE that affect family physicians practice?

**Method:**

The study was cross-sectional, descriptive and analytic. An online web-based survey was performed on family physicians in 15 days. In the survey, there are 20 questions about physicians sociodemographic features and opinions about OVE.

**Results:**

Of the 108 participants in our study those who worked in the profession for 0-5 years were 49.1%, 5-10 years were 18.4%, and those with >10 years were 32.5%. 57.4% of the participants knew about OVE, 41.7% stated that chronic diseases could be followed with OVE, 31.5% stated that they were undecided. 68.2% of the participants stated diabetes, 72.7% hypertension, 58% hyperlipidemia, 67% depression, anxiety follow-up can be done via OVE. 66(61.1%) people thought that prescription repetitions could be done via OVE. 40.7% wanted to serve their patients with OVE, and 51.4% thought that this would increase their workload. Those who wanted OVE to become widespread were 34.3%. 89.8% of the participants thought that OVE would create legal problems. There was no statistically significant relationship between age, gender, experience, and willingness to serve patients via the OVE ( $p>0.05$ ).

**Conclusions:**

Although participants think that OVE can be used for chronic disease management, the majority think that it will increase the workload and cause legal problems. Therefore those who wish the expansion of OVE are in the minority.

**Points for discussion:**

What do you think about OVE usage? Does it increase our workload?

How can we use the OVE without causing legal problems at follow-up of chronic diseases?

**Theme Paper / Ongoing study with preliminary results****Perspectives on communicative barriers and resources of digital communication between Nursing Homes and Family Practices: a mixed methods study**

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**Keywords:** e-health, general practice, primary care, digitalisation, nursing homes

**Background:**

ElectronicE-Health communication in GP (general practitioner) care is becoming increasingly important, especially during the ongoing pandemic. It offersE-Health applications offer the opportunity to exchange relevant patient data quickly and safely. Despite national initiatives, the main communication tools remain telephone and fax.

**Research questions:**

To establish perspectives of nursing home employees (NSE) and GPs on the possibilities and hurdles of digital communication between nursing homes and GPs in Saxony-Anhalt, Germany.

**Method:**

Our project consists of two parts. First, a published questionnaire-based cross-sectional survey among 600 randomly selected GPs (PMID: 34781385). Second, an ongoing guideline-based interview study among NSE. The interviews are being transcribed according to Dresing & Pehl (2020) and content-analysed according to Mayering & Brunner.

**Results:**

The survey's response rate was 20% (n = 114). The mean age was 53 years and 65% were women. GPs mainly used fax (92%) and telephone (87%) to communicate with nursing homes. Digital technologies were used by less than 10%. Many GPs wanted to use electronic medication plans (85%), follow-up prescriptions (79%) and referrals (69%) in the future.

In preliminary results, NSE generally described communication with GPs as good. Most NSE report telephone and fax as the most common communication tools, while some NSE mentioned the use of chat services for practical reasons despite data protection concerns.

**Conclusions:**

Despite GPs and NSE being open to digitalized communication, fax and telephone are still most frequently used. NSE name a lack of technical infrastructure in nursing homes as the greatest obstacle to digital communication. GPs prefer digital execution of less complex tasks (change of medication plans, letters of referral) to more complex procedures (e.g. acute health problems). Only 8% of GPs do not want to work digitally at all. However, NSE emphasized the importance of ongoing GP visits in person.

**Points for discussion:**

What is communication between GPs and nursing homes in other European countries like?

What electronic Health applications are successfully used in your practice to improve communication with nursing homes?

**Theme Paper / Ongoing study with preliminary results****Utilizing Google Trends to Assess Global Interest for Cancer Screening Tests**

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**Keywords:** google trends, cancer screening, mammography, prostate specific antigen, colonoscopy, pap smear

**Background:**

Preventive care is one of the cornerstones of family medicine and primary care. Health policies focusing on health promotion and prevention require up-to-date epidemiological data. Unfortunately, traditional surveillance systems fall short in providing timely data for designing preventive health strategies. They are costly and cumbersome and vulnerable to recall bias. Recent IT solutions for data acquisition, like Google Trends, may be a fast and effective way to investigate trends in interest in various health-related topics, like cancer screening.

**Research questions:**

How does Google Trends reflect cancer screening awareness compared to existing surveillance systems? Exploring worldwide google search trends for cancer screening to better guide strategies for preventive care.

**Method:**

We aimed to perform a uniform assessment of the global interest for cancer screening tests using data from Google Trends. Google Trends measures the popularity of a search term in a given week compared to the popularity of all search terms in that week, calculated as relative search volume (RSV). First, we plotted prospectively recorded data on the favor of mammography, prostate-specific antigen (PSA), colonoscopy, and PAP smear across 171 countries for the last five years (2017-2022). Then, we compared those Google Trends findings with timely epidemiological cancer incidence data.

**Results:**

The most common cancer in a particular country and the frequency of searches for its' screening test were in accordance with its' epidemiology.

In developed countries, cancer awareness months were stimulating eager interest in prevention methods as reflected in an increase in the number of searches for the related screening tests (e.g., mammography for breast cancer, psa for prostate cancer)

**Conclusions:**

Analysis of internet searches can give insight into people's information-seeking behavior. Investigating and understanding information-seeking behavior can be used to improve health care delivery. Furthermore, we can do a sample country review regarding the events organized during cancer awareness months.

**Points for discussion:**

What role does the Google search engine play in information-seeking behavior regarding cancer screening tests?

What are the reasons for the increase in searches during cancer awareness months in developed countries?

How can public search engine data documenting health information seeking behaviour be exploited for health policy strategies?

**Theme Paper / Finished study****A scoping review to identify strategies and interventions improving interprofessional collaboration and integration (IPCI) in primary care.**

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**Keywords:** Interprofessional collaboration, primary care, integrated care, general practice, intervention

**Background:**

As the world population is aging, the increased health care needs and its growing complexity and cost, are prompting a fundamental rethink of primary care organization. Researchers and the government are convinced that interprofessional collaboration and integration among primary care workers can counteract these challenges and problems.

**Research questions:**

Which strategies and interventions are used to improve interprofessional collaboration and integration in primary care?

**Method:**

We conducted a scoping review using the Arksey & O'Malley framework and the PRISMA Guidelines. Specific Medical Subject Headings (MeSH-terms) were used, and a search strategy was developed for Pubmed and subsequently adapted to Medline, Eric and Web of Science. Articles were included if they: (i) were in English, (ii) described an intervention to improve interprofessional collaboration or integration (IPCI) in primary care involving at least two different healthcare disciplines, (iii) originated from a high-income country, (iv) were peer reviewed; and (v) were published between 2001 and 2020.

**Results:**

The literature search yielded a total of 1816 papers. After removing duplicates, screening titles and abstracts, and performing full text readings, 34 papers describing strategies and interventions to facilitate IPCI in primary care were incorporated in this scoping review. The identified strategies and interventions are categorised under five main themes; (i) Acceptance and team readiness towards collaboration, (ii) acting as a team and not as an individual; (iii) communication strategies and shared decision making, (iv) coordination in primary care, and (v) integration of caregivers and their skills and competences.

**Conclusions:**

We identified a mix of strategies and interventions that can function as 'building blocks', for the development of a generic intervention to improve collaboration in different settings and levels of primary care.

**Points for discussion:**

Acceptancy and team readiness towards interprofessional collaboration is a prerequisite to achieve a collaborative practice.

When and how can interprofessional collaboration be beneficial for the patient?

To enhance and maintain a cooperative behaviour, development of shared principles such as a shared vision, values and goals are needed.

**Theme Paper / Finished study****GPs intentions to use organizational practice changes from the pandemic prospectively**

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**Background:**

The vast majority of COVID patients is treated in ambulatory care. To implement hygiene and distancing regulations, many practices changed their organisational routines as recommended by the German College of General Practitioners. We aimed at understanding GPs' intention to continue these changes prospectively.

**Research questions:**

Which organizational changes required during the pandemic do GPs plan to use prospectively?

**Method:**

In Spring 2021, we performed a web-based, nationwide survey among GPs. The GP sample was drawn as a stratified random sample with proportionate allocation by population density and practice type. The questionnaire addressed GP and practice characteristics as well as GPs assessment of practice changes. A Net-Promoter Score obtained GPs intention to use new structures and processes prospectively. The score ranged from +100 [highest interest in future use] to -100 [no interest in future use].

**Results:**

In total, 630 of 10,180 GPs completed the questionnaire (participation rate: 9.3 %). On average, GPs were practicing since 18.8 years (SD±9.6), 57.8% were male, and 10.2% reported COVID infections of practice personnel. In decreasing order, the net-promoter scores were as follows: disinfectant dispensers at entrance (NPS=56.2); optimized consultation scheduling to reduce waiting times (NPS=33.6); glass screens at reception (NPS=18.4); separate consultations for infectious patients (NPS=6.9); face masks obligatory for patients with respiratory infections (NPS=5.5); testing for COVID only if personal protective equipment is sufficient (NPS=5.0); phone consultations for patients with respiratory infections (NPS=2.9); prescriptions by mail (NPS= -11.0); smartcard reader handled by patients (NPS= -16.7); selected staff treats infectious patients (NPS= -35.0); video consultations for patients with infections (NPS= -63.5).

**Conclusions:**

GPs support organizational learning from the pandemic, yet asynchronous treatments options are not preferred. Current German billing regulations which require patients to be seen in person may play a role and need to be reconsidered.

**Points for discussion:**

organizational changes

pandemic preparedness

Net-Promoter Score

**Theme Paper / Almost finished study****Interprofessional team meeting in Multiprofessional health care centres. A quantitative descriptive study in France.**

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**Keywords:** primary care practice, interprofessional team meeting, multiprofessional health care centre, complex situation in care

**Background:**

Primary care Multiprofessional healthcare centres (MHC) were created in France to develop interprofessional practices in primary care. Financial support requires multiprofessional teams to account for their activities, including interprofessional team meeting (ITM). The nature and forms of ITM in primary care remain largely unknown, preventing from any assessment of its impact.

The "Concert MSP" interdisciplinary research project, aims at analyzing ITM activity based on 8 MHC chosen for their diversity (location, size).

**Research questions:**

To describe the profile of patients who have benefited from ITM and their clinical situations discussed.

**Method:**

quantitative descriptive analysis of IPT activities carried out in the 8 MHC in 2018 and 2019. Data were extracted from the healthcare teams meeting reports, according to a common grid, including the patients' age, profession, place of living, clinical situation (coded using the ICPC-3: International Classification of Primary Care -3rd version). Quantitative data were described using means (standard deviations), and qualitative data using percentages.

**Results:**

Data about 1733 patient situations were collected. The average patients' age was 52.1 years ( $\pm 26.1$ ). 59.8% were women. 35% were retired. 94.8% lived at home. Regarding clinical situations, 815 (51.7%) were coded with several ICPC-3 codes, suggesting complex situations.

A psychological or social dimension was found in 395 (25.0%) and 385 (24.4%) situations, respectively.

**Conclusions:**

Further analysis will identify the most frequent motives and explore the heterogeneity of patients among the MHC. ITM address varied and complex patients' situations, frequently including psychological or social dimension.

**Points for discussion:**

What are the characteristics of people discussed in interprofessional team meeting in multiprofessional health care centre?

What are the main component of the medical history which is discussed by health car professional?

International comparison will help us to understand the results of our study.

**Theme Paper / Finished study****The desire to be a better doctor versus the lack of time and resources; Promotors and inhibitors for quality improvement work in general practice. A qualitative analysis of 2715 free-text replies from participants in a quality improvement project.**

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**Keywords:** Quality improvement. Continuous Medical Education. Antibiotic prescribing.

**Background:**

Continuous quality improvement (QI) is necessary to maintain and develop high quality general practice services. GPs' motivation is an important factor to understand the success of QI initiatives. There is an increasing strain on GPs' time and responsibilities (6), and we need more knowledge concerning GPs reactions to participation in QI projects to help initiate and implement further QI work.

**Research questions:**

Which factors contribute to impair or promote GPs' motivation for and participation in QI projects?

**Method:**

We used questionnaire data from the QI project "Correct Antibiotic Use in the Municipalities", a combined electronic and face-to-face course consisting of three GP peer group meetings over 9 months. Each GP individually completed e-learning modules, and the content was discussed in the subsequent meetings. The participants received reports detailing their individual antibiotic prescriptions for a defined period, including a comparison with the corresponding period during the previous year. We analysed 2715 free text answers from 2208 GPs using text-driven inductive thematic analysis.

**Results:**

We identified three overarching themes in the GPs' thoughts on inhibitors and promotors of QI work: 1) The desire to be a better doctor 2) Practical and structural factors as both promotors and inhibitors, and 3) Properties related to different QI measures. The participants stressed the importance of a safe peer group for discussions. The motivating effect of involving the whole GP practice in QI work was underlined. QI tools should be easily available and directly relevant in clinical work. The provision of individual prescription data was generally very well received.

**Conclusions:**

The desire to be good doctor is a strong motivator, but the framework for general practice must allow for QI initiatives. QI tools must be easily obtainable and relevant for practice. Initiatives to facilitate QI work may be more successful if they target the GP practice instead of the individual GP.

**Points for discussion:**

1. How can different organisational models for general practice promote or inhibit QI work?
2. How can health authorities help GPs to improve quality of practice?

**Freestanding Paper / Almost finished study****Acute Coronary Events Following Treatment with NSAIDs and Alternative Analgesic Agents for Acute Pain – A Nested Case Control Study among Members of Clalit Health Services, Israel**

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**Keywords:** non-steroidal anti-inflammatory drugs; acute pain treatment; cardiovascular risk; population based; nested case-control

**Background:**

Long-term treatment with high doses of non-steroidal anti-inflammatory medications (NSAIDs) has been associated with acute coronary events (ACEs). Risk in the context of acute pain management or compared to alternative analgesic agents remains unclear.

**Research questions:**

To explore the short-term risk of ACE-hospitalization following non-chronic treatment with NSAIDs and alternative analgesic agents.

**Method:**

A case-control study, nested among the 1,764,797 members of Clalit Health Services aged  $\geq 40$  years between 2015-2019. All members admitted to hospital with an ACE throughout the study period (N=41,276) were matched on sex, age and clinic with up to ten controls (N=371,787). To assess risk in the context of acute pain, we limited the analysis to members who had claimed an analgesic within the four weeks that preceded the index date, but were not chronic users of such agents (claimed  $< 1$  defined daily dose [DDD] per day). We assessed the risk of an ACE following the claim of a NSAID using conditional logistic regression models to adjust for sociodemographic characteristics, cardiovascular risk factors, background comorbidity, and use of alternative analgesic agents (paracetamol, dipyrrone, opioids, codeine, tramadol and propoxyphene).

**Results:**

Analysis included 19,640 non-chronic users of analgesics (6,541 ACE cases; mean age 74.7 years [SD=11.9]; 9,729 [49.5%] males). 33.3% had claimed an analgesic drug (prescription or over-the-counter) within a week prior to the index date (NSAIDs=8.0%; paracetamol=9.82%; dipyrrone=9.24%; opioids/opioid-related=11.3%). Treatment with NSAIDs was not associated with an increase in subsequent ACEs (at one week: aOR 1.02 [95%CI 0.89-1.18]; P=0.743; at four weeks: aOR 1.05 [95%CI 0.95-1.17]; P=0.337). The results remained similar when further restricted to those aged  $\geq 65$  years, those treated with large doses of NSAIDs, or those with a prior history of ischemic heart disease, cerebrovascular disease or smoking.

**Conclusions:**

Non-chronic treatment with NSAIDs in the context of acute pain was not associated with a measurable excess in short-term cardiovascular event risk.

**Points for discussion:**

Study limitations: observational design, measurement error, confounding by indication

Mapping gaps in evidence for treatments routinely used in primary care

Place of NSAIDs in acute pain management



**Freestanding Paper / Published****Concordance of comorbidity in diabetes and the burden of the disease – 11 years cohort**

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**Keywords:** diabetes mellitus, comorbidity, health services, family doctor, mortality

**Background:**

The burden of type 2 diabetes is growing, not only through increased incidence, but also through its comorbidities. Concordant comorbidities for type 2 diabetes, such as cardiovascular diseases, are considered expected outcomes of the disease or disease complications, while discordant comorbidities are less extensively addressed under diabetes management.

**Research questions:**

Is there a difference in the impact on health between concordant and discordant comorbidities of persons with diabetes?

**Method:**

A retrospective cohort study following 11 years after persons with new onset diabetes. Persons were stratified into groups according to comorbidities: concordant, discordant, combined (concordant and discordant) or absent. The use of health services and mortality were compared between the groups according to sociodemographic variables.

**Results:**

The study sample included 9,725 persons, most of them having the combination of concordant and discordant comorbidities (75%), detected both before and after diagnosis of type 2 diabetes. Rheumatic and gastrointestinal diseases were leading in discordant comorbidities.

Those aged 45-65 years were at higher risk for having combined comorbidities [OR=4.9; 95% CI: 3.9-6.2], as were those aged 65 years or more [OR=4.8; 95% CI: 3.8-6.1]. Women were at lower risk than men for having combined comorbidity [OR=0.87; 95% CI: 0.7-1.0], similar to other types of comorbidities.

The comparison between people with combined comorbidities to those with concordant and discordant comorbidities only shows:

- More comorbidities (7.3 vs. 2.8 and 2.0 respectively)
- More visits/year to family physicians (17.3 vs. 11.6 and 9.7 respectively)
- A higher risk of death in persons with both combined comorbidities and discordant only comorbidities (HR=33.4; 95% CI: 12.5-89.2 and HR=33.5; 95% CI: 11.7-95.8).

**Conclusions:**

The findings highlight the contribution of discordant comorbidity to the burden of the disease. The high prevalence of the combination of both concordant and discordant comorbidities, and their appearance before the onset of type 2 diabetes, indicates a continuum of morbidity.

**Freestanding Paper / Finished study****Orthopaedic corticosteroid injection and risk of acute coronary syndrome : a case control study**

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**Keywords:** acute coronary syndrome; corticosteroid injections; intra-articular injections; orthopaedics; rheumatology

**Background:**

Intra-articular and soft tissue corticosteroid injection, (CSI) is a common treatment for musculoskeletal conditions and is considered safe with a low incidence of minor side effects. An association between musculoskeletal CSI and acute ischemic heart disease is not known.

**Research questions:**

Do musculoskeletal corticosteroid injections increase the incidence of acute coronary syndrome?

**Method:**

Data were reviewed from 41,276 patients, aged forty years of age or older and hospitalised with Acute Coronary Syndrome (ACS) between January 2015 and December 2019. Each ACS case was allocated up to ten control patients, drawn from their primary care clinic and matched for age and sex. The incidence of an orthopaedic or rheumatological consultation including a corticosteroid injection prior to the date of hospital admission was compared between the case and control groups.

**Results:**

A total of 413,063 patients were reviewed, 41,276 ACS cases and 371,787 controls. The mean age was 68.1 Standard deviation (SD) =13.1, 69.4% male. In the week prior to hospital admission 118 injections were received by the ACS patients and 495 in the control group. Odds Ratio, [OR] =1.95 (1.56-2.43). An association between ACS and prior CSI was strongest in the days immediately prior to hospitalisation: OR= 3.11 (2.10-4.61) for patients who were injected one day before ACS; OR = 2.33 (1.74-3.10) for patients injected in the three days prior to ACS. The statistical association between CSI and ACS gradually declined as the time between the injection and the hospitalisation increased, losing significance at ninety days, OR= 1.08 (0.98-1.18). The association between CSI and ACS remained robust when cardiovascular risk factors and history of rheumatological disease were taken into consideration.

**Conclusions:**

CSI for musculoskeletal conditions appear to substantially increase the risk of ACS in the days following the injection. Although the absolute risk of ACS is small, the effect size is clinically significant.

**Points for discussion:**

Should corticosteroid injections be re-evaluated as a "safe" option for treating musculoskeletal conditions.

**Freestanding Paper / Finished study****The effect of BATHE interview technique on adherence to hypertension treatment in primary care: Open-label, parallel group, randomized controlled trial**

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**Keywords:** hypertension, bathe technique, therapy adherence , primary care**Background:**

BATHE is a short therapeutic interview technique developed for use by primary care physicians. It has been shown to be effective in changing behavior. It is important to show that it can be used to increase adherence to treatment with hypertension.

**Research questions:**

Does the intervention using BATHE short therapeutic interview technique have an effect on adherence to hypertension treatment in primary care?

**Method:**

The research was conducted as an open-label, parallel group, randomized-controlled trial on patients with hypertension. 86 patients were included in the study. The study was completed with 41 intervention and 42 control patients. The intervention was done face to face in the 1st and 6th months, and online in the 3rd month. The BATHE technique was applied to the intervention group in each interview. The control group continued their routine therapy. BP were measured in both groups, and the Scale for Evaluating the Success of Treatment Compliance and Lifestyle Change in Hypertensive Individuals (HTUYTD) and Morisky Medication Adherence Scale (MMAS) were applied at 0 and 6 months. The data were analyzed by descriptive analyses and t-test for groups.

**Results:**

In the initial evaluation there was no statistically significant difference between the two groups for blood pressure (BP) and scale scores ( $p < 0.05$ ). The intervention and control group were evaluated in the 6th month; In the intervention group, the mean BP was  $129.0 \pm 13.49 / 77.2 \pm 7.86$  mmHg, while the mean BP in the control group was  $136,3 \pm 14,55 / 80,8 \pm 8,74$  mmHg. The mean HTUYTD scale score was  $80.41 \pm 4.50$ , the mean MMAS score was  $5.76 \pm 0.69$  in the intervention group, and the mean HTUYTD scale score was  $74.52 \pm 7.00$ , the mean MMAS score was  $4.90 \pm 1.37$  in the control group ( $p < 0.05$ ).

**Conclusions:**

The intervention using the BATHE short therapeutic interview technique was found to be effective in increasing adherence to hypertension treatment and reducing blood pressure in patients with hypertension.

**Points for discussion:**

What other statistical analyzes can be used?

**Freestanding Paper / Finished study**

## **A Study on the Effect of COVID-19 on the Healthcare Workers of a University Hospital**

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**Keywords:** COVID-19, effects, healthcare workers, psychological

### **Background:**

The COVID-19 disease, which emerged in December 2019 in the city of Wuhan, China, has spread all over the world, causing a pandemic on an unprecedented scale. One of the groups most affected by this pandemic is healthcare workers.

### **Research questions:**

What is the effect of the COVID-19 pandemic on healthcare workers in a university hospital?

### **Method:**

The research is a mixed type of research with quantitative and qualitative components. The quantitative part is observational and analytical, cross-sectional, and the qualitative part is phenomenological. After calculating the sample size, a questionnaire was applied to 351 participants who were reached through convenience sampling between July 2020 and June 2021 at Marmara University Pendik Hospital. Then, one-on-one in-depth interviews were conducted with 18 people between 18 May–2 June 2021. The interview participants were selected by extreme case sampling, based on psychological impact according to the questionnaire results. The data obtained from the questionnaire was analyzed with a statistical program. Transcripts obtained from in-depth interviews were thematically analyzed by three researchers.

### **Results:**

Of the survey participants, 189 were female (53.8%), 162 were male (46.2%); 108 doctors (30.8%), 91 nurses (25.9%), 38 other health professionals (10.8%), 5 administrative (1.4%), 109 assistant medical personnel (31.1%).

Of the 18 participants, 4 doctors, 4 nurses, 5 other health professionals and 5 assistant medical personnel, who were interviewed individually, 9 were male and 9 were female. 9 of the participants were highly-affected and 9 were slightly-affected.

Inadequate training, protective equipment shortages, poor working conditions, unbalanced division of labor, injustices in payments, personnel shortages, working in different departments were statistically significant and/or major themes.

### **Conclusions:**

The COVID-19 pandemic has affected health workers professionally, socially and individually. Making them feel listened to and supported by management can help reduce feelings of worthlessness and forlornness in some healthcare professionals, as well as increase overall motivation. Necessary efforts should be made to provide psychological support to all healthcare professionals and family members in need.

### **Points for discussion:**

What do you think about the main reasons of these results?

What should be the priority interventions to support healthcare professionals?

**Freestanding Paper / Almost finished study****Analysis of the implementation of family medicine practice in Tajikistan**

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**Keywords:** family medicine, Tajikistan, optimization, primary health care

**Background:**

Tajikistan, where 73% of the country's population lives in rural areas, has adopted a PHC model based on the principles of family medicine.

**Research questions:**

Analysis of the current situation at the level of a network of PHC facilities in 30 cities and regions serving more than 4 million people, in order to identify achievements and problems in optimizing the practice of family medicine.

**Method:**

Quantitative and qualitative research methods were used: two-sided questionnaire interviews, analysis of medical records and the use of official statistics.

**Results:**

In 93.3% of cases, the population is divided among family doctors. A common registry is available for all examined PHC, standard paper medical forms of accounting and reporting documentation are used. A pre-doctor's office is available in 73.3% of PHC facilities and in 82.9% of cases, family doctors' offices are located at the entrance to the PHC, in which: anthropometry, measurement of blood pressure, pulse, temperature, pulse oximetry, shoulder circumference and head circumference in children are performed, providing assistance to difficult patients. In general, the first visit to the family doctor was noted in 78.7% of cases. At the level of cities and districts, a family doctor serves an average of 2948 people, and at the level of rural areas 4289 people, while the norm is 1500 per 1 doctor. 95% of family doctors are certified. The presence of categories among family doctors was 61.24%.

**Conclusions:**

Family medicine has taken root in country. Family doctors can work multipolar, with family doctors and family nurses playing a major role in prevention, treatment, follow-up and immunization during the COVID-19 pandemic. There is a significant shortage of family doctors in the country, which reduces the efficiency and effectiveness of their work in rural areas. Due to the integration of the services of vertical centers, the burden on the family doctor has increased.

**Points for discussion:**

The position and status of family medicine in the country's health care system should be continuously strengthened. To increase the population's access to quality healthcare services, it is necessary to develop and implement a model of integrated services at the PHC level, leverage to motivate family doctors in order to attract young cadres to family medicine, to stop the outflow of professional cadres outside the country.

**Freestanding Paper / Almost finished study****Perspectives of GPs supporting young people who self-harm in England: a qualitative study**

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**Keywords:** Self-harm; young people; GPs; qualitative research

**Background:**

Self-harm in young people is an international public health priority, and self-harm is the strongest risk factor for suicide. Rates of self-harm in young people presenting in primary care are increasing, and general practitioners (GPs) have a key role in the management of young people who self-harm. Young people have described varied experiences of care for self-harm, but perspectives of GPs about young people have not previously been explored.

**Research questions:**

What are the perspectives of GPs on presentation and management of young people who self-harm, including the impact of COVID-19?

**Method:**

Semi-structured interviews were conducted remotely with GPs around England. Purposive sampling aimed for a maximum variation sample in participant age, gender, years in practice, employment role, and practice list size. Recruitment was facilitated through Clinical Research Networks. Interviews were audio-recorded, transcribed verbatim, and thematic analysis with principles of constant comparison was conducted. A patient and public involvement group informed recruitment techniques, the interview topic guide, and interpretation of data.

**Results:**

Fifteen interviews were conducted. GPs understood self-harm to be broad in nature with a spectrum of severity. GPs described a variety of strategies for managing young people who self-harm: treating underlying mental illness, offering distraction techniques, and signposting. GPs stated that remote consulting due to COVID-19 reduced the opportunity to identify non-verbal cues and develop relationship-based care that can be critical in supporting young people who self-harm.

**Conclusions:**

These findings will inform clinical practice recommendations for primary care and the development of a GP-led intervention to reduce self-harm in young people.

**Points for discussion:**

How this study informs the COPING study

The management of self-harm by GPs outside of England

Implications for health policy

**Freestanding Paper / Ongoing study with preliminary results****Towards de-identification of general practitioners' electronic medical records for secondary research**

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**Keywords:** electronic medical record; secondary research; privacy protection; de-identification; health services research

**Background:**

Secondary use of GPs' routine data in a legal way is technically and organisationally feasible. Potentially identifying field content (PIF), especially free text entries, obstruct 'factual anonymisation' of a secondary data set (SDS) for scientific use.

**Research questions:**

Stepwise and systematic recognition of PIF in an exemplary SDS from structured routine data, using a mandatory software interface in a general practice management system. Data protection impact assessment (Art. 35 GDPR) for evaluation.

**Method:**

Studies were performed at four levels, (a) single field identifiers (variables, attributes), (b) their combination, (c) their field content (expressions, values), and (d) the dataset as a whole. Instruments for (a) and (b) were field type, relative frequencies, categories, GP's expertise, for (c) TextCrawler, (d) ARX. Results were evaluated as coin-cidence of a possible harm's severity with its probability of occurrence.

**Results:**

A SDS from one German general practice, 1993 until 2017, covering 14,2885 patients, was studied as csv-datafile with 5,918,321 data lines and three variables (order, field identifier, field content). PIF were discovered predominantly in 'permanent remarks' ('doctor's notes') and 'findings', and were categorised as 'names', 'toponymata', 'phone numbers', 'functional descriptors' and 'professions', but semantic text qualifiers were not implicit. 'Date of death' was considered a harm of high impact to privacy protection with moderate occurrence probability – remedial was replacement by 'Year of death'. The combination of temporal order, patient pseudonym and certain field contents increased the risk of re-identification within this SDS as a whole.

**Conclusions:**

Studies for PIF have to be done on a defined and completed SDS. They require professional and appropriate expertise concerning data generation and framing background in general practice as well as meta-information about the primary data set.

With reasonable effort, PIFs can be identified only to a certain imperfect extent. Recognizing and assessing PIFs is a requirement prior to any de-identifying intervention.

**Points for discussion:**

GP's EMR for secondary research

Potentially identifying content of GP's EMR and breach of privacy

Appropriate de-identification of GP's routine data and privacy protection

**Theme Paper / Finished study****Quality and Outcome of Diabetes Care During the COVID-19 Pandemic in a Primary Care Setting in Switzerland**

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**Keywords:** diabetes mellitus, primary care, COVID-19 pandemic, quality indicators, diabetes outcomes

**Background:**

During the pandemic, not only SARS-CoV-2 infections and their complications have an impact on public health. The management of non-communicable diseases such as diabetes mellitus can be affected too. Patients may not receive the same quality of care because of pandemic.

**Research questions:**

To determine the impact of the pandemic on quality and outcome of diabetes care.

**Method:**

Retrospective comparison of two cohorts in a primary care setting in Switzerland. Adult patients ( $\geq 18$  years) with a diagnosis of diabetes mellitus and with at least one consultation at a general practitioner, between 17.03.2018 and 16.03.2019 (cohort 1) and 17.03.2019 and 16.03.2020 (cohort 2), were included and observed for two years (until 16.03.2020 and 16.03.2021 respectively). Quality indicators and outcomes of diabetes care, at patient and practitioner level, were compared before and during the COVID-19 pandemic.

**Results:**

A total of 27,043 patients and 191 practices were included, 23,903 in cohort 1 and 25,092 in cohort 2. The fraction of patients lost to follow-up attributable to the pandemic was 28% [95% Confidence Interval: 25%, 30%]. At patient level, regular measurement of weight, Hemoglobin A1c (HbA1c), blood pressure and serum creatinine were less frequent during the pandemic. At practitioner level, less patients reached the target of an HbA1c value  $\leq 7\%$  and a blood pressure value of  $< 140/90$  mmHg during the pandemic. However, more patients had an LDL-cholesterol value of  $< 2.6$  mmol/l. Although higher HbA1c values were observed in the months after lockdown, values converged to the same level, for both cohorts, by the end of follow-up period.

**Conclusions:**

A considerable drop of quality in diabetes mellitus care could be observed during the pandemic (17.03.2020 - 16.03.2021). However, HbA1c values converged to the same level for both cohorts at the end of the observation period. Thus, the long term effect on relevant outcomes has not yet been visible.



**Theme Paper / Finished study****Quality indicators of type 2 diabetes management in Greek primary care: A Delphi study**

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**Keywords:** Quality indicators; type 2 diabetes; primary care; Delphi

**Background:**

Type 2 diabetes mellitus is a worldwide cause of significant morbidity and mortality. However there is paucity of evidence regarding the quality of care delivered in Greece and a complete absence of quality indicators of type 2 diabetes in the Greek primary care.

**Research questions:**

This study aimed to develop a set of quality indicators to facilitate quality measurement of type 2 diabetes management in the Greek primary care.

**Method:**

A set of 43 preliminary quality indicators were identified through literature review and were sent to a 10 member Delphi panel, consisting of 3 Greek, 1 Italian and 1 Spanish General Practitioners (GPs), 1 Diabetologist, 1 Dietologist, 1 Professor of Health Politics and 2 patients with type 2 diabetes. The indicators were rated based on importance and feasibility during three rounds. The agreement criteria were defined as median  $\geq 7.0$  and  $\geq 85.0\%$  of ratings in the 7–9 tertile for importance; median  $\geq 7.0$  and  $\geq 65.0, 70.0, 75.0\%$  of ratings in the 7–9 tertile for feasibility respectively in the three rounds of rating.

**Results:**

A total of 39 indicators achieved consensus for inclusion in the final set of indicators, The final set of indicators were grouped into 10 domains: access (2 indicators), monitoring (13 indicators), health counseling (3 indicators), treatment (1 indicator), vaccination (1 indicator), patient safety (3 indicators), records (1 indicator), health status (11 indicators), patient satisfaction (2 indicators) and self-management (2 indicators).

**Conclusions:**

Our study presents for the first time a set of 39 quality indicators for type 2 diabetes in the Greek primary care that were assessed through an iterative Delphi process and judged as both important and feasible to implement.

**Points for discussion:**

Further testing and validation in Primary Care settings

Implementation in other south-european countries

**Theme Paper / Finished study****The Effect of Basic Carbohydrate Counting on HbA1c in Type 2 Diabetic Patients: A Non-Randomized Controlled Trial**

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**Keywords:** type 2 diabetes mellitus, carbohydrate counting, basic carbohydrate counting, self-management, primary care

**Background:**

Carbohydrate counting (CC) is considered as a medical nutrition therapy method especially used in Type 1 DM (T1DM) patients in basic and advanced levels. Limited number of studies reported that basic CC improves glycemic control in T2DM patients, and there is need for further studies.

**Research questions:**

How the basic CC effects HbA1c levels in T2DM patients using oral antidiabetic drugs, when presented as a component of nutrition education by primary care physicians.

**Method:**

The study hereby is a non-randomized controlled clinical trial. T2DM patients, aged between 18-75 years, HbA1c levels between 6.5%-10.8% using oral antidiabetic medication, were followed for three months in two groups; one intervention (IG) (n=33) and one control group (CG) (n=45), in two different Primary Care Centers. General diabetes monitoring principles were applied in both groups; basic CC training was given additionally to the IG. The training consisted of three sessions lasting 40 minutes each. An informative CC booklet was provided to both groups. Beside sociodemographic questionnaire, a healthy nutrition information scale was applied to all of the participants; HbA1c, other laboratory and anthropometric measurements were performed at the beginning and at the 3rd month of the study.

**Results:**

The mean age value was  $54.58 \pm 9.69$  (28-73). Male/female distribution was (IG:57.6%/42.4%, CG:53.3%/46.7%). At the third month, HbA1c value decreased within the IG from 7.7% to 7.2% (p:0.002), from 7.49% to 7.46%, in the CG (p:0.851). Comparing two groups, the decrease in HbA1c in the IG was higher than in the CG (-0.5, -0.02, p: 0.018). Third month knowledge score was higher the intervention group's (<0.001).

**Conclusions:**

Basic CC training provided to T2DM patients by primary care physician, improves glycemic control by increasing CC knowledge level and improving HbA1c.

**Points for discussion:**

How to integrate basic CC education at the diabetes management primary care centers?

**Freestanding Paper / Ongoing study with preliminary results****GP's at the Edge: The GATE study of the Experience of Delivering Care Irish Rural General Practice**

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**Keywords:** rural health, general practice, delivery of care, rural general practice

**Background:**

Over a third of Irish people live in a rural area, each with their own unique health needs. General practice is a vital health service in these areas, often the most accessible for people living in rural areas. . However, only a fifth of Irish general practices are rural and recruitment of new GPs, distance to other health services, and professional isolation persist as obstacles to sustainability.

**Research questions:**

What is the real experience of delivering healthcare in rural areas in Ireland? The study will review the challenges and benefits of working in rural general practice from both a physician and nurse perspective.

**Method:**

This is a qualitative study, with data collection occurring via semi-structured interviews. General practitioners and practice nurses were invited to share their experience in choosing a career in rural general practice and what it is like to provide care in these areas.

**Results:**

This is an ongoing study; these results are preliminary. An emerging theme of access to secondary and emergency services as a key challenge for rural GPs has been identified. This may indicate unequal access to services compared to urban areas. Participants consistently shared experiences of being the medical port of call and offering emergency medicine. Nevertheless, all the participants thus far enjoy practising in a rural community. They care for whole families, from 'cradle to grave', and build strong relationships which enrich their professional satisfaction. Older rural patients are particularly vulnerable, with barriers like access to transport and living alone, they cannot always easily access care to support their needs. Further interviews are required to develop overall key themes.

**Conclusions:**

Working in rural general practice seems to give great professional satisfaction but does not come without its challenges. Fast access to secondary and tertiary care services was a particular challenge. Final conclusions will be made after completion.

**Points for discussion:**

What is it like providing care in rural settings in your country?

What barriers do rural healthcare professionals face?

How can we better support the health of rural communities?

**Freestanding Paper / Study Proposal / Idea****Person-centred care and family-centred care in primary care: Perspectives of patients, professionals, and family members**

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**Keywords:** person-centred care, patient-centered care, physician-patient communication, family-centered care

**Background:**

Health and social care systems, especially in the wake of the COVID-19 pandemic, are struggling to maintain the quality of care while containing health system costs. Person-centred care (PCC) has been proposed as a potential solution, and family-centered care (FCC) may be as well. Given the long-lasting relationships that primary care physicians often form with their patients and their patients' families, PCC/FCC may be naturally implemented in many consultations. However, there is a seemingly wide diversity both within and across primary care practices regarding PCC and FCC attitudes and behaviors. In addition to this variability, the impact of PCC/FCC implementation in primary care has not been adequately documented.

**Research questions:**

Therefore, the primary aims of this study is three-fold: (1) to examine attitudes concerning PCC/FCC as perceived by primary care staff, patients, and their family members; (2) to document the extent of PCC/FCC implementation in primary care consultations; (3) to measure the impact of PCC/FCC implementation on patient-reported outcomes, family-reported outcomes, physician-reported outcomes, patient health outcomes, and health system outcomes.

**Method:**

A longitudinal study involving quantitative and qualitative data collection will be conducted. Semi-structured and/or focus groups will be carried out with primary care staff, patients, and family members. The Person-centred Practice Inventory-Staff (PCPI-S) and Family Nurse Caring Belief Scale (FNBCS) will be completed by primary care staff, the Consultation and Relational Empathy (CARE) Measure by patients, and an adapted version of the CARE scale by family members. Questions to address FCC specifically for patients and family members will be identified based on relevant literature (in progress). If feasible, consultations will be video-recorded and coded for objective measurement of PCC/FCC or interactions observed and a checklist completed. Quantification of patient health outcomes given available EMR data and health system outcomes (e.g., cost savings) is currently in progress.

**Results:**

TBD

**Conclusions:**

TBD

**Points for discussion:**

What are the indicators in the primary care consultation that person-centred care and/or family-centered care has occurred? What behaviors or written documentation could/should be measured?

How can the impact of person-centred care and/or family-centered care on health or health system outcomes be measured?

What is an appropriate follow-up time frame? What is the shortest time period in which impact on health or health systems outcomes could be documented?

**Freestanding Paper / Finished study****The Relationship Between Health Screening Behaviors, Practices and Workload of Family Physicians**

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**Keywords:** Health screening behavior, Workload

**Background:**

Primary care physicians play a critical role in health screening. This role emerges with physicians' increased awareness of the social, environmental and societal determinants of health, with the ability to recognize and intervene with patients' individual risk factors. In daily practice, family physicians need to deal with this work as well as diagnosis and treatment. Therefore, the relationship between family physicians' health screening behaviors and practices and workload is important.

**Research questions:**

What is the relationship between health screening behaviors, practices and workload of family physicians in Izmir, Turkey?

**Method:**

This cross-sectional study was conducted with 259 family physicians working in Family Health Center (FHC)s in Izmir. Questionnaire that has sociodemographic data, questions evaluating family physicians' health screening behavior and workload was applied. In analyzing t test, ANOVA and correlation analysis were used.  $p < 0.05$  was considered significant.

**Results:**

The mean age was  $53.53 \pm 5.96$  years. 43.6% were female and 89.2% were married. Time worked as a family physician is  $13.36 \pm 4.85$  (Min:2-Max:30) years. Mean score of health screening behavior was found  $3.67 \pm 0.45$ . Workload mean score was found to be  $3.49 \pm 0.58$ . It was found to be significantly higher both in the group with a high mean number of patients given daily health care ( $3.62 \pm 0.46$ ;  $p < 0.001$ ) and in the group with a high mean number of patients enrolled in the FHC.

**Conclusions:**

Making the time to provide preventive services is one of the most challenging obstacles, as many of physicians work in systems that reward patient care as a performance appraisal. Decrease in the number of patients registered in the FHC; it will reduce the workload of family physicians to make health screenings more common and regular. The screening risk assessment approach, which includes the basic provisions for disease prevention and screening throughout the life cycle, provides the community oriented primary care approach.

**Points for discussion:**

Adjusting physicians' medical practices to improve screening and disease prevention practices in adults is important in reducing the workload.

**Freestanding Paper / Published****Effectiveness of STOPP/START Criteria in Primary Prevention of Polypharmacy and Under-treatment in Older Patients**

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**Keywords:** STOPP/START criteria, Rational drug use, Primary care, Polypharmacy, Under-treatment

**Background:**

STOPP/START criteria appear to be a useful tool to curb inappropriate prescribing (IP), which encompasses errors of both, over and under-treatment. This study aimed to find out whether application of STOPP/START reduces the IP effectively in primary care.

**Method:**

This prospective cross-sectional study was conducted in two family health centers (FHC) in Istanbul. All older adults who applied to FHCs between 01-07-2018 and 01-07-2020 were enrolled. The potential inappropriate medications (PIMs) and potential prescription omissions (PPOs) were identified according to STOPP/START version 2 criteria. Mean drug consumptions before and after STOPP/START were compared using Student's t-test.

**Results:**

Among 1023 participants there were 626 females and 397 males. The mean age was  $73.33 \pm 7.30$  years. The number of the patients seen at FHCs was 657(64.2%) while 366(35.8%) of them were visited at home. Of the patients, 383(37.8) were 75 years old or older and 631(62.2%) of them were under 75. Overall number of drugs consumed per patient was  $5.49 \pm 3.93$  while it was  $6.01 \pm 3.71$  and  $4.55 \pm 4.138$  for outpatients and home patients respectively ( $p < 0.001$ ). By application of STOPP criteria, among the 5616 medications consumed by the overall patients, 881(15.6) of them were found to be potentially inappropriate. 424 (41.4%) patients were using at least one PIM. This ratio was 354 (53.8 %) in outpatients and 70 (19%) in home patients. START criteria identified 380 (7.4) PPOs. There were 246 (24.0%) patients with at least with one PPO; 155 (42.3%) of whom were home patient and 91 (13.8%) were outpatients. Regarding the age groups; PIM ratio was 35.5% in patients under 75 and 52.1% over 75 whereas PPO ratio was 22.5% under 75 and 26.8% over 75.

**Conclusions:**

This study supports the data reporting the effectiveness of STOPP/START criteria in primary care units in implementing appropriate prescription criteria.

**Freestanding Paper / Finished study****Knowledge and Attitudes of Family Physicians Regarding Levothyroxine Use**

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**Keywords:** Attitude, hypothyroidism, knowledge levothyroxine.

**Background:**

Hypothyroidism is a common disorder in society. In addition, follow-up and treatment can be done in primary care. The aim of the study is to measure the knowledge and attitudes of family physicians working in primary health care institutions about the use of levothyroxine.

**Research questions:**

Do primary care physicians have sufficient knowledge about the use of levothyroxine?

**Method:**

This prospective study was conducted with 102 family physicians from family health centers in Şanlıurfa province central districts. A questionnaire, created by the researchers, consisting of eight questions; 7 multiple choice and one open-ended, was used for measurement. Statistical analyzes were performed with SPSS version 22.0. Categorical data between groups were compared with the Chi-square test, and those that were constantly variable were compared with the Student T-test.

**Results:**

Of the physicians participating in the study, 21 (20.6%) were female, 81 (79.4%) were male, and the mean age was  $36.9 \pm 8.0$  (28-66) years. Working duration as a family physician was  $6.1 \pm 3.3$  years and 16 (15.7%) of the participants reported that they had never prescribed levothyroxine. Two-thirds of the participants correctly answered the relationship between levothyroxine and food intake and 36.3% of them correctly answered the difference of levothyroxine formulations' that affect their absorption. Very few of them gave the correct answer to the question of how to start hypothyroidism treatment in patients over 60 years of age or with coronary artery disease.

**Conclusions:**

This study results revealed that the training needs of family physicians on hypothyroidism treatment.

**Freestanding Paper / Almost finished study****Pneumococcal vaccination coverage and adherence to recommended dosing schedules in adults: a repeated cross-sectional study in the INTEGO morbidity registry**

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**Keywords:** general practice, adult pneumococcal vaccination, coverage rate, equity

**Background:**

Belgium's Superior Health Council (SHC) recommends pneumococcal vaccination for adults aged 16+ at high risk, 50-85 years with comorbidities, and healthy elderly aged 65-85 years, with specific vaccine administering sequence and timing (i.e., schedules). Currently there is no publicly funded adult pneumococcal vaccination program in Belgium.

**Research questions:**

This study investigated the seasonal pneumococcal vaccination trends, evolution of vaccination coverage rates (VCR) and adherence to SHC recommendations.

**Method:**

INTEGO is a general practice morbidity registry in Flanders (Belgium) representing 104 general practice centers and 226.793 patients in 2021. A repeated cross-sectional study for the period 2016-2021 was performed. To assess the association between (schedule adherent) pneumococcal vaccination status and patient characteristics (gender, age, comorbidity, influenza vaccination status and socio-economic status), adjusted odds ratios (aORs) were computed using multivariate logistic regression.

**Results:**

Pneumococcal VCR in Flanders showed a seasonal trend with a PCV13 peak in November (together with seasonal flu vaccination) and a PPV23 peak in January. The VCR in the population at risk increased from 18% in 2016 to 24% in 2021 (one-sided  $p = 2.2 \cdot 10^{-16}$ ). VCR was highest for high-risk adults (29%), followed by the 50-to-85-year-olds with comorbidities (22%) and healthy elderly (15%). For persons with a lower socio-economic status, the aOR was 1.06 (95%CI 1.04;1.09) for immunization and 1.23 (95%CI 1.18;1.28) for schedule non-adherence. The aOR for schedule non-adherence was 0.51 (95%CI 0.49;0.54) for the 50-to-85-year-olds with comorbidities and 0.52 (95%CI 0.5;0.55) for healthy elderly compared to the high-risk group.

**Conclusions:**

General practice data from Flanders showed that VCR of target groups is slowly increasing, while displaying seasonal peaks. However, high-risk patients and adults with poor socio-economic status have lower odds of schedule adherence, which demonstrates the need for a publicly funded program in Belgium to ensure equitable access and to optimize the benefits of current recommendations for the target population.

**Points for discussion:**

Since we only used registered vaccines to determine a patient's vaccination status and since not all vaccinations might be registered, vaccination coverage rates might slightly be underestimated.

Sensitivity analysis, including generalized linear mixed models and datasets with imputed smoking status, showed robustness of the results.

Although most European countries have a government funded program for pneumococcal vaccines, Belgium has not. This study demonstrates the need for a publicly funded program in Belgium to ensure equitable access. Additionally, a previous study within our group showed that pneumococcal vaccination protects against severe lower respiratory tract infections, which emphasizes the importance of such a program.



**Theme Paper / Finished study**

## Can we improve patient reported accessibility with Integrated Primary Care Teams?

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### **Background:**

Integrated Primary Care Teams (IPCTs) have four key characteristics (intensive interdisciplinary practice; advanced nursing practice with an expanded role; group practice; increased proximity and availability) aimed at strengthening primary care in Quebec, Canada.

Patient Reported Experience Measures (PREM) provide patient-centered measures that allow for the capture of quality dimensions that are important to patients but that are not captured by other data sources usually used in health services research such as administrative data.

### **Research questions:**

Does the patient reported accessibility increase over time for patients who have an IPCT as their primary source of care?

What are the site and patients' characteristics associated with an increase in reported accessibility?

### **Method:**

We used a quasi-experimental longitudinal design based on a pre-and-post administered survey at a 2-year interval. Patients who used an IPCT as their primary source of care were recruited during a consultation received in one of the participating IPCT. They completed a self-administered questionnaire at inception and two years later. We measured 5 PREM including 5 dimensions of patient-reported accessibility.

### **Results:**

A total of 1473 patients completed both the pre- and post-surveys. Results showed that patients who were newly registered with an IPCT had a significant increase in reported accessibility, whereas patients who have been registered with an IPCT for 2 years prior to the first round of data collection had already high reported accessibility that was maintained over time. Moreover, linear regression models showed statistically significant different increases in accessibility by site and patients' characteristics.

### **Conclusions:**

Our results suggest that the IPCT model is tailored to the needs of its target populations, resulting in improved PREM. These results imply that broader implementation of innovative and flexible community-based care models should be considered by policymakers.

### **Points for discussion:**

What are the characteristics of the IPCT?

What are the other dimensions of experience of care that IPCT can improve?

Could accessibility be measured by other methods?

**Theme Paper / Ongoing study with preliminary results****Characteristics of the Visits to a Family Health Center in a District of Istanbul During Covid -19 Pandemics**

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**Keywords:** Primary care, Family Medicine, follow up, preventive medicine, COVID -19

**Background:**

The organization of primary care practice depends primarily on the needs of the community, the availability of resources and the structure of service delivery.

**Research questions:**

To evaluate the reasons of the peoples visits, needs, diagnoses, follow-up and vaccination status of all patients who applied to the Family Medicine Health Center.

**Method:**

Of the 7871 population registered to the FMHC of all age groups who received health service between 01.07.2021 and 15.01.2022 was included in this retrospective, cross-sectional, and descriptive designed study.

**Results:**

We evaluated 8203 visits. The majority included in the study (65.2%; n=5371) were female, with a mean age of 39 years (0 min, 99 max) Distribution by months, the visits increased in winter and highest number was in December (22.9%; n=1879). 15-64 age group comprised 53.7% (n=4404) of the visits and age of 65 and over followed by 19.9% (n=1633). Only 25% of all applications were preventive medicine with a ratio of 16% vaccination, 3.5% infant follow-up, 3% pediatric follow up We found no significant difference in admission to FMHC ( $p>0.05$ ) between age and gender, it was observed that women were more likely to apply than men and older people than younger people. In order of frequency, the five most common diagnoses are; Acute upper respiratory tract infections 16.82 %, general medical examination 10.4%, Hypertension with Diabetes M. 7.8%, Pain 7%, Gastroesophageal Reflux % 6.5. Infant and child vaccines accounted for 51.7% of 1314 vaccines administered, while COVID-19 mRNA 30.4%, COVID-19 Inactive 7% seasonal influenza vaccine was 9.4%. Adult vaccination rates increased in individuals with advanced age and without chronic disease.

**Conclusions:**

It is defined that in primary care health services in our region acute problem management is higher than the preventive medicine, periodic examinations and follow-up visits which is not ideal. We concluded preventive medicine and follow-up should be given more weight.

**Points for discussion:**

How much time do you spend on preventive medicine in your daily clinic practice?

Considering the additional financial burdens that the preventive medicine disruption will bring to the health system, what can be done to improve the preventive medicine in primary care?

**Theme Paper / Ongoing study with preliminary results****Developing a tool for implementation of good practices in Family Violence care.**

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**Keywords:** Implementation research, Process evaluation, Family Violence, Multicenter study

**Background:**

Facilitators for effective Family Violence care are professional commitment, collaboration, providing mutual trust and health care system support. Other success factors are the linkage between several intervention strategies, clear referral options, attention to attitudes and sustaining consensus application protocols. A new inquiry tool was constructed based on the IMOCAFV consensus process in three continents to use during implementation strategies.

**Research questions:**

What process measures should be included in implementation research about Family Violence in primary health care?

**Method:**

Based on the tasks enumerated in our international multicentre study on Family Violence we compared dimensions of European datasets and Premis, the latter being mainly validated in the USA. The Transtheoretical Domains Framework seems a good guide to choose dimensions to be measured as it is based on 33 models for behavioural change. The dataset is being validated by comparing participants and non-participants to training.

**Results:**

Barriers identified through our prior multicentre qualitative research also indicate potential facilitating factors. Several collaborative care models need adaptation according to available facilities and differences, e.g. between rural and urban areas. Knowledge and skills for clearly defined tasks and motivation and opportunity costs, beliefs about detection, the feasibility of responding to violence and emotions with situations encountered, attitudes towards collaborative care, and support by peers appear essential.

**Conclusions:**

Adaptation to different local settings needs to render the tool well applicable. The applied domains framework seems a good tool for better practice implementation and organisation integrated with multisectoral care.

**Points for discussion:**

1. Does the presented implementation measures seem fit to Family Violence primary health care in your country
2. Would you consider other elements than those enumerated to improve primary health care practice for family violence?
3. Could this model of research be applied to other topics of clinical care ?

**Theme Paper / Finished study**

## **Experiences of Family Physicians Who Encountered with Cases of Child Abuse/Neglect in Turkey**

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**Keywords:** family physician, child abuse, neglect, primary care

### **Background:**

Family physicians play a pivotal role in the detection and reporting of child abuse. However, there is not enough research on their experiences in this issue in literature.

### **Research questions:**

What are the experiences of family physicians who encountered with cases of child abuse/neglect, and needs in this regard?

### **Method:**

A qualitative study was conducted in 2021 with family physicians (FPs) worked in primary health centers in Turkey. Semi-structured interviews were used to understand the experiences of FPs' worked in primary health centers in Turkey who were recruited by purposive and snowball sampling and through the announcements of FPs associations. Deep interviews with the voluntary physicians took place via online meetings or face to face. In those interviews covered topics were such as participants' opinions and experiences about reporting child abuse, barriers or facilitators encountered when reporting and participants' suggestions to improve the opinions on the current reporting system. All interviews were conducted by the first author and took an average of 30-45 minutes. Interviews were recorded with prior consent and transcribed verbatim. Interviews were thematically analysed using an inductive approach, first by descriptive coding, then categorising common codes into subthemes and themes, by three authors. To ensure rigor, the coding framework was reviewed and agreed by the all authors. Ethics approval was obtained from the Marmara University School of Medicine Non-interventional Clinical Practices Ethics Committee.

### **Results:**

Seventeen FPs (fifteen female, two male) participated, with an average age of 40 years and 15 years of practice in medicine. Four main themes were identified: "Case reporting and management process", "Judgments and emotions", "Self-assessment", "Traces on the physician and recommendations". Physicians reported the difficulties in; recognizing child abuse, deciding to report, managing the interfamily relations and self safety after reporting the case to the officials.

### **Conclusions:**

The family physicians need support about reporting and managing child abuse.

### **Points for discussion:**

Is there any similarity with your experience?

Do you experienced any helping factor that makes the primary care physicians to manage child abuse/neglect cases better?

**Freestanding Paper / Finished study****A secondary analysis of patient outcomes in Heartwatch, the Irish Cardiovascular secondary prevention programme in primary care**

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**Keywords:** secondary prevention, cardiovascular health, patient outcomes, primary care, general practice**Background:**

In 2003, Ireland set up a secondary prevention programme for cardiovascular disease that is delivered in general practice – Heartwatch. It was designed using European guidelines on secondary prevention for patients with a history of acute myocardial infarction, coronary artery bypass grafting, or percutaneous coronary intervention. The programme brought structured risk factor management into the community across 20% of Irish general practices.

**Research questions:**

After 8 years of structured follow-up visits, do patients meet programme targets? Do some patients achieve more targets than others?

**Method:**

Data was requested and extracted from the national Heartwatch database. To assess patient outcomes, a continuing care score (CCare score) was developed. A CCare score out of 8 was calculated based on well-known cardiovascular risk factors monitored in Heartwatch.

**Results:**

More than 5,500 patients had 8 years of follow up data, 77% were male. The median age at registration of this cohort was 65. After 1 year in Heartwatch, 33% of the 8-year cohort had achieved a CCare score of 5, which increased to 40% of patients scoring 6 or better after year 8. Patients who enrolled in Heartwatch sooner after their qualifying event achieved more targets, as did male patients, younger patients, and patients who attended more frequently.

**Conclusions:**

Some patients, including female and older patients, and risk factors, such as waist circumference, do not improve within the current guidelines for secondary prevention programmes. New research on improving the implementation and organisation of secondary prevention programmes for less-improving populations is needed, preferably with patient and public involvement.

**Points for discussion:**

What barriers exist for patients in achieving cardiovascular risk factor targets in general practice, and how can we overcome them?

What are new approaches to secondary prevention and chronic disease management can be delivered in primary care?

How can patients be empowered to have more control of their own health?

**Freestanding Paper / Ongoing study with preliminary results****Multicomponent intervention for primary prevention of cardiovascular diseases in general practitioner practices and community settings: lessons from the SPICES project in Belgium**

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**Keywords:** Cardiovascular diseases; GP practices; Community; Prevention; Implementation

**Background:**

Cardiovascular diseases are preventable through population and individual level interventions. Due to frequent contact with patients and opportunity for appropriate risk assessment, GP practices have a vital role in prevention of CVDs. On the other hand, community settings are complementary and often more able to reach vulnerable populations. However, the role of GP practices and community settings in lifestyle preventive interventions is not well documented.

**Research questions:**

We aimed to describe and explore the potential of GP practices and community settings in CVD preventive interventions in selected vulnerable districts of Antwerp, Belgium.

**Method:**

The SPICES project in Antwerp used the participatory action research approach to improve CVD risk identification and communication in the community and GP practice settings. Three GP practices and 4 various types of community settings were involved. Adults aged 40 or above were the target population. The intervention is tailored to the context and individual's CVD risk level. We used an effectiveness-implementation Hybrid type III design, which emphasizes on testing implementation strategies and implementation outcomes, while also monitoring effectiveness. The intervention consists of CVD profiling and risk communication, brief behavior change counseling, and tailored lifestyle coaching. The primary outcomes are CVD risk level measured using non-laboratory INTERHEART risk score, CVD knowledge and risk perception, and physical activity level. We will describe the evaluation of GP practice and community settings in terms of RE-AIM - reach, effectiveness, adoption, implementation and maintenance.

**Results:**

A total of 353 participants (67 in the GP practice, 279 in community settings, and 7 online) participated. The final results will be available at the conference.

**Conclusions:**

This study will show the potential of GP practices and community settings in implementation of multicomponent CVD preventive interventions in vulnerable communities. Furthermore, it will provide an insight on possible directions to integrate provision of CVD preventive interventions in GP practices and community.

**Points for discussion:**

How to integrate community and primary care settings?

Lifestyle interventions in primary care settings and the burden on healthcare professionals

**Freestanding Paper / Ongoing study with preliminary results****The effect of armodafinil on drowsiness level in patients with high BMI**

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**Keywords:** drowsiness, daytime sleepiness, Epworth scale, treatment, obesity and overweight**Background:**

A significant number of patients with overweight report the drowsiness during the day, which caused by metabolic disorders, hypoxia and complicates the treatment process. The drowsiness and daytime sleepiness can be assessed by Epworth Sleepiness Scale (1990), that has proven to be a very convenient and effective tool. American Academy of Sleep Medicine recommend to treat the excessive daytime sleepiness with armodafinil (K Maski, LM Trotti, S Kotagal, et al 2021).

**Research questions:**

Does the armodafinil have positive effect on drowsiness in complex treatment of obese and overweight patients?

**Method:**

75 people (25-55 age) with BMI>25 kg/m<sup>2</sup> with drowsiness were studied. The level of drowsiness was determined by Epworth scale. Patients were divided into two groups: 1st group - 37 people with traditional treatment of obesity, and 2nd group - 38 people with addition of armodafinil 150 mg/day. The follow up was 6 months with control of Epworth scale changes and other indexes (baseline, 1 month, 3 months, 6 months). Statistical data processing was performed by Statistica 12, Excel 2010.

**Results:**

The groups didn't differ at baseline in levels of drowsiness by Epworth scale (I=7.97±0.65; II=9.18±0.95), p=0.202. However, 2nd group was identified as having excessive daytime sleepiness, so armodafinil was prescribed. The 6 months of follow up showed no significant drowsiness' changes in 1st group (p=0.137), but significant reduction was observed in 2nd group in 3 months (p=0.04) and 6 months (p = 4.79E-6), the difference between groups in 6 months was significant (p=0,03). The reduction of BMI was in both groups.

**Conclusions:**

The use of armodafinil at dose of 150 mg/day allows to achieve a significant reduction in drowsiness and is effective in complex treatment of overweight patients.

**Points for discussion:**

Does the armodafinil have positive effect on drowsiness in patients with other concomitant conditions?

Is the armodafinil included in national guidelines?

Does the armodafinil have other known positive/negative effects?

**Freestanding Paper / Finished study****The SPICES Cardiovascular risk assessment in general population: quantitative data and implantation clues**

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**Keywords:** cardiovascular disease prevention, general population, implementation

**Background:**

In 2015, cardiovascular diseases (CVD) caused 31% of worldwide deaths. SPICES involves five countries in an international primary prevention implementation study. In France, the study was implemented in a rural, deprived territory with a cardiovascular increased mortality. An assessment of CVD risk of individuals in general population was conducted in public events and places of the territory in 2018. Screeners, stakeholders, and researchers experimented barriers and facilitators to this assessment. The efficacy and the replicability of such a study were unknown.

**Research questions:**

Following the Non-Laboratory Interheart risk score (NL-IHRS), what are the characteristics of the individuals undergoing CVD risk assessment for SPICES? Which barriers and facilitators were experimented by the whole screening team?

**Method:**

Implementation study combining a cross-sectional descriptive study to qualitative interviews. The NL-IHRS was completed on a voluntary basis, recording age, gender, familial history of heart attack, diabetes, hypertension, smoking status, physical activities, dietary habits, psychosocial factors, and abdominal obesity. After the screening, groups of students, GP trainees, pharmacists, nurses, physiotherapists, members of the research team were interviewed until theoretical saturation of the data for each group. Thematic analysis was performed with double blind coding.

**Results:**

From April 15th to September 14th, 2019, 3374 assessments were undertaken in 64 different places. 1582 individuals were at low CVD risk, 1304 at moderate risk, 488 at high risk. Stressed or depressed individuals were 39,8% and 24,4% of the population. 50 qualitative interviews were conducted. Main facilitators were readiness of the population, trust between screeners and research team, media attention and word spread. Main barriers were lack of motivation, difficulties to handle the research software.

**Conclusions:**

This recruitment was successful. Levels of diabetics and smokers were comparable to the French population, hypertensive and physical inactive were lower. Stress and depression were unexpectedly high. Training of screeners and ambulatory research software should be improved.

**Points for discussion:**

the software

junior researchers



**Freestanding Paper / Finished study****Communication channels of German GPs in the pandemic: results of the nationwide egePan study**

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**Keywords:** pandemic preparedness, COVID-19, general practitioners, regional healthcare, nationwide survey

**Background:**

Primary care requires good communication between general practitioners (GPs), patients and other healthcare providers. To avoid vis-à-vis contacts in the pandemic, communication shifted to digital communication, yet details are poorly investigated.

**Research questions:**

Identifying communication channels of GPs with patients and other healthcare providers.

**Method:**

This cross-sectional web-based survey was performed in a nationwide, stratified random sample of GPs during spring 2021. The allocation was proportionate by population density and practice type. Invitations were sent by email. The questionnaire addressed personal and practice characteristics as well as GPs communication channels with patients and regional health care professionals (multiple-select format). A Net-Promotor Score (NPS: range +100 to -100) was used to obtain GPs intention for the future use of new communication channels.

**Results:**

In total, 630 of 9,373 GPs completed the questionnaire (participation rate: 6.7%). On average, GPs were on duty since 18.8 years (SD±9.6), 57.8% were male and 10.2% reported COVID-19 infections of practice personnel including themselves. The majority of GPs used phone communication, especially with COVID-19 patients (95.4%), ambulatory nursing services (90.5%) and hospitals (90.2%). In addition, other communication channels were used with suspected and confirmed COVID-19 patients: vis-à-vis 66.7%, email 48.9%, video-conferences 26.5% and messengers 14.0%. Communication among GPs was mainly by phone (77.6%), followed by email (52.7%), messengers (25.7%) and video-conferences (23.7%). Interestingly, GPs assessment did not reflect high intentions for future use regarding video consultations for patients with respiratory infections (-63.5) and telephone screening/treatment of patients with respiratory infections (2.9%).

**Conclusions:**

The majority of GPs prefers vis-à-vis contact with COVID-19 patients over video-consultations. Future qualitative studies are needed to better understand this finding.

**Freestanding Paper / Finished study****COVID-19 severity prediction based on patient risk factors and number of vaccines received**

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**Keywords:** COVID-19, disease severity, calculator, diabetes, obesity, kidney disease

**Background:**

Vaccines are highly effective in preventing severe disease and death from COVID-19, and new medications that can reduce severity of disease have been approved. However, many countries are facing limited supply of vaccine doses and medications.

**Research questions:**

A model estimating the probabilities for hospitalization and mortality according to individual risk factors and vaccine doses received could help prioritize vaccination and yet scarce medications to maximize lives saved and reduce the burden on hospitalization facilities.

**Method:**

Electronic health records from 101,034 individuals infected with SARS-CoV-2, since the beginning of the pandemic and until November 30, 2021 were extracted from a national healthcare organization in Israel. Logistic regression models were built to estimate the risk for subsequent hospitalization and death based on the number of BNT162b2 mRNA vaccine doses received and few major risk factors (age, sex, body mass index, hemoglobin A1C, kidney function, and presence of hypertension, pulmonary disease or malignancy).

**Results:**

The models built predict the outcome of newly infected individuals with remarkable accuracy: area under the curve was 0.889 for predicting hospitalization, and 0.967 for predicting mortality. Even when a breakthrough infection occurs, having received three vaccination doses significantly reduces the risk of hospitalization by 66% (OR=0.336) and of death by 78% (OR=0.220).

**Conclusions:**

The models enable rapid identification of individuals at high risk for hospitalization and death when infected. These patients can be prioritized to receive booster vaccination and the yet scarce medications. A calculator based on these models is made publicly available on <http://covidest.web.app>

**Points for discussion:**

Is the calculator needs validation in other populations?

Is such a calculator can be an effective tool to a family doctor to evaluate COVID-19 severe disease risk?

How to communicate the risk to the patient?

**Freestanding Paper / Finished study****Distress and wellbeing among general practitioners during COVID-19: results from the cross-sectional PRICOV-19 study.**

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**Keywords:** wellbeing, distress, general practice, family medicine, COVID-19, organisational

**Background:**

Emerging literature from all around the world is highlighting the huge toll of the COVID-19 pandemic on frontline health workers. However, prior the crisis, the wellbeing of this group was already of concern. Burnout is the most extreme form of this lack of wellbeing and its symptoms not only has a direct impact on the physician, but also on patients. Some studies have shown that, among physicians who report experiencing at least some signs of burnout, family medicine and emergency medicine physicians are among those at highest risk.

**Research questions:**

To describe the frequency of distress and wellbeing, measured by the Mayo Clinic Wellbeing index, among general practitioners and family physicians during the COVID-19 pandemic and to identify some of the key levers that could potentially mitigate the risk of distress.

**Method:**

Data were collected by means of an online self-reported questionnaire among GP practices. Statistical analysis was performed using SPSS software on Version 7 of the database which was the version consisting of the cleaned data of 33 countries available as of November 3rd, 2021.

**Results:**

Data from 3,711 was included. MCWI scores ranged from -2 to 9 with a mean of 2.7 and median of 3. Using a cut off of  $\geq 2$ , 64.5% of respondents are considered at risk.

GPs with less experience, in smaller practices, and with more vulnerable patient populations are at a higher risk of distress.

Collaboration from other practices and adequate governmental support are significant protective factors for distress.

**Conclusions:**

While individual factors are important, it is necessary to address practice and system level organizational factors in order to enhance wellbeing and support primary care physicians.

**Poster / Finished study****Distribution of medical and nursing consultations in primary care: Portugal Trend and Seasonality**

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**Background:**

There are diseases with a seasonal distribution, if the amplitude of the impact of these diseases is important in the total number of consultations throughout the year, there is an opportunity for improvement in management of appointments.

**Research questions:**

The aim of this study is to assess the temporal evolution and distribution of direct and indirect medical and nursing contacts in mainland Portugal, between 2016 and 2019.

**Method:**

Descriptive observational study, with data collected from the National Health Service's Transparency Portal, processed and combined with the R (3.4.2) for the production of distribution graphs. A linear model for a short temporal series (Jan/2014-Dec/2019, monthly resolution) was created with a trend component and a seasonal component (the seasonal pattern was approximated by fourier terms).

**Results:**

There is a seasonal distribution in person medical consultations, the model shows a periodic component [coef fourier (df, 2)S1-12=67842,02, p=0.011]. Nursing contacts, both face-to-face [coef fourier (df, 2)S1-12=-66179.87, p=0.031; coef fourier (df, 2)C1-12=70315.40, p=0.031; coef fourier (df, 2)S2-12=-1272272.24, p<0.001 ] and non-face-to-face [coef fourier (df, 2)S1-12=10515.29, p<0.001 ] contacts, show periodic phenomena.

**Conclusions:**

There is evidence of periodic phenomena in face-to-face medical consultations, but not in the indirect ones. Nursing contacts, both face-to-face and non-face-to-face contacts, show periodic phenomena, with a potential management opportunity to be investigated.

**Points for discussion:**

Which are the temporal evolution and distribution of direct and indirect contacts in primary care?

How we can improve the consultation offer?

**Poster / Ongoing study with preliminary results****Effectiveness and cost-effectiveness of a virtual Community of Practice in the empowerment of patients with ischemic heart disease: An ongoing randomized controlled trial.**

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

**Background:**

Virtual Communities of Practice (VCoP) offer access to information and exchange possibilities for people in similar situations, which might be especially valuable for the self-management of chronic diseases.

**Research questions:**

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

**Method:**

A pragmatic randomized controlled trial is being performed in Catalonia/Madrid/Canary Islands, Spain. Three-hundred patients with a recent diagnosis of IHD attending participating centres (GP practices/hospitals) are selected/randomized to the intervention/control group to reach the sample size. Intervention group is offered participation for 12 months in a VCoP based on a gamified web 2.0 platform with educational material, plus interaction with other patients and a multidisciplinary professional team. Intervention/control groups are receiving usual care. Primary outcome is measured with Patient Activation Measure (PAM) questionnaire (baseline/six/12/18 months). Secondary outcomes include: clinical variables; adherence to Mediterranean diet (PREDIMED); physical activity (IPAQ), depression (PHQ-9), anxiety (HADS-A); medication adherence (ARMS); quality of life (EQ-5D-5L); health resources use. Data is collected from self-reported questionnaires/electronic medical records.

**Results:**

One hundred and eighty-one participants (16.5% women, mean age: 58.3, SD: 8.89, age range: 39-81) have been included from June 2021 (60% of the sample size needed), 99 in the intervention and 82 in the control group. Sixty-six participants fulfilled the six-month questionnaires out of 117 that have already been involved in the trial for six months. Results at six-month follow-up will be available at the congress.

**Conclusions:**

Due to COVID-19 situation recruitment is a major challenge. Participants will be recruited continuously until sample size is achieved to maintain trial integrity/validity. The results of this study will provide evidence on the effectiveness/cost-effectiveness of an alternative way of managing patients with recent diagnosis of IHD by using a VCoP, which could be extended to other chronic patients/settings.

**Points for discussion:**

How to optimize patient recruitment with the 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 / Finished study****Factors Affecting Utilization of an Urban Community Health Center in the Philippines: A Cross-Sectional Study**

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**Keywords:** Community Health Center, Utilization, Urban

**Background:**

The local health center, or the LHC, is the locus of public health service delivery in the urban communities of Makati, Philippines. It should be the first-line for consultation and should be able to address most health concerns of the community. Despite the many services offered in the LHC, residents still opt to consult in the city hospital or in private institutions and this study sought to understand why.

**Research questions:**

This study aimed to determine the correlation between demographic variables of residents and the utilization of the LHC and between community perception of the LHC and utilization of the LHC in two urban communities.

**Method:**

Utilization of the LHC was operationally defined as any consultation in the LHC in the past year, regardless of occurrence of illness. The survey questionnaire utilized the Patient Satisfaction Questionnaire-18 or PSQ-18 which has a 5-point Likert Scale. Other possible factors affecting utilization based on related literature were added to the survey questionnaire.

**Results:**

Results showed that utilization of the LHC had a weak positive correlation with older age and having more co-morbid illnesses. Other factors which showed a positive though weak correlation with consulting in the LHC were community perception regarding General Satisfaction, Availability of doctors, and Availability of free medications, however these aspects were rated highly by residents overall. Community perception on Patient-Doctor Relationship also showed a weak positive correlation with consulting in the LHC and had a low community perception rating, suggesting this is the key issue in the utilization of the LHC.

**Conclusions:**

Utilization of the LHC were correlated with older age, having more co-morbid illnesses, and community perception of General Satisfaction, Availability of doctors, Availability of free medications, and Patient-Doctor Relationship.

**Points for discussion:**

These results coincide with a similar study in Baguio, Philippines by Sy et al. (2019) that showed the top 3 important factors for choosing a health care facility among bypassers of their nearby health facilities were Availability of doctors, Sufficient supply of medicines, and Satisfactory health service.

The results of this study contrast with a few studies in other countries such as South Korea, Albania, and rural Southern Nigeria where distance and transportation difficulties were associated with lower utilization of public primary health care facilities (Han et al., 2016, Gabrani et al., 2018, Adam et al., 2014).

Additionally, long waiting time was a barrier to utilization of a community health center according to Adam et al. (2014) but our results showed that long waiting time for consultation was not correlated with utilization of the LHC.

**Poster / Finished study****From theory to an understanding on how primary care providers and managers operationalize goal-oriented care in three international primary care settings**

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**Keywords:** Primary care, goal-oriented care, person-centered care, primary care providers, chronic care

**Background:**

Goal-oriented care (GOC) is one of the suggested strategies for person-centered integration of care. In GOC, care is explicitly focused on the patients' personal goals. To make GOC more applicable, it is important to build an understanding on how it should be provided in practice. Therefore, it is vital to learn from primary care providers and managers on how they operationalize GOC.

**Research questions:**

How do primary healthcare providers and managers operationalize GOC?

**Method:**

Primary care providers and managers were recruited in different primary care settings in Ottawa (Canada), Vermont (USA), and Ghent (Belgium). A two-step approach of a deductive and inductive analysis was used to analyze the in-depth interviews. Firstly, the theoretical framework that emerged from the concept analysis on GOC was used for the deductive analysis to validate the literature. Secondly, an inductive thematic analysis was performed to expand the theoretical knowledge with insights from practice. Interviews were audio taped and transcribed verbatim.

**Results:**

The deductive analysis was conducted using the theoretical framework of GOC consisting the process of goal-elicitation, goal-setting, and goal-evaluation underpinned by the patients' needs and preferences and patients' context. All elements could be identified in practice, but not in such a linear way as emerged from literature. This emphasized the dynamic character of GOC. The inductive analysis revealed three main themes: 1) involving the patients, 2) interprofessional collaboration, and 3) the use of tools or guidance.

**Conclusions:**

Besides the validation of the literature, we learn from practice that professionals made use of tools to support goal-elicitation, goal-setting, and to prepare interprofessional meetings. All this with the overall aim to encourage patients to actively take part in their care.

**Poster / Ongoing study with preliminary results****Healthcare and social needs associated with COVID-19: An evidence map**

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**Keywords:** COVID-19, needs assessment, healthcare needs, social needs, evidence map

**Background:**

COVID-19 has triggered a global crisis that has exposed gaps and areas of need in our health and social care systems.

**Research questions:**

The present work aims to systematically map evidence addressing COVID-19-related healthcare and social needs of adult patients, their family members, and the professionals involved at any care level, including primary care, to identify knowledge clusters and research gaps.

**Method:**

We searched the electronic databases MEDLINE, Embase, and Web of Science (2019 – 14/01/2021). Two reviewers independently screened titles and abstracts, assessed full-texts for eligibility, and extracted the data. Disagreements were resolved by consensus. Primary studies addressing COVID-19-related healthcare and social needs from the perspective of patients, family members, and professionals were included. There were no restrictions on article type, study design or setting. Qualitative content analysis was used to generate codes and derive overarching themes associated with COVID-19-related healthcare and social needs.

**Results:**

A total of 1,336 references were screened after removing duplicates, and 145 full-texts were assessed for eligibility. Thirty-eight studies met inclusion criteria. Studies were conducted in multiple countries (24% Europe, 18% USA, 16% China). Professionals' needs were grouped into four themes (basic, occupational, psychological, public health) and patients' needs into five themes (basic, healthcare, informational, psychological support, social welfare). No study addressed needs from the perspective of family members. Preliminary results indicate the most frequently reported needs from the professionals' perspective were personal protective equipment, and strategies to cope with stress, anxiety, and other emotional symptoms. The most frequently reported patients' needs were social support and communication, COVID-19 knowledge, and receiving high-quality care.

**Conclusions:**

This evidence map provides valuable insight on COVID-19-related healthcare and social needs from the perspective of patients and professionals. More research is warranted to identify the needs of family members, assess whether needs differ by country or region, and evaluate how needs evolve over time.

**Points for discussion:**

Additional COVID-19-related needs of adult patients and health and social care professionals, including country or region-specific needs.

There is limited research exploring COVID-19-related healthcare and social needs from the perspective of family members\*. We are interested in discussing why this subgroup has been forgotten, how to fill this gap, and potential additional needs specific to family members not currently captured by the perspective of patients or professionals.

\*Note: For the purposes of our review, family is defined as any group of persons who are related biologically, emotionally, or legally such as siblings, parents, spouses, hired caregivers, significant others, and friends.

The evolution of healthcare and social needs over time given the dynamic nature of the COVID-19 pandemic.



**Poster / Ongoing study with preliminary results****Opinions of Primary Care Family Physicians in İstanbul about The New National Noncommunicable Chronic Diseases Management Programme**

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**Keywords:** Primary care, chronic disease, clinical decision support system, family physician

**Background:**

Prevalence of chronic diseases is increasing worldwide. As a result, regulations regarding chronic disease follow-up in primary care have come in force. A new web-based programme called HYP (Disease Management Platform) has been implemented in 2021 to the family medicine system in Turkey.

**Research questions:**

What are the opinions of family physicians about HYP system ? Is the application user-friendly? Which aspects of the system need improvements?

**Method:**

For this cross-sectional descriptive study, a form having 21 questions was applied to the family physicians working in İstanbul through digital sources between 05-20 January, 2022. After sampling, 138 physicians who gave consent to the study were included.

**Results:**

A total of 138 physicians consisting of 75(54.34%) women and 63(45.65%) men with a mean age of  $41.52 \pm 9.35$  were included to the study. The mean registered patient population of family physicians was  $3352.44 \pm 690.44$ . Those who have explored HYP system were 123 (89.13%), among them 89.43% have reported that it was not user-friendly. The average number of patients who thought they could log into the HYP system was 5.40/day besides the routine work of the primary care center. Only 25(18.11%) physicians stated that they were informed about the new system before it was implemented.

The disadvantages of the HYP system were conveyed as involving some tests which are not present in the primary care orders(85.50%), not putting any responsibility on the patients for their own chronic disease follow-up (84.78%) and the long period needed to evaluate the patient using the web-based application (84.05%) respectively. As the most common advantage, providing standard and regular follow-up of preventive medicine practices (46.37%).

**Conclusions:**

Most of our participants have explored the new system and had positive opinions on its advantages which shows that they had positive attitudes for chronic disease follow-up. However, the disadvantages conveyed have to be considered by the policy makers.

**Points for discussion:**

What are main aspects to consider in implementing follow-up programmes?

What is the importance and return of patient responsibility in follow-up?

**Poster / Finished study****Arterial stiffness measurements for lower extremities arterial disease identification in general practice.**

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**Keywords:** pulse wave velocity, arterial stiffness, lower extremities arterial disease

**Background:**

Arterial stiffness is an established cardiovascular risk factor and implicates disturbances in circulation in many conditions, among others, in atherosclerosis. Comparing ankle-brachial index (ABI), a verified method of lower extremities arterial disease (LEAD) detection to pulse wave velocity (PWV) an established measurement of arterial stiffness could help to implement a new diagnostic and prognostic tool. The measurement of PWV is simple, non-invasive, and reproducible.

**Research questions:**

Do pulse wave velocity measurements correspond with abnormal ABI measurements?

**Method:**

A cross-sectional study performed among general practice patients over 50. Ankle-brachial index (ABI) measurements with Huntleigh Dopplex and pulse wave velocity (PWV) evaluation with Mobil-O-Graph Pulse Wave Analyser (PWA) were performed. The prevalence of lower ABI measurements among patients with elevated and normal values of PWV were compared.

**Results:**

The study included 158 participants. Overall, 72 (45,5%) had an elevated PWV over a fixed, based on literature threshold of 10m/s. Among those patients 42 out of 72 (58,3%) had ABI below a reference value. When we considered individual PWV threshold calculated by Mobi-O-Graph PWA (taking into account gender, age and blood pressure) 63/158 patients (39,9%) had abnormal result. Of those 38/63 had abnormal ABI (60,3%).

**Conclusions:**

Patients with elevated PWV had considerably higher prevalence of LEAD as expressed by lowered ABI. PWV may be a useful parameter in identification of LEAD.

**Poster / Ongoing study with preliminary results****Assessment of Chronic Illness Care in Family Medicine Patients**

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**Keywords:** Chronic Illness**Background:**

Care of chronic disease, is important to reduce mortality and morbidity. In our country, care of chronic diseases performed also by Family Medicine Physicians. One of the important part to increase the attendance to Chronic Illness Care(CIC) is patients opinion and satisfaction.

**Research questions:**

What is the expectation of the patient in CIC?

What are the factors effect to satisfaction about CIC?

**Method:**

The participants who attendance to Family Medicine outpatients clinic, between 01-31 December 2021; were included in the study. Collecting data form about sociodemografic features and Patient Chronic Illness Care Scale(PCCS) were performed to the patients that excepted to enter the study. PCCS is a Likert scale that have Validity and Reliability Study of Turkish Version . There are also five factors called Patient Participation, Decision Making, Goal setting, Problem Solving, Follow-up\Coordination. Total PCCS score were examined. Increasing of total PCCS score shows the increase of the satisfaction.

**Results:**

The mean age of the 105 participants was  $48,50 \pm 12,87$  and 56,2% (n=59) were females. Most of them have 31,4% (n=33) hypertension and %20 (n=21) diabetes. The total PCCS score was  $2,99 \pm 1,03$ . When the scale items were examined, the lowest averages were 'Encouraged to attend programs in the community that could help me' ( $2,28 \pm 1,24$ ), 'Contacted after a visit to see how thing were going' ( $2,32 \pm 1,31$ ) , the highest averages for items; ' Asked to talk about any problems with my medicines or their effects' ( $3,73 \pm 1,19$ ), and 'Satisfied that my care was well organized' ( $3,58 \pm 1,13$ ).

**Conclusions:**

Participants have encouraging patients to health programs and close contact after care will increase satisfaction in CIC.

**Points for discussion:**

How can be in close contact with the patient? Tecnological apps? Online examine?

How can we increase attendance to CIC?

**Poster / Ongoing study with preliminary results****COVID-19 Influence on NCD Prevention, Care and Research in Primary Care: Multi-Case study of Belgium and Slovenia**

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**Keywords:** Non-Communicable Diseases (NCDs); COVID-19; NCD Prevention; NCD Care; NCD Research in Primary Care

**Background:**

COVID-19 burden and restriction policies have had various effects on NCD prevention and care. This study focuses on the differences and similarities of NCD-related challenges due to the pandemic in Belgium and Slovenia. This study is part of the process evaluation of the 'Scale-up of Diabetes and Hypertension Care' (SCUBY) project.

**Research questions:**

This research aims to explore how COVID-19 has influenced: (a) the patient and healthcare worker (individual perspective); (b) primary healthcare practices (organizational perspective); and (c) NCD research in primary care (research perspective).

**Method:**

A multi-case study design was used to distinguish Belgian and Slovenian experiences of the COVID-19 pandemic. Interviews were conducted with key stakeholders in both countries, including public administration bodies (civil servants at municipality and public health agencies), professional associations of healthcare workers, patient associations, and members of the SCUBY research teams. A qualitative thematic analysis was performed highlighting differences and similarities in challenges to care, prevention, and research for NCD.

**Results:**

At individual level, both countries faced similar challenges. Patients with NCD(s) originally stopped seeking care, out of fear of being infected by COVID-19 at the health facility. Healthcare workers lacked time for NCD care due to focus on COVID-19. At organizational level, NCD care and prevention activities were disrupted in both countries. In Slovenia, delays in NCD care were associated with healthcare workers being moved to different work sites to organise and perform COVID-19 tests and vaccinations following arrangements in their centralised system. In Belgium's decentralised system, GPs were responding more bottom-up and ad-hoc to organise testing and triage centres. From a research perspective, in both countries, some NCD-related research projects were halted, especially those that included contact with patients and external stakeholders.

**Conclusions:**

Both Belgium and Slovenia experienced disruption of NCD care, prevention, and research. Further studies are needed to assess the effect on quality of care.

**Points for discussion:**

What can we learn from the Belgian and Slovenian situation and organisational approach?

How have challenges evolved over time throughout the different waves of COVID-19?

**Poster / Almost finished study****Do Bulgarian patients with cardiovascular diseases collide access limitations to primary healthcare services during lockdown in Bulgaria?**

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**Keywords:** primary care, GP, cardiovascular, access**Background:**

SARS-CoV-2 virus emerged in China in 2019 and became pandemic in March 2020. This led to enormous burden of healthcare systems and medical staff. Countries struggled the surge of patients and faced unpredicted organizational problems.

**Research questions:**

Are there access limitations to primary care during COVID-19 lockdown in Bulgaria, 03-04.2021

**Method:**

A pilot study of 50 patients and 10 individual GP practices was conducted. A special questionnaire was developed

**Results:**

34 of patients were male (68%), 26 (32%) female, divided into 4 age groups 18-30 years (1 or 2%), 30-50 (5 or 10%), 50-70 (18 or 36%), 70 and older (26 or 52%). Patients suffered one or more cardiovascular disease-6 (12%) had one, 26 (52%) had 2, 13 (26%) had 3, 5 (10%) had 4. 48 patients suffered hypertension, 3 survived myocardial infarction, 8 had permanent atrial fibrillation, 18 chronic heart failure. 26 people (52%) sought consultation with GP due to severe COVID-19 symptoms, 1 (2%) for regular chronic disease monitoring, 5 (11%) for drug prescription, 48 (36%) due to poor chronic cardiovascular disease control and related complaints. 26 patients (52%) reported difficulties and access limitation to their GP. 1 patient (2%) couldn't reach the GP by the phone, 3 (6%) couldn't access the hospital where the practice was located, 9 (18%) were not allowed by the GP to enter practice room, in 13 (26%) GP refused examination. In that group 9 patients (69%) complained severe COVID-19 symptoms and 4(31%) had other complains. 7 of 10 practices were in Plovdiv city, 3 were rural.

**Conclusions:**

The majority of patients were older than 70 years and suffered 2 or more cardiovascular diseases. 52% of all patients experienced access limitations to GP. The main reason for examination denial were COVID-19 like symptoms. Changes in organization are needed to improve access to medical services especially for patients with cardiovascular diseases

**Points for discussion:**

how to improve access to primary health care services

**Poster / Study Proposal / Idea**

## **Management of Type-2-Diabetes patients at Family Medicine Practices at the Community Health Centre Ljubljana (Slovenia): A Protocol of a Cross-Sectional Study**

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**Keywords:** type-2-diabetes, primary health care, bottlenecks, study protocol

### **Background:**

Type-2-diabetes (T2D) is a major public health problem worldwide. In 2011, family medicine model practices were established in Slovenia to improve T2D care at the primary level with standardized clinical protocols. There is an urgent need to identify the bottlenecks of current T2D care in the family medicine practices in order to improve them for the future.

### **Research questions:**

The aim of this study is to develop a research protocol to assess the current management of T2D patients in family medicine practices at the Community Health Centre Ljubljana (CHCL).

### **Method:**

A cross-sectional study will be conducted. Individual clinical and demographic data will be collected from clinical protocols of patients with T2D treated in the CHCL family medicine practices in 2019. Descriptive statistics and multivariate logistic regression analyzes will then be performed to assess various aspects (parameters) of T2D care.

### **Results:**

Data from a total of 5279 patient visits will be analyzed. (1) The process of care will be assessed by evaluating the ratio of performed T2D-specific visits, HbA1c measurement, screening for T2D complications (retinopathy, peripheral neuropathy, nephropathy), and screening for T2D comorbidities (hypercholesterolemia, arterial hypertension, metabolic syndrome). (2) Treatment outcomes will be evaluated by assessing the ratio of HbA1c, fasting glucose, LDL, and blood pressure levels in the target ranges. (3) The aforementioned variables will also be stratified by patient lifestyle (e.g., BMI, smoking, physical activity, and alcohol consumption) and sociodemographic factors (age, sex, education, employment, and subjective assessment of financial status).

### **Conclusions:**

The proposed research protocol will provide evidence of bottlenecks in current T2D care in family medicine practices in CHCL and identify potential opportunities for future expansion. It will also provide evidence on the influence of patient lifestyle and sociodemographic factors on T2D care and outcomes.

### **Points for discussion:**

What will we learn from such a study?

What other evaluation strategies could be used to obtain a comprehensive assessment of T2D care in primary care?

What actions could be taken to address identified barriers?

**Poster / Ongoing study with preliminary results****Acceptability and feasibility of self-organized blood sample collection for SARS-CoV-2 antibody screening in persons with a high risk for a severe COVID-19 disease progression**

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**Keywords:** SARS-CoV-2, acceptability, feasibility, blood sample

**Background:**

The pandemic situation poses new challenges for research. Ethical issues might arise if especially vulnerable individuals expose themselves to a higher risk of infection for study purposes.

**Research questions:**

How is the feasibility, quality and acceptance of self-organized blood sample collections to measure anti-SARS-CoV-2 Spike IgG antibodies in persons with a high risk for a severe COVID-19 disease progression?

**Method:**

Persons with a high risk for a severe COVID-19 disease progression (immunocompromised, oncology or 80+ years) were recruited between January and September 2021 to send in blood samples (2.6 ml, 7.5 ml or 500 µl EDTA tubes) 1 month and 6 months after second COVID-19 vaccination. Participants were given the choice of drawing blood themselves (as capillary blood), through the research team, or in local practices or clinics. Participants were surveyed via a computer-assisted telephone interview in December 2021 and January 2022 about their choice of blood sampling methods, experiences and influence of choice upon study participation.

**Results:**

Data from 366 participants was collected via telephone follow-up. First blood samples were collected by the participants themselves (35.8%), local practices or clinics (32.0%) and the research team (22.7%). Second blood samples were mostly collected in local practices or clinics (43.7%) followed by participants themselves (32.5%) and the research team (14.3%). Only 3.3% of blood samples were not send back or were not analyzable. One-fourth (26%) of participants stated that they would not have participated in the study if it would have been required to travel to the university hospital to give their blood sample.

**Conclusions:**

Participants were able to self-organize blood collection, making use of several different blood sample methods. Nearly all blood samples were analyzable when self-collected and send in by post. One-fourth of the participants would not have participated in the study if required to give their blood sample in the study location.

**Points for discussion:**

Pandemic situation as a challenge in the recruitment of study participants

Experiences with self-organized blood collection in a study setting

**Poster / Finished study****Assessment of Confirmed Covid 19 Cases-Part II**

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**Keywords:** covid 19 positive, quality assurance

**Background:**

Health Center of Varis (H.C.V.) from 1/10/2020 has become a COVID 19 clinic. PCR tests were taken and were sent for examination to the microbiological laboratory of the University Hospital ATTIKON. All PCRs were registered at the national COVID 19 registry.

**Research questions:**

Is management of COVID 19 + cases in HCV effective?

**Method:**

The national COVID 19 registry is a valuable evaluation file of COVID 19 cases, which were managed by H.C.V. It will be used in order to make a first evaluation of the way the covid 19 patients were managed in HCV. We will use the data of the disease as recorded in COVID 19 from 30/06/2021 to 15/01/2022. Data were processed with EXCELL 2007.

**Results:**

## 1. DISEASE OUTCOME

Of the total of 920 positive cases, 920 (100%), did not require hospitalization but remained at home. None of them 0(0%), required hospitalization, and none of them 0(0%), were unclear.

DISEASE OUTCOME 30/6/2021-15/1/2022

CONFIRMED CASES COVID 920

ACTIVE CASE 515 44%

HEALING 40 56%

DEATH 0 0%

OTHER INFECTION 0 0%

TOTAL 920 100%

## 2. TYPE OF HOSPITALITY

Of the total of 920 positive cases, none of them 0(0%), ended up. 515(56%) were cured and 405(44%) are still recorded as active cases.

TYPE OF HOSPITALITY %

AT HOME 920 100%

HOSPITAL CARE 0 0%

UNDEFINED 0 0%

TOTAL 920 100%

**Conclusions:**

None of the positive incidents managed by HCV from 30/6/2021-15/1/2022 ended up. Of the remaining cases, a large proportion of 44% are rated 'active cases'. This means that telephone communication with positive incidents has not been completed. (100%) of positive patients had symptoms of mild-moderate severity and did not require hospitalization in the hospital. These findings compared with those of 3rd and 2nd wave of Covid 19 pandemic shows that 4th wave have less requires for hospitalization and deaths.

**Points for discussion:**

THE FUTURE OF COVID 19 PANDEMIC IN GREECE AND EUROPE



**Poster / Finished study****Clinical characteristics of vaccine-naive COVID-19 patients hospitalized during the first peak of the pandemic (March –May 2020)**

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**Research questions:**

Aim:

to describe clinical characteristics (risk factors and outcomes) of vaccine-naive COVID-19 patients  
to document comparative surveillance data to assist(aide) decisions about pandemic control strategies

**Method:**

Upon Turkish MoH and local ethical approval, EPR of COVID-19 patients hospitalized in 3 pandemic hospitals (March 11th-May 30th,2020) were descriptively screened. After excluding 44 records (uneligible/missing data) a total of 298 patient records were included. Data are presented as mean+/-SD and %.

**Results:**

Baseline patient characteristics were:age 52.4+/-16.6 years, 63% male, pulse 84+/-13/minute, BP 128+/-16/74+/-11mmHg, respiratory rate 21+/-11/minute, capillary oxygene saturation 97+/-2%, body temperature 37+/-1Celsius, BMI 28+/-6.kg/m2,>=1 chronic condition 47%, multimorbid 25%, ASCVD 33,3%, Hypertension 30,4%, Diabetes 28,4%, polypharmacy 16%, COVID-19 close contact 26%, good general condition 91,3%, symptomatic 97%,fever 71%->38C 10%,dry cough 64,4%,fatigue 46%,dyspnoe 22,1%,myalgia 19%,sore throat 8%,capillary oxygene saturation(<95%) 8%.All patients (n=298) underwent PCR, 98% (n=283)had a CT scan, pneumonia was diagnosed in 98.3% (n=258), 88% (n=254) were confirmed as COVID-19 pneumonia, whereas, PCR test positivity rate was 55% (n=158).

Median hospital duration was 6 days (range 1-69),rehospitalization due to COVID-19 (n=8)2,8%, ICU treatment 11,8% (n=34), intubation 8,3% (n=24, constituting 70,6% of all ICU treated patients), median ICU duration was 10,5 days(range 1-65)with 11,5 days (range 1-66) median intubation duration. Mortality rate was 3,8% (n=11), all patients who died were treated in the ICU and 10 out of 11 fatalities were intubated.Nearly all patients who died had diabetes (OR 28.5, 95% CI 3.6 to 226.3, p<0.001) and mortality was 10 times more common (81,8% vs. 18.2%) among patients with ASCVD (OR 9.8, 95% CI 2.1 to 46.4, p=0.001).

**Conclusions:**

Results of this study with its risk profile and outcomes are similar to publications from early 2022.However, impact of important developments like vaccination and mutations on the course of the pandemic can be evaluated by comparing present data with such historical vaccine-naive patient population data.

**Points for discussion:**

Have COVID-19 clinical features changed, how?

What is the function-value of such "historical control" data for evaluation the course of a pandemic?

**Poster / Finished study****Longitudinal study of Quality of Life Assessment in primary care during COVID-19 pandemic using EuroQol**

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**Keywords:** Quality of Life, Primary Health Care, COVID-19

**Background:**

The global COVID-19 pandemic has had an impact on the physical and mental health of the population. Analyzing how the assessment of quality of life has changed due to the COVID-19 pandemic can give us the necessary tools to anticipate the needs of our population from a holistic perspective.

**Research questions:**

Our main objective is to quantify the changes in the quality of life of the population of our health center in the context of the COVID-19 pandemic one year after the Spanish state alarm.

**Method:**

Prospective cohort study, 100 patients randomly selected from those assigned to the Vilanova de Arousa Health Center, who met the criteria. A semi-structured telephone survey was conducted, including EQ-5D-5L and sociodemographic data, three times between June 2020 and August 2021. Generalized linear model for repeated measures was applied.

**Results:**

The participants were 45% men and 55% women, with an average age of 54 years old (SD 18). EQ Visual Analogue Scale (EQ-VAS) did not show significant differences. The VAS median at the beginning (June to August 2020) was 69.3 (95% CI 65.3-73.4), 6 months later (December 2020 to February 2021) was 71.1 (95% CI 66.8-75.4) and at the end of the study, 12 months later (June to August 2021), was 70.5 (95% CI 66.3-74.7).

At the beginning of our study, 96% of the participants did not have COVID infection either themselves or their partners and 6 months later, in the third wave, 79% survived infection-free or without suspicion of it.

**Conclusions:**

Our preliminary results conclude that there are no significant changes in the quality of life of our population in the context of COVID-19 pandemic.

**Points for discussion:**

What's your perception about the impact that this pandemic had over Primary Care and the Health Systems?

Is this study applicable to your Health Care Center?

What results do you think you could get in your country?

**Poster / Ongoing study with preliminary results****Primary care COVID-19 pathways in European countries, preliminary results from a qualitative study**

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**Keywords:** Primary Health Care, COVID-19, SARS-CoV-2, Clinical Pathways, Health Information System

**Background:**

COVID-19 patients were treated in primary care (PC) in Europe but how the care was delivered in the different countries has not been described.

**Research questions:**

How was the acute clinical pathway by Europe countries in the diagnosis and follow-up for COVID-19 pandemic in PC?

**Method:**

Descriptive, cross-sectional, retrospective study with qualitative data acquired through a semi-structured questionnaire to know COVID-19 pathway in PC in Europe (31 countries participating). Main variable: PC COVID-19 acute clinical pathway. Secondary variables: COVID-19 diagnosis, testing, hotline, remote assessment. All variables were collected from each country in September 2020.

**Results:**

preliminary results from 12 countries (Byelorussia, Bosnia, Cyprus, Greece, Italy, North-Macedonia, Portugal, Romania, Serbia, Slovenia, Turkey, Ukraine) out of 31. Patients with suspicious COVID-19 accessed in first place to PC with RT-PCR free testing in public health system in all the countries, 10 countries also provided COVID-19 hotlines. Testing was available in PC in 6 countries and in 5 countries PC tested the immobile patients. PC collaborated to the contact tracing along with other institutions in 2 countries. Physical exploration was made in PC in 9 countries. PC asked for complementary tests directly in 7 countries. 4 countries had some restrictions to prescribe COVID-19 treatment in PC. The sick leave was released in PC in all the countries. All the countries recommended isolation during 14 days (Turkey, North Macedonia and Slovenia allowed 10 days in some cases) and only 4 countries requested additional testing after finishing the isolation. 4 countries provided other accommodation if patients could not isolate themselves.

**Conclusions:**

COVID-19 patients were attended in PC in all the countries with free testing. The physical exploration, access to complementary tests, COVID-19 treatment and contact tracing was not available in all the countries in PC.

**Points for discussion:**

1. What is the usefulness of collecting data about COVID-19 pathway in PC in European countries?

**Poster / Published****Primary health care influencing policy actions: Prevalence of SARS-CoV-2 antibodies among Primary care attendees**

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**Keywords:** COVID-19; Seroprevalence; antibody; Primary Health Care; Policy**Background:**

Seroprevalence testing provides a more detailed view of COVID-19's distribution and helps determine the effectiveness of public health interventions and planning for additional prevention and control measures.

**Research questions:**

What is the prevalence of SARS-CoV-2 antibodies in the Palestinian population targeting PHC centres' attendants?

Are there regions where the level of antibodies are higher than others?

What are the sociodemographic characteristics of those with COVID-19 antibodies?

**Method:**

We utilized a cross-sectional design to analyze serological and epidemiological data of 1299 adult primary health care attendees in Palestine from 1 November to 31 December 2020. All serum samples were first tested for total antibodies using the ELISA test. Then, we measured the titer of IgM, IgG, and IgA-specific antibodies using ELISA.

**Results:**

The overall seroprevalence of SARS-CoV-2 antibodies was 24.2% (95%CI 21.9%-26.6%). Seroprevalence was significantly higher among people living in South of the West Bank (aOR 2.3, 95% CI: 1.649-3.216), people encountered COVID-19 like symptoms [aOR 3.8, 95% CI 2.7-5.2], those who had contact with COVID-19 patients (aOR 1.48, 95% CI 1.05-2.07), those with hypertension (aOR 1.5, 95% CI 1.06-2.3) and non-smokers (aOR 0.45, 95%CI 0.29-0.67). Specific antibodies IgM, IgG, and IgA were positive at 13.8% (95%CI: 9.1%-19.8%), 88.5% (95%CI: 82.8%-92.9%), and 42.5% (95%CI: 35.1%-50.3%), respectively.

**Conclusions:**

SARS-CoV-2 antibodies were prevalent among PHC attendees, and levels were higher among females, non-smokers, those with the previous contact with COVID-19 patients, and those who lived in COVID-19 high-prevalence areas. Specific long-term immune antibodies, primarily IgG and IgA, have been identified for up to six months. To characterize COVID-19 and its trend, continuous monitoring and testing of SARS-CoV-2 antibodies are recommended. This study was communicated to higher levels and impacted Palestine's policy decisions regarding COVID-19.

**Points for discussion:**

Primary health care research has the potential to influence policy, particularly because primary care patients are representative of the population.

At one point, COVID-19 immunity was determined by the presence of neutralizing antibodies, and numerous debates still exist.

As primary care providers, our influence spans the spectrum from individual to public health.

**Poster / Finished study****Comparison of the benzodiazepines users with the general practitioners experiences**

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**Keywords:** benzodiazepine users, family medicine.**Background:**

Benzodiazepines (BDZ) are class of the drug that are widely used to treat anxiety and insomnia. However, regular use (>4 weeks) can cause serious side effects, such as addiction, in the public we can find people who are using BDZ more than a year.

**Research questions:**

What is the difference between general practitioners (GP) and BDZs users experiences?

**Method:**

Descriptive cross-sectional study using an online survey was conducted. Data was collected from 51 GPs and 71 BDZ users and analyzed using SPSS 27 program.

**Results:**

The study included 51 GPs, most of whom have been practicing for more than 20 years (64,7%) and 71 BDZ users (93% female, 7% male), the mean age - 34,6 (SD=10.62). The most prescribed BDZs in GPs practice were Bromazepam, Alprazolam and Clonazepam (94,1%, 86,3% and 35,3%), however in general population these drugs were used by respectively 67,6%, 70,4% and 11,3% ( $p<0,000$ ,  $p=0,040$ ,  $p=0,001$ ). In general population 21,1% have been taking BDZs more than a year and 15,5% more than 4 weeks, but in GPs practice only 2% use BDZ more than a year and 2% more than 4 weeks. Distribution of the therapy duration in the GPs experience differs significantly from general population ( $p=0,005$ ). BZD users and GPs reported that the most common side effect of the BDZ was sleepiness (54,3% and 54,0%). 15,7% GPs reported about constipation, but only 4,2% users had this side effect ( $p=0,021$ ). 47,1% GPs noticed dizziness, and only 18,3% had it ( $p=0,001$ ).

**Conclusions:**

The most prescribed BZDs in GPs practice differ significantly from the drugs that are used in general population. As well as there are differences between the side effect experience in GPs practice and general population, but both groups observed sleepiness as the most common side effect. The duration of the BDZ therapy was longer in general population than in GPs practice.

**Points for discussion:**

BDZs usage is exceeding recommended length and dosage.

To which extend the long-term use of the BDZs and its' severe side effects are related to the GPs practice?

**Poster / Ongoing study with preliminary results****Identifying patients with psychosocial problems in general practice: a scoping review**

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**Keywords:** general practice, psychosocial problems, scoping review

**Background:**

Psychosocial problems are common phenomena associated with negative health outcomes. As they manifest in heterogeneous and complex forms, they pose major challenges on GPs in their daily practice. Specific tools that are supportive and feasible in daily routine and that capture a broad range of psychosocial problems at once can help optimise the organisation of GP practice by providing guidance to general practice professionals at an early stage of care.

**Research questions:**

What is known about the usage of instruments to identify patients with psychosocial problems in general practice?

**Method:**

We conduct a scoping review by following the Joanna Briggs Institute Reviewer's Manual. A protocol has been registered with Open Science Framework, <https://osf.io/c2m6z>, and published in BMJ Open, <http://dx.doi.org/10.1136/bmjopen-2021-051383>. A systematic search of four electronic databases (Medline [Ovid], Web of Science Core Collection, PsycInfo, Cochrane Library) was conducted for quantitative and qualitative studies published in English, Spanish, French and German without time restriction.

**Results:**

A total of 637 titles and abstracts were screened. 91 articles were subjected to a full-text review and a final 50 studies were considered eligible for inclusion in the review from which relevant information was extracted. Data analysis and synthesis is currently underway. At the EGPRN meeting, we will present the overall results of our scoping review as well as details of the included studies in terms of population, context and concept.

**Conclusions:**

The aim of our review is to comprehensively examine the published research on tools used in general practice to identify patients with psychosocial problems. Our review addresses a topic of great public health importance, as early and structured identification not only benefits patients, but also optimise the work of general practice professionals. Bringing the results together will help to provide an overview of the evidence and identify knowledge gaps, which will give direction for further research activities.

**Points for discussion:**

What experience has been gained with specific tools for identifying patients with psychosocial problems?

What (further) support is needed for general practice professionals?

**Poster / Finished study****Intermediate care in caring for dementia, the point of view of General Practitioners: a key informant survey across Europe**

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**Keywords:** intermediate care, dementia, primary care

**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 and may prevent caregiver burnout. However, very little is known about the point of view of intermediate care for persons with dementia in Europe. This study aims at describing the point of view of General Practitioners on intermediate care services for people with neuro cognitive disorders across Europe.

**Research questions:**

How are intermediate care services used in the care for people with neuro cognitive disorders across Europe?

**Method:**

Key informant survey was sent to GPs via a self-developed questionnaire with space for open ended comments. Convenience sampling technique was used to address variations due to regional opportunities and regulations within the same country. Descriptive analyses of all intermediate care facilities groups by countries were performed.

**Results:**

The questionnaire was sent to 17 European countries. 583 questionnaires were analysed. The responding physicians were 48 (+/- 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 centres and nursing homes. Their availability was considered very inhomogeneous by the majority of respondents. The main benefits 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%). They 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. Major concerns of GPs are about the cost issues, the accessibility and the awareness of the existence of these facilities and the procedure to access them.

**Points for discussion:**

Possible selection bias?

Relevance in primary Care

**Poster / Almost finished study****Reanalysis of a randomized controlled trial on promoting influenza vaccination in general practice waiting rooms. A Zelen Design**

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**Keywords:** Influenza Vaccines / administration & dosage\* ; Patient Education as Topic / methods\* ; Routinely Collected Health Data ; randomized controlled trial

**Background:**

In 2018, we published a randomized controlled trial (RCT) assessing the effect of an advertising campaign for seasonal influenza vaccination using posters and pamphlets in general practitioners' (GPs) waiting rooms. No effect of the intervention could be demonstrated in 10,597 patients of 75 GPs. However, the immunization uptake increased in both arms of the study compared to the prior year, and we evoked an experimental artefact.

**Research questions:**

To deepen the investigations explaining the increased vaccination uptake, considering the risks of an experimental artefact. To check the external validity of our trial.

**Method:**

Registry based 4/2/1 Zelen designed cluster RCT with a two years follow-up of the study cohort. Study population included a cohort of 23,024 patients eligible to be vaccinated (i.e.  $\geq 65$  years of age or affected by a chronic condition) registered under 175 GPs and followed over four years from winter 2013-2014 until winter 2016-2017. The intervention ran during the 2014-2015 influenza vaccination campaign. A posteriori, we included a new control group ("Zelen group") consisting of patients with the same characteristics of 100 GPs but with the GPs not aware of the trial. The main outcome remained the number of vaccination units delivered per study group (by community pharmacies). Data were extracted from the SNIIRAM warehouse claim database for the Lille-Douai district (Northern France). The intervention effect was assessed using generalized estimating equations.

**Results:**

The Zelen group did not show a difference with the population of the RCT in vaccination uptake, while taking into account a higher baseline vaccination in this group. Overall, the proportion of vaccinated patients increased from 51% to 70% over the four study years in the 3 groups. Vaccination uptake increased faster in the 60-65 and was higher among the  $>65$ . Being vaccinated the previous year was only a weak predictor of being vaccinated the subsequent year.

**Points for discussion:**

What are the factors discriminating public health data from primary care data?

How can Zelen designs with routinely collected data be used for RCTs in primary care?

Challenging interpretation of routinely collected data from claim database warehouses



**Poster / Published****Somatic symptom disorders and utilization of health services among Palestinian primary health care attendees: a cross-sectional study**

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**Keywords:** Somatic symptom disorder; Primary Care clients; Risk factor; Palestine

**Background:**

Somatization is the expression of psychological or emotional distress through physical symptoms that are otherwise unexplained. Many primary health care (PHC) clients come in with medically unexplained complaints, leading to frequent consultations and high usage of services and healthcare costs.

**Research questions:**

The research questions are

- 1- What is the prevalence of somatic symptom disorder (SSD) among PHC attendees
- 2- Is somatic symptom disorder associated with utilization of health services and other mental conditions

**Method:**

A cross-sectional design was used to interview 400 attendees. Men and women aged over 18 years old without a psychiatric diagnosis were invited to participate. The Somatization scale of the Four-Dimensional Symptom Questionnaire was used to assess somatic symptom disorders. It is a valid tool to be used in a PHC setting. We used the Chi-square test and multivariable logistic regression to explore determinant variables.

**Results:**

The study included 400 PHC; 71.8% of them were female, and 52.3% were over 50 years of age. The majority were married (77.5%), unemployed (66.2%), and have chronic diseases (64%). The prevalence of SSD was 32.5% (95%CI= 27.9%-37.1%). The most common symptoms were painful muscles (61.5%) followed by back pain (52.3%).

Female gender [adjusted OR = 2.1 (95% CI= 1.2-3.7)], chronic diseases [adjusted OR = 2.4 (95%CI=1.3-4.5)], depression [adjusted OR = 3.3 (95%CI= 2.0-5.5)], and anxiety [adjusted OR = 2.1 (95%CI= 1.2-3.6)] were all associated with SSD. In addition, frequent primary health care attendance was found to be associated with SSD [adjusted OR = 2.4 (95%CI= 1.4-4.1)]

**Conclusions:**

SSD is prevalent among Palestinian PHC attendees. It is significantly higher among females, patients with chronic diseases, anxiety and depressive disorders, and patients with frequent doctors' visits. Painful muscles and back pain are the most prevalent symptoms reported by patients, and this might be used as an early screening signal by PHC physicians.

**Poster / Finished study****Is a Family Doctors' and Nurses' Training a Good Way for Changing Their Attitude Towards Covid-19 Vaccination?**

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**Keywords:** COVID-19, interactive training, readiness, vaccination

**Background:**

COVID-19 vaccination was launched in March 2021 in Ukraine. The vaccination teams had to pass a mandatory 2 day training. The trainers of vaccination teams conducted training for healthcare workers all over the country. The low level of readiness for COVID-19 vaccination was observed in the population and also among healthcare workers.

**Research questions:**

To assess changes of family doctors' and nurses' attitude after the interactive training concerning vaccination against COVID-19

**Method:**

The interactive training was conducted for medical teams of 541 health workers (doctors and nurses) trained to provide COVID-19 vaccinations in Western Ukraine. Questionnaires to assess readiness of self-vaccination were used at the beginning and at the end of the training. The questionnaire was validated beforehand and consisted of questions in epidemiological data and a Lickert scale aimed to assess readiness for vaccination of the doctor/nurse on the scale from 1-5 (where grade 1 was "not ready" and grade 5 was "totally ready" to accept vaccination)

Training was conducted by 5 trainers who provided 5 training modules concerning practical and theoretical aspects of COVID-19 vaccination

**Results:**

The set of training was performed in 2021. The participants were divided to small groups of 20-30 and passed 2 days seminars. The seminars consisted of 5 interactive modules where used different interactive teaching methods as well as evidence based information about COVID-19 vaccination and management.

The difference in levels of readiness for vaccination given by participants was estimated before and after the training: the number of grades 1 decreased from 9% to 1%, grades 2 from 14% decreased to 5%, grades 3 from 57% to 23%. Accordingly, the number of grades 4 increased from 19% to 55% and grades 5 from 1% to 16 %..

**Conclusions:**

Analyzing the data, we achieved the significant difference in readiness for COVID-19 vaccination among healthcare professionals after the interactive training

**Points for discussion:**

Does the estimated level of readiness mean that healthcare workers are being vaccinated?

Will effect of provided training be the same in other regions or countries?

**Poster / Almost finished study****Is it possible to optimize the undergraduate teaching process and research regarding to everyday life as general practitioner?**

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**Keywords:** undergraduate teaching, general practice, research

**Background:**

There is a dearth of published literature on how to optimize the connection between general practitioner practice, undergraduate teaching, and academic work on Medical Faculties. The aim of our research was to assess the needs and expectation of general practitioners about the new established Institute for general practice and his role in high quality teaching and research.

**Research questions:**

How the input of general practitioner could optimize the undergraduate teaching and research work on Medical Faculty?

**Method:**

A semi-structured questionnaire was sent to 650 general practitioners (GP) in the region. Questions covered demographical data, suggestions for teaching needs and research interest in general practice in Upper Austria

**Results:**

The response rate was 64%. The following research ideas, such as workload in general practice, polypharmacy, multimorbidity, professionalism and suggestions for teaching, such as communication skills, professionalism, disease management and the profile of the general practitioner, could be identified. 105 GPs expressed their willingness to contribute to research, 121 indicated their willingness to be involved in teaching at the faculty or in practice.

**Conclusions:**

Optimization of the undergraduate teaching is possible through more intensive cooperation between academic medicine and general practitioners in their practices and communities. This would enable a more flexible and faster response to changes in the real life, and thus better prepare students for everyday work as general practitioners.

**Points for discussion:**

Methodology

Presentation of the results

Presentation on 14/05/2022 11:30 in "Poster Session 5: Training & Elderly Care " by Zelko Erika.

**Poster / Finished study****Knowledge and Attitude of Students About Breast Cancer and Breast Self-Examination in a Medical Faculty**

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**Keywords:** Breast Cancer, Breast Self Examination, Awareness, Medical Students

**Background:**

Breast cancer is the most widely diagnosed cancer in Turkey and is the second cause of death in women after lung cancer.

**Research questions:**

What is the knowledge level of medical students about breast cancer ?

Does the level of knowledge show change between the students' grades?

Do the medical student know about and perform breast-self examination?

**Method:**

The study is a cross-sectional study and included our faculty's 3rd, 4th and 5th grade students. A questionnaire consisting of 36 questions including sociodemographic characteristics, breast cancer risk factors, knowledge and attitudes about breast self-examination (BSE) was applied to the students between November 2020 and March 2021.

SPSS 21.0 program was used in the analysis of the data. Pearson, Fisher's exact and chi square tests were used. A  $p < 0.05$  value was accepted for statistical significance.

**Results:**

The rate of students who gave right answers about BSE and breast cancer(BC) risk factors increased as they progressed through the grades ( $p < 0.05$ ). Also, the 5th graders answered their knowledge about BC was sufficient significantly more than the 3rd and 4th grades, and the 4th graders indicated that their knowledge about BC was sufficient significantly more than the 3rd grades ( $p < 0.001$ ). When the reason for not doing BSE was questioned, the 4th and 5th grades gave the answer "I don't know how to do it" more than the 4th and 5th grades, and the 4th graders gave the answer "I don't know how to do it" more than the 5th grades ( $p < 0.05$ ). The rate of performing BSE increased with the students' higher grade( $p < 0.05$ ).

**Conclusions:**

The education about breast cancer risk factors and BSE received during school should be given to all students, not only to students studying in health departments. Structuring and implementation of self training programs is essential in order to increase awareness of BSE and to perform it regularly.

**Points for discussion:**

Shall family practitioners be more involved in training students and patients about breast self examination?

Family practitioners can play an important role in primary prevention of breast cancer.

Family practitioners can play an important role in the early diagnosis and follow-up of breast cancer patients.

**Poster / Ongoing study no results yet****Poly-pharmacy in the elderly as a risk factor for cognitive impairment**

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**Keywords:** Elderly, Poly-pharmacy, Multi-morbidity, Drug interaction, Cognitive impairment

**Background:**

The prevalence of multi-morbidity in the elderly is high (50 to 98%). Individuals with multi-morbidity, especially the elderly, are predisposed to more hospitalizations using multiple medications at the same time. This leads to new conditions as a result of drug interactions and can manifest with cognitive impairment.

**Research questions:**

Are drugs interactions associated with quality of life and daily active functions in elderly? What is the impact of socio-economic conditions and lifestyle and their association with poly-pharmacy and cognitive disorders? What is the role of poly-pharmacy and multi-morbidity in the development of cognitive impairment and dementia? Will the intervention improve the quality of life?

**Method:**

Multi-center prospective randomized study, conducted by 20 family medicine specialists in eight regions in the country. Ten of them will carry out the intervention of rational prescribing of drugs and assessment. Screening and standard care will be performed in the other ten.

400 respondents will be included.

10 family medicine specialists will conduct a Medication Appropriateness Index (MAI), an anticholinergic score of previously used drugs with (ACB) and conduct a rational prescription of drugs using the STOPP/START criterion.

Inclusion criteria: Elderly (<65 years) with multi-morbidity ( $\leq 3$  chronic diseases) and poly-pharmacy ( $\leq 5$  drugs in the last 3 months).

Exclusive criteria: people with fatal illness that are at the end of life, blind, deaf and dumb.

**Results:**

Shall be presented to health care institutions where instruments for early diagnosis of cognitive deficits in patients with multi-morbidity and poly-pharmacy would be indicated. It is expected that in the future doctors working with the elderly and people with multi-morbidity and poly-pharmacy, primary care physicians, will apply a holistic and proactive approach.

**Conclusions:**

Implementing appropriate poly-pharmacy interventions may improve patients' cognitive function which may affect quality of life. This should confirm the hypothesis that STOPP/START intervention will improve cognitive functions and quality of life.

**Points for discussion:**

Appropriate vs. inadequate poly-pharmacy - improve quality of life and prevent disease consequences, or detrimental to patients' health?

Assessment for cognitive impairment

Stopp/Start tool

**Poster / Published****Quality of life and physical activity in prefrail individuals over 70 years in primary care**

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**Keywords:** Pre-frailty, Quality of Life, Exercise, Aged, Primary Health Care, Sex.

**Background:**

Frailty is an increasing problem among the elderly people and it is more frequent in women. Literature reports that physical activity improves either the function and quality of life, but there is a lack of evidence regarding changes in pre-frailty individuals and differences between men and women

**Research questions:**

Is there an association between health related quality of life (HRQoL) and physical activity in a pre-frail population and what is the role of gender?

**Method:**

Descriptive cross-sectional study in pre-frail individuals over 70 years old in twelve primary care health centers carried out between 2018 Jun and 2020 March in Madrid, Spain. The studied variables were collected by clinical interview: Physical activity (Yale), HRQoL (EQ-5D-3L), sociodemographic and clinical variables (comorbidity, depression and pain). Descriptive analysis and multiple linear regression for the whole population and stratified by gender, using the quality of life as dependent variable. Funding: Grant PI 17/01887 (Carlos III Health Institute and FEDER)

**Results:**

The study involved 206 pre-frail individuals (152 women) with an average age of 78 years. Women had less comorbidity (32.3% versus 55.6%) but more pain (60.5% versus 44.4%) than men. 55.9% of the physical activity realized by participants was attributable to relaxed walk; women did more physical activity than men ( $p > 0,01$ ). Mean HRQoL was 0.74 (CI95%:0.72-0.77) in utility score and 68.1 (CI95%:65.9-70.3) in the EQ-VAS. To walk more than 5 hours a week was associated with better quality of life by EQ-5D utility score (0.08, 95%CI: 0.03 to 0.14), and by EQ-VAS score (5.38, 95% CI: 0.25 to 10.51) when adjusted by age, pain and depression

**Conclusions:**

Physical activity was associated to better quality of life in a pre-frail population of individuals older than 70 years old. Women did more physical activity without finding differences in quality of life with men

**Points for discussion:**

Does sex influence the relationship between physical activity and quality of life in the pre-frailty population over 70 years?

Does pain influence quality of life differently in men than in women?

What is the role of the family doctor in promoting physical activity among older people?

**Poster / Finished study****Very simple PDF-based online aging game equivalent enhances medical students' understanding for elderly patients**

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**Keywords:** online learning, aging game, aging simulation, geriatric medicine, awareness

**Background:**

Aging simulation games are established tools in undergraduate medical education aiming to provide medical students with insights into elderly patient's everyday life and raise awareness for age related difficulties.

At Leipzig University, a 90-minute aging simulation game is part of a compulsory geriatric medicine course in the fifth study year (of six). In the course of online teaching during the covid-19 pandemic, we replaced the classroom-based simulation by a very simple online version based on four PDF documents containing audio and video links, directives for "do it yourself" experiences, and impulses for reflexion.

**Research questions:**

Is a simple, self-directed online aging game able to provide students with relevant experiences and insights to enhance their understanding for elderly patients?

**Method:**

Anonymous post hoc survey among 277 5th-year medical students eligible for the course in 2020. Descriptive statistical analysis, and qualitative analysis of students' free-text responses regarding their main insights from the course.

**Results:**

Response rate was 92.4% (n=256, Ø age=26 years, 60% women). 88% of the students enjoyed working on the course, and 83% perceived it as practice-orientated. 75% reported to have gained new personal insights and 60% new professional knowledge. Although 92% reported an enhanced understanding for elderly patients, 85% disagreed that online simulations may generally replace real-world aging games. PDF documents containing audio and video-links directly imitating conditions (visual or hearing impairment) were rated best. Students' main insights from the course (qualitative data) most frequently referred to aspects of professional interaction with geriatric patients, knowledge about conditions/diseases, role reversal, and enhanced empathy.

**Conclusions:**

Very simple online aging game equivalents are suitable to provide students with relevant insights and raise awareness for elderly patients' needs. They might be alternatively implemented into the education of health professionals where resource intensive real-world simulations are unfeasible.

**Points for discussion:**

Which other content could be suitable to enrich the students' experiences?

How can the results of this study be integrated in blended learning concepts?

How were the results affected by the fact that no presence teaching was possible at the time of the survey?

**Poster / Finished study****Adaptation of the Short Form of the Tobacco Craving Questionnaire into Turkish**

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**Keywords:** Tobacco craving, validity, methodological study

**Background:**

Tobacco use is one of the leading risk factors among the preventable causes of illness and death, as it causes many health problems. Severe substance use craving is a factor that complicates compliance with treatment in smokers. For this reason, it is important to determine the craving desire. Tobacco Craving Questionnaire-Short Form (TCQ-SF) is a practical, short and easily applicable measurement tool for cigarette craving.

**Research questions:**

There is no short and easy-to-use scale adapted to Turkish that measures the strength and frequency of craving for tobacco use together. In this study, it was aimed to adapt the TCQ-SF scale into Turkish, which has proven validity and reliability for tobacco craving.

**Method:**

The research was designed in methodological type. Data were collected electronically during the period of social closure due to COVID-19. As data collection tools; TCQ-SF, Positive and Negative Affect Scale and Fagerstrom Nicotine Dependence Scale were used. Language adaptation, confirmatory factor analyses, explanatory factor analysis, known groups and discriminant validity analyzes of TCQ-SF were applied.

**Results:**

214 people were included in the study. The 12-item cronbach's alpha value of TCQ-SF was calculated as 0.939. The one-dimensional model in the original scale was evaluated with confirmatory factor analysis. Since the model fit indices were not good it was determined that the original structure of the scale did not show sufficient fit. The explanatory level of the variability of the items constituting the two-dimensional structure produced from the explanatory factor analysis to the scale is 74.71%. In the comparison between scales made within the scope of discriminant validity analysis; significant positive correlations were found between the other scales of the Tobacco Craving Questionnaire-Short Form ( $p < 0.05$ ).

**Conclusions:**

It is thought that TCQ-SF Turkish will be an important guide in the planning of smoking cessation treatment in our country by determining the desire for smoking craving.

**Points for discussion:**

Do you have any methodological suggestions?

How do you think this scale can contribute to the practice of smoking cessation treatment?



**Poster / Ongoing study with preliminary results****Evaluation of Drug Use Status, Rational Drug Use Level and Interaction Status Between Drugs of Patients Who Have a Chronic Disease and Apply to The Education Family Health Center(FHC) to Prescribe Drugs**

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**Keywords:** Chronic disease, Rational Drug Use, Drug interaction

**Background:**

Rational drug use(RDU) is the ability of patients to reach the drug that is suitable for their clinical needs, in the required dose, for the necessary time and in a cost effective way. As a result of irrational drug use, unnecessary health expenditures increase and many undesirable drug reactions can be seen.

**Research questions:**

Is the RDU level of the patients admitted to the FHC sufficient and what are the factors affecting it?

**Method:**

It was planned to include 252 individuals over the age of 18.A questionnaire and RDU scale, consisting of questions such as the sociodemographic characteristics of the participants, chronic disease, drug use histories, etc. were administered face-to-face.Those who get 35 points and above from the scale are considered to have sufficient RDU level.The data obtained from the study were analyzed with the SPSS-25 statistical program.

**Results:**

172 people have participated in our study so far,64.5% of the participants are women,58.1% graduating from primary school and 83.1% are married.48.8% of the individuals were using 4 or more drugs.When we look the drug interactions 31.4%of them have high levels and 2.3% of them have very high levels of interactions.The RDU scores of 64% of the participants were 35 and above.The RDU scores of women were found to be significantly higher than that of men( $p=0.02$ ).The mean age of those with polypharmacy was found to be significantly higher( $p=0.01$ ).As the level of education increased, the RDU scores of the individuals increased significantly( $p=0.00$ ), while the rate of polypharmacy decreased( $p=0.07$ ).There weren't significant relationship between RDU score and marital status, monthly income and smoking( $p>0.05$ ).

**Conclusions:**

It was determined that polypharmacy and interactions between drugs were high in patients who applied to FHC;An inverse relationship was found between education and polypharmacy, and a direct relationship was found between the level of RDU.Family physicians have an important role in educating patients

**Points for discussion:**

The RDU level of the patients admitted to the FHC and the factors affecting it.

The relationship between patients' polypharmacy status and drug interactions

What can we do as family physicians to solve these problems?

**Poster / Almost finished study****German primary care data collection projects: a scoping review**

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**Keywords:** general practice, routine data, ambulatory, data extraction, Germany,

**Background:**

Worldwide, there exist a number of large primary care data collection projects using anonymized electronic health records extracted directly from practice management systems. The projects enable important health services research questions to be answered e.g. by including detailed clinical input data or by allowing for disaggregate analysis of outpatient data.

**Research questions:**

Since the projects as a whole are very country-specific, the objective of this scoping literature review is to summarize research projects based on electronic health records in primary care in Germany.

**Method:**

From May to June 2021, two databases (MEDLINE and LIVIVO) relevant to health services research were sought to cover English and German language articles. Terms identified for the search string followed three dimensions: "general practice", "routine data" and "Germany". To identify missing literature, project homepages were searched, project managers were interviewed, and references of selected articles were screened.

**Results:**

After reviewing 778 references, 153 publications were included. We identified four active and two terminated primary care data collection projects in Germany since 1992. The projects strongly differ in terms of their funding, registry population, number of practices included, ways of data collection and access, technical implementation, variables collected and recruitment strategies. Studies that have emerged from the projects most often include pharmacoepidemiological and health utilization topics such as drug safety monitoring, prescription patterns, comparing real-life treatment with guidelines for major diseases, multi-morbidity and consultation events. The most common study designs identified are cohort, cross-sectional, and case-control. Many publications addressed methodological issues like project descriptions, methods of data extraction, preparation and analysis.

**Conclusions:**

German primary care data collection projects deal with many complex methodological, technical and data protection hurdles including practices recruitment and software compatibility issues. Moreover, such registers often operate in legal gray areas in terms of longitudinal data extraction. Only a small part of the studies identified actually included data.

**Points for discussion:**

What experience has been gained with research based on electronic health records?

What lessons can be learned from primary care data collection projects in Germany?

**Poster / Ongoing study with preliminary results****Management of tick bites and suspicion of Lyme disease in Belgian primary care : compliance with national guidelines**

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**Keywords:** national guidelines, Lyme disease, tick bite, management of infection**Background:**

Lyme disease is the most common tick-borne disease in Europe. Diagnosis is confirmed upon Erythema Migrans (EM) appearance, or serology testing. Suspicion of Lyme disease linked to other clinical manifestations than EM should be verified by serology. Only symptomatic confirmed cases require prescription of antibiotics.

**Research questions:**

The objective is to assess GP's compliance with 2017 Belgian national guidelines regarding tick bite and Lyme disease suspicion.

**Method:**

A 6-year retrospective population-based study based on data collected by the Belgian network of Sentinel General Practices (SGP). GPs report on a case-by-case basis using an online questionnaire. Data from 2015 to 2020 were analyzed.

**Results:**

During the study period, 1618 cases were reported. In our sample, 47.9% patients were female and 52.1% male. 74.7% of tick bites occurred in Belgium. Majority of patients had Erythema Migrans (35.8%) or no symptoms (45.8%). Other clinical manifestations, such as arthritis (4.9%), less common.

Serology test for Lyme disease was ordered by GPs for 32.8% of patients with EM, 83.8% of patients with arthritis, 90% of patients with neurological symptoms, 57.1% of patients with carditis, 39.6% of patients with other symptoms and 14.2% of patients without symptoms. Antibiotics (doxycycline or amoxicillin) were prescribed in 92.6% of patients when symptom was EM, 62.5% for arthritis, 65% for neurological symptoms, 71.4% for carditis and 7.7% in asymptomatic patients.

**Conclusions:**

This study yields recent data on tick bites and Lyme disease in general practice in Belgium. GPs were not completely compliant with current national guidelines. Indeed, serology was ordered by GPs when patients had EM as symptom (32.8%) against national recommendations. Moreover, serology was not always used to verify suspicion of infection. Furthermore, some GPs prescribed antibiotics to asymptomatic patients. Compliance and knowledge regarding the national guideline should be investigated further by conducting semi-structured interviews and running a pre-post analysis.

**Points for discussion:**

GPs' compliance with national guidelines

Barriers to comply with guidelines

Appropriate management of tick bite and suspicion of lyme disease

## Promoting health critical thinking by and for students: utopia or reality? The example of the Critical Thinking Days in Nice

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**Keywords:** pedagogy; education; medicine; problem-based learning; pharmaceutical industry

### Background:

Contact with health industry representatives from the initial training stage influences future prescribers on the type and quantity of molecules they will prescribe. Numerous initiatives have offered training in critical appraisal of pharmaceutical promotion. However, most medical students considered that they were not sufficiently trained on this subject and wanted more teaching on this subject.

### Research questions:

Thus, a group of students has started to organise peer training for critical thinking in health: the "Journées de l'esprit critique niçois".

### Method:

This paper describes the first two courses, which took place at the Faculty of medicine in Nice. The first day consisted of four workshops. They dealt with: health communication, analysing scientific articles, the relationship between health care providers and industry, and debating the pharmaceutical sales visits in clinical settings. The second day consisted of three workshops followed by a screening of the movie "La Fille de Brest". The workshops dealt with: social psychology in health, presentation of information, the Mediator case. The workshops were animated using innovative pedagogical techniques.

### Results:

The participants had a variety of backgrounds. Participation rates for the evaluations of the two days were 66.5% and 46%. The average rating given to the workshops was 8.15/10. Participants expressed appreciation for the teaching methods used.

### Conclusions:

Training and awareness of pharmaceutical promotion of students by their peers was not only feasible but highly valued by medical students. However, we lack feedback on the impact of these courses in their clinical practice. The "Journées de l'esprit critique niçois" was the first student initiative to train and raise awareness of critical thinking and pharmaceutical promotion techniques in this format. In a context of tensions between the student needs for independence training and universities struggling to meet their social responsibility, peer training of students is an efficient response to an ethical and societal issue.

**Poster / Finished study****What's in Their Mind? High School Students' Perspective of Vaccination**

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**Keywords:** adolescent health, vaccine hesitancy, vaccination, knowledge, decision-making

**Background:**

Vaccine hesitation has become one of the highly debated topics today. The number of the vaccines that are applicable for adolescence is very few and adolescents' visit to primary care is limited to acute problems. So it is difficult to observe the health status of the adolescents periodically.

**Research questions:**

What is high school students' knowledge, attitude and behaviour about vaccination?

**Method:**

This descriptive type study and has been conducted during february and march, 2021. The researchers use the "lockdown" as an opportunity and 571 Turkish high school students between the ages of 13-19 who share an online homework site gave consent to join the study. Participants The "Knowledge, Attitudes and Behaviors of High School Students on Vaccination" questionnaire, consisting of 33 close ended questions, was applied online. The data was analyzed with the SPSS 22.0 program.

**Results:**

All of the participants 60.9% stated that vaccination was effective in prevention, 26.3% were uncertain, 48.3% thought vaccines were safe, while 33.6% were uncertain and 17.9% were stated them unsafe. The number of the students who talk about vaccination with their parents were higher if one of the family members or close relatives is a health professional( $p < 0.05$ ). The frequency of being vaccinated against influenza was higher among the students who were informed by the health professionals( $p < 0.05$ ). The participants who stated that he would accept vaccination for Hepatitis C if there was a vaccine developed were significantly higher among the participants who were informed by health workers about vaccination or advised by their parents ( $p < 0.05$ ).

**Conclusions:**

The education level of the parents and having talked to their parents about vaccination reduce vaccination hesitancy. Being informed about vaccination makes it easier for adolescents to accept it. It would be beneficial for healthcare professionals to encourage both adolescents and their families to talk about this issue.

**Poster / Finished study****Are primary care providers ready to implement goal-oriented care? An explorative study using the Normalization Process Theory**

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**Keywords:** Goal-oriented care, person-centered care, chronic care, multimorbidity, primary care providers

**Background:**

GOC is a possible approach to more coordinated and integrated care and tailors care to patients' personal life goals. The concept has gained interest among policy makers and researchers but the main drivers for successful implementation are the Primary Care Professionals (PHCPs) who need to see added value of GOC in order to embed it into their daily practice. Normalization Process Theory (NPT), developed to understand the processes of implementing new ways of organizing care, offers a useful lens to understand adoption of GOC in primary care practice.

**Research questions:**

Are primary care providers ready to implement goal-oriented care?

**Method:**

PHCPs (n=131) who participated in a 2-hour community meeting on GOC were asked to complete the Normalization Measure Development survey (NoMAD) survey. This 23-item survey is based on NPT and describes participants' views about how an intervention would impact their work, their expectations about it, and whether it could become a routine part of their work.

**Results:**

The NPT-constructs coherence (sense-making work) and cognitive participation (relational work) showed positive tendency towards implementation of GOC. The participants had an initial understanding on GOC and their was much interest in supporting and start working with this approach. The other constructs collective action (operational work) and reflexive monitoring (appraisal work) will need further efforts to trigger implementation. A common ground is needed to integrate GOC as a common practice which can be achieved by intensive interprofessional collaboration.

**Conclusions:**

PHCPs seemed to welcome GOC as an innovation and there was willingness to adopt it in daily practice. Further specification of GOC into a concrete intervention with specific guidelines on how to provide is needed to enable a deeper understanding of the concept and how to put it into practice.

**Poster / Almost finished study****Does Any Transverse and Invariable Barrier for Writing and Carrying Out an Advance Directive Exist?**

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**Keywords:** Advance directive, uncertainty, conflict anxiety

**Background:**

Advance directives represent a strong societal debate, and improving its completion rate a subject of interest. After the identification of barriers from specific populations accomplished by the ER 7479 SPURBO, a question occurs: does any transverse and invariant barrier for writing and carrying out advance directives exist?

**Method:**

To resolve the question, a pragmatic approach inspired by the Grounded Theory had been chosen. It combined a set of systematic reviews of the literature and qualitative studies previously done by the EA-7479-SPURBO used as datas. A conceptual model, resulting from the synthesis of all this research, was produced to answer the research question.

**Results:**

Eleven open codes, three sub themes had been spotted, gathered under an invariant and transversal theme: the conflict anxiety, which represented a transversal barrier as the research question asked.

As a way to understand the mechanism of this barrier, a conceptual model was proposed. Eleven accessible and empirical elements acted in a synergic way to irrigate three theoretical concepts (Altered confidence, advance directive's viability, leading to a change in behaviour) improving uncertainty. By doing so, the three concepts gave access to the core of the conceptual model, the conflict anxiety.

**Conclusions:**

By submitting this, it allowed a broader vision of the advance directive's concept and may allow a better comprehension of that barrier standing against the application of advance directive, and so for every person involved.

**Points for discussion:**

Are you confronted with advance directives in your respective countries?

Do you think that this question should be harmonized in europe? and do you think it is possible?

**Poster / Finished study****Intelligent Monitoring Systems applied to Health. Opinion of the actors involved: patients, carers and professionals. TeNDER Study - 875325**

Cristina María Lozano Hernandez, Rodrigo Medina García, Araceli Garrido Barral, María Del Canto De Hoyos Alonso, César Augusto Minue Lorenzo, Teresa Sanz Cuesta, Elena Polentinos Castro, María Isabel Del Cura González, Grupo Tender 875325

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**Keywords:** Telemonitoring , Chronic Disease , Caregivers, Primary care

**Background:**

Intelligent monitoring systems can facilitate the follow-up of chronic patients by healthcare professionals. By means of sensors for movement, location, voice detection and facial expressions, changes in health status can be recognised. Before implementing the devices discussed above, it is necessary to get feedback on their usefulness from all the actors involved.

**Research questions:**

¿Qué opinan pacientes, cuidadores y profesionales, sobre la utilidad de los Sistemas Inteligentes de Monitorización? To determine, from the opinion of patients, caregivers and professionals, the usefulness of Intelligent Monitoring Systems in cardiovascular disease, Parkinson's disease and Alzheimer's disease.

**Method:**

Cross-sectional descriptive observational study in patients (with cardiovascular disease, Parkinson's disease and Alzheimer's disease), caregivers and health professionals in primary care centres. Each functionality was explored with a Likert scale (1-5), the main variable was opinion through a score (9-45 points); in addition, sociodemographic data, health status and technology use were collected. Descriptive and bivariate analyses and multilevel linear regression models were performed.

**Results:**

20 patients (55% male), 21 caregivers (85.7% female) and 13 health professionals (84.6% female) were surveyed; their mean age was 77.5(1.5), 59.1(2.7) and 44.5(4.1), respectively. Overall, the lowest mean points on usefulness were reported by patients 23.9(2.1), followed by caregivers 34(2.1) and professionals 38.9(1.1). The most useful functionality reported by patients was "recording of constants" 3.3(0.3); for caregivers "smart calendar" 4.6(0.2); for professionals "external location" and "adherence" 4.7(0.1). Younger age was linked to higher scores for patients (-1.18; 95%CI:-2;-0.39) and caregivers (-0.43; 95%CI:-0.77;-0.09); while for professionals, professional category was linked (5.57; 95%CI:1.43;9.70).

**Conclusions:**

The usefulness of the Smart Monitoring Systems for the chronic patients studied is rated by the patients themselves as not very useful, while caregivers and professionals rate it as useful. The older the patients and carers are, the lower the perceived usefulness. Nursing professionals rate its use as more useful than medical professionals.

**Points for discussion:**

Are older people and their carers ready to use Smart Monitoring Systems?

As healthcare professionals, what do we think would be useful for us from the incorporation of Smart Monitoring Systems in chronically ill patients?

European funded projects involving older patients with chronic diseases and everyday technologies are on the rise. What are our views on this reality as primary care health professionals?



**Poster / Ongoing study no results yet****Investigation of Asthma and Allergy Risk and Affecting Factors in School-Age Children (7-14 Years)**

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**Keywords:** Asthma , Allergy , Children, Screening

**Background:**

Although the incidence of asthma and allergic diseases is high (approximately 15%) in school-age, many children may not be diagnosed yet. Undetected chronic conditions can lead to symptom development and loss of school days and social activities over time.

**Research questions:**

The aim of this study is to investigate the risk of asthma and allergy in school-age children and the factors associated with it. High-risk children are planned to be referred for further evaluation.

**Method:**

This prospective study was planned in a single-centered, descriptive, and relationship-seeking design. The universe of the research will consist of school-age children between the ages of 7-14 who are educated in primary and secondary schools in Gaziosmanpaşa, İstanbul. The sample will consist of at least 210 students and who are declared to be willing to be included in the study by their parents from the schools selected according to their socioeconomic level. Children between the ages of 7 and 14 who are literate, whose parents agree to participate in the study, who have the ability to understand and answer the questions asked, will be included in the study. Those who are under the age of 7 and over the age of 14, those whose parents and/or those have a condition that may prevent communication (such as hearing and speech impairment) and those who are illiterate will be excluded from the study. In order to obtain the data, a patient information form questioning the sociodemographic characteristics and general health status of children and their parents, and A School-Based Asthma and Allergy Screening Questionnaire which includes questions to be filled in by parents and children, will be used. While evaluating the findings in the study, IBM SPSS Statistics 22 program will be used for statistical analysis. Significance will be evaluated at the  $p < 0.05$  level.

Presentation on 14/05/2022 11:30 in "Poster Session 7: Miscellaneous II" by Zeynep Yağmur Ertürk.

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Motivational Interviewing for alcohol abuse - a systematic review**

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**Keywords:** Motivational Interviewing; Alcohol; Systematic Review

**Background:**

Motivational Interviewing (MI) is a widely used intervention in the field of addiction treatment with the aim of building a person's intrinsic motivation and commitment to behaviour change. It is a versatile intervention that has been implemented differently in various clinical settings in nearly four decades and is challenging in terms of assessing its effectiveness. The present work was developed within the context of updating the Cochrane review 'Motivational interviewing for substance abuse' by Smedslund et al., 2011 and focuses exclusively on alcohol.

**Research questions:**

To assess the effectiveness of MI for risky drinking behaviour, alcohol abuse or dependence in relation to substance use and readiness to change.

**Method:**

A systematic search of five electronic databases and a registry was conducted for randomized controlled trials published from 2010 to 2021. RCTs in which people with risky drinking behavior, alcohol abuse or dependence of any age received MI in an individual session were included. The control group received either no intervention, treatment as usual or another active intervention without MI.

**Results:**

3451 references were identified through database searching. After removal of duplicates, the title and abstracts of 1664 studies were screened. Of these, 227 were included for full-text review. 21 studies were extracted for the alcohol specific review. At the EGPRN conference, we will provide an overview of the study population characteristics and the results for specific alcohol outcomes and different subgroups. We will discuss potential biases, strengths and limitations of the review.

**Conclusions:**

The aim of our systematic review is to update the evidence base and to assess the effectiveness of MI in relation to problematic alcohol use. Knowledge of treatment options for patients with alcohol-related disorders helps to integrate their therapy more successfully into daily practice routines and to take it into account while optimizing the organisation of primary care practices.

**Points for discussion:**

Limitations of operationalizing psychological interventions in clinical research and how to overcome them.

What has been your experience with use of MI to treat patients with alcohol related problems in general practice?

**Poster / Finished study****Quality control of the laboratory examinations of the Microbiological laboratory of Health Center of Vari**

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**Keywords:** QUALITY ASSESMENT, MICROBIOLOGICAL EXAMINATIONS

**Background:**

This work is done in the context of quality control of the health services provided by the Microbiological laboratory of Health Center of Vari (H.C.V.). This control is done in the context of the completion of Health Balanced Scorecard (HBSC), which is a quality assurance tool, which is used by H.C.V. More specifically this control concerns the part of medical procedures chapter of HBSC.

**Research questions:**

How is the quality of services provided by the Lab of H.C.V.?

**Method:**

In all the Microbiological laboratories of both the public and the private sector, there are ISO systems with which it is possible to control the quality of the performed laboratory examinations.

It will be examined whether the ISO systems are applied in the examinations which are done in the Lab of H.C.V.

**Results:**

In an inspection which was carried out, the following were found. Every morning before the start of operation of the machines of the Microbiological laboratory of, H.C.V a check is made with a specific standard which is available from the manufacturer. Also from time to time a check is made with the laboratory of the Asclepieion Hospital of Voula

**Conclusions:**

The operation of the Microbiological laboratory of H.C.V follows the foreseen programs I S O. Therefore it meets the conditions of quality operation, at least at the level of internal control

**Points for discussion:**

Organization of laboratory of a primary care unit.

**Theme Paper / Finished study****Adequate surveillance in Maternal Health in Primary Care - Quality improvement work**

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**Keywords:** Maternal Health, Pregnancy, Primary Care

**Background:**

Surveillance of low-risk pregnancy has key periods and parameters to assess maternal-fetal well-being. This work aimed to evaluate and promote continuous quality improvement in this field.

**Research questions:**

How adequate is the surveillance of low-risk pregnancies?

**Method:**

A retrospective evaluation was done using fifteen parameters. The audit was carried out in two stages. In the first stage, pregnancies corresponding to births between May and October 2019 were evaluated. The most frequent non-compliances were identified and presented at a team meeting, and improvement strategies were defined. In a second step, pregnancies corresponding to births between July and September 2021 were evaluated. Regarding the parameters that correspond to an indicator of the Primary Health Care Identity Card, in the first phase, the objective was to reach the "minimum accepted" value defined. In the second phase, in the parameters whose percentage was initially lower than the "minimum accepted", the goal was this value; In those whose percentage was initially higher than the "minimum accepted", the goal was the "minimum expected"; in the parameters not included in the Identity Card, the goal was 70%.

**Results:**

In the first stage, 32 pregnant women were included. There were three parameters whose percentage of compliance was lower than the "minimum accepted": registration of the 2nd trimester ultrasound and laboratory tests of the 2nd and 3rd trimesters. Record of 1st trimester laboratory tests was between the "minimum accepted" and the "minimum expected". Regarding the parameters that do not have any established indicator, all reached the target. In the second stage, 17 pregnant women were included. We reached the goal of recording results from the 2nd trimester obstetric ultrasound and 3rd trimester laboratory tests. The improvement in 1st and 2nd laboratory tests was not sufficient to achieve the objectives.

**Conclusions:**

Although there is room for improvement, we consider this intervention to be positive.

**Theme Paper / Finished study****Contextual factors associated with successful implementation of the evidence-based health promotion intervention Prescribe Vida Saludable**

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**Keywords:** health promotion, implementation science, primary care

**Background:**

The benefits of primary care health promotion are well-documented, yet primary prevention lifestyle advice is not typical routine clinical practice in primary care.

**Research questions:**

This study aims to elucidate the contextual factors associated with the implementation effectiveness of an evidence-based health promotion intervention in primary care centers in Basque Country, Spain.

**Method:**

Seven primary care centers participated in the 'Prescribe Vida Saludable' (PVS) phase III intervention-implementation effectiveness trial. After 18 months of participation, centers were classified as having high, medium, or low implementation effectiveness based on the proportion of their population who received the 5A's intervention. In this qualitative study, seven focus groups with the participating staff of six primary care centers were conducted. Three trained researchers coded the transcripts using The Consolidated Framework for Implementation Research (CFIR) codebook available here: <https://cfirguide.org/constructs/>.

**Results:**

Of the 36 CFIR constructs, 14 were associated with implementation performance: 2 intervention characteristics (relative advantage, adaptability), 1 outer setting construct (needs & resources), 4 inner setting constructs (structural characteristics, networks & communication, culture, implementation climate), 2 characteristics of individuals (self-efficacy, individual stage of change), and 5 process constructs (engaging, engaging champions, engaging external change agents, executing, reflecting & evaluating). Of these, three of the inner setting constructs and two of the process constructs (engaging champions, executing) were positively related with implementation effectiveness. In contrast, smaller centers had higher implementation effectiveness, indicating a negative relationship.

**Conclusions:**

Inner setting and process factors are especially important to effective implementation of health promotion interventions in primary care. In those centers with smaller size, strong existing communication networks among staff (e.g., regular meetings), a culture of teamwork, a favorable implementation climate, champions who promote the intervention and motivate colleagues, and the capacity to execute their planned strategy reached higher percentages of their assigned populations than those without these characteristics.

**Points for discussion:**

To what extent do you think that these factors, especially those related to inner setting, are modifiable?

Do you use implementation science frameworks in your own research? Why or why not?

**Theme Paper / Finished study****Exploring the views of primary care paramedics on the screening of addictive disorders**

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**Keywords:** Screening - substance use disorders - allied health occupations**Background:**

Early screening for substance use disorders is recommended as part of primary care. The objective of the evolution of the European health system is to include allied health professionals in this identification. The appropriation of their new role has not yet been explored.

**Research questions:**

To explore the viewpoint of allied health professionals in primary care on the screening of substance use disorders.

**Method:**

This qualitative study inspired by grounded theory was conducted between August 2018 and July 2019. It included 13 semi-structured individual interviews and 4 focus groups of primary care health professionals (physical therapist, nurse, midwife, pharmacist, and dentist) recruited at their practice settings.

**Results:**

Paramedics described the advantages of their profession for addiction screening: home visits, prescription history, familiarity with intimate topics, close consultations, .... Despite daily observation positions, they sometimes remained silent witnesses "I suspected an addiction but I told myself 'there's no point in bringing it up'"; for fear of dropping a bomb "I got 'What are you meddling with?' " and resigned: "You try and then you don't try anymore". Their habits of centered-prescription practice "it's fine with them that we just come in for the care. Their feeling of powerlessness was a barrier to their screening process. They felt closer to the patients to talk about intimate subjects and yet less legitimate than the doctor to talk about addictions. Finally, their desire for multidisciplinary was limited by the fear of disturbing the doctor and the confusion between betrayal and medical secret.

**Conclusions:**

Paramedical professionals claimed to have a complementary role to play in the identification of addictions. Their reluctance echoes the concept of self-censorship already described in the studies with addictologists and patients.

**Points for discussion:**

How to include specific contributions from paramedic practice on screening for substance use disorders?

how to optimize the practice of family medicine in these new interprofessional settings?

**Theme Paper / Study Proposal / Idea****A More Functional and Effective Family Medicine Practice Is Possible**

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**Keywords:** Functional and effective family medicine practice, violence in health, prestige of primary health care services, motivation of family physicians

**Background:**

The family medicine practice has been applied by the Ministry of Health of the Republic of Turkey since 2004. In spite of It receiving many criticisms, it is a reform in Turkey's primary health care services.

**Research questions:**

Is a more functional and effective family medicine practice possible?

**Method:**

We can say that it is the most rational approach to reveal the main problems and implement possible solutions to improve family medicine practice in our country.

In order to achieve this; professional organizations, trade unions, and the ministry of health can overcome problems by working closely.

**Results:**

Significant problems and solutions:

1) Violence in health:

This is not only a problem of primary health care institutions and the whole health community. Without solving this problem, it is impossible to increase the motivation of health workers involved in family medicine practice.

2) Lack of dialogue:

In this regard, more official institutions have a duty.

3) Increasing the prestige of primary health care services, in particular, the family medicine practice.

- Providing a response note to the family physician regarding by the branch specialist in the 2nd and 3rd level health institutions.

- Providing imaging examinations at a basic level will increase the quality of service in primary care.

- Inappropriate rest report requests from the physician (for a social event), which has an essential place among the applications, should be prevented by introducing different legal measures.

4) Education and research efforts of family health center staff should be supported. Those who are active in this field should be rewarded and encouraged.

5) Patients must be obliged to make an appointment: It shouldn't be an application saying I was passing by the door.

**Conclusions:**

Increasing the motivation of all professionals working in family health centers, especially family physicians, is an inevitable prerequisite for better family medicine.

**Points for discussion:**

Which issues should be highlighted in order to improve family medicine practice in Turkey?

**Freestanding Paper / Finished study****Coronavirus Anxiety in Teachers Working in Primary and Secondary Education**

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**Keywords:** Coronavirus anxiety in teachers, health anxiety inventory (short version), EUROPEP**Background:**

Anxiety is a response to vague and uncertain threats and dangers with physiological, psychological, and behavioral patterns. During the pandemic, COVID-19 disease health anxiety is expressed as excessive concern about one's health or perceiving the changes in the body as the harbinger of a severe illness.

**Research questions:**

In this study, we aimed to reach the participants' opinions about health anxiety levels, coronavirus anxiety levels, and their family physicians and determine the relationship between these variables.

**Method:**

The research is of cross-sectional-analytical type. The questionnaires were administered face to face. We used four instruments to collect data: sociodemographic information form, health anxiety inventory (short version), coronavirus anxiety scale, and EUROPEP family physician evaluation form. Descriptive statistics analysis was used. The level of significance in the study was accepted as  $p < 0.05$ . The research universe consists of teachers (a total of 2000 teachers) working in primary and secondary education in the province of Uşak city. We calculated the sample size as 323 with a 95% confidence interval and a 5% margin of error.

**Results:**

54.2% of the participants were female, and 45.8% were male. The average age of the participants was 40.32. 15.17% of the 323 participants had a chronic disease. According to gender, teachers have a significant difference in their coronavirus anxiety scores ( $P=0.032$ ). The mean score for coronavirus anxiety of female teachers is higher than that of male teachers. The coronavirus anxiety score of participants with any psychological disorder is much higher than those without any psychological disorder.

**Conclusions:**

Having health anxiety may be a predictor for having coronavirus anxiety. It can be conceivable that motivating the patient, eliminating his worries and fears, gaining the physician's trust in the patient, and contributing positively to the psychological aspect of the patient-physician relationship may reduce health anxiety.

**Points for discussion:**

If we want to carry out this study in a larger population and different centers, what suggestions do you have in terms of method?



**Web Based Research Course Presentation / Study Proposal / Idea****Opinions of family medicine residents about health advocacy training in residency training.**

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**Keywords:** health advocacy, family medicine, residency training

**Background:**

Health advocacy as an essential role for physicians, also an integral part of the principles of family medicine. It relates to the physician's responsibility to identify and respond appropriately to the social determinants of health and the healthcare needs of vulnerable and marginalized populations. Our aim in this study is to evaluate the training on health advocacy in the family medicine specialty training program by revealing the views of KTU family medicine residents on health advocacy.

**Research questions:**

What are the opinions of the residents about health advocacy training in family medicine residency training?

**Method:**

A qualitative study will be conducted. All Ktū family medicine residents will be invited to participate in the research, and those who volunteer will be included. Data will be obtained through semi-structured interviews. In the analysis of the data, the transcripts of all interviews will be analyzed by the researchers and codes and themes will be created. Researchers will come together as much as necessary and it will be ensured that there is a consensus on the themes.

**Results:**

Study hasn t conducted yet.

**Conclusions:**

Study hasn t conducted yet.

**Points for discussion:**

Is the health advocacy training during the residency period sufficient?

What is the opinions of residents about health advocacy training?

## **The effect of telemedicine usage among hypertension patients in a primary care centre; randomized controlled study**

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**Keywords:** telemedicine, hypertension, primary care,

### **Background:**

Electronic processes and communication technologies are more often employed to provide healthcare services to caregivers and their patients. Such solutions are currently referred to as e-health, the most popular and widely distributed being those based on telemedicine and mobile health (m-health). Telemedicine played an important role in primary care during pandemic days. Online consultations helped general practitioners and patients about severeness of illnesses that can be cured at home or by referring to the hospital or making an appointment for a consultation in the primary health care centre.

Chronic illness management places considerable pressure on patients, doctors, and health care systems worldwide. International clinical guidelines recommend patient empowerment for chronic illness management. Telemedicine could be a low-cost, easy, acceptable and useful way of supporting patient empowerment.

### **Research questions:**

Telemedicine usage among hypertension patients in a primary care centre; is as effective as face to face consultations on regulating hypertension.

### **Method:**

A randomized controlled study

\*Educational primary health care center.

\*150 hypertension patients

\*Three groups; 1. control 2. telemedicine 3. face to face

\*Blood pressure levels and EKG tests; urinary tests?

\*1st group would be only called after six months for the same process.

\*2nd group would be called via phone or video every 30 days.

\*3rd group would be appointed every 30 days for a face-to-face consultation.

\*After 6 months their blood pressure levels and left ventricular hypertrophy levels would be compared

### **Results:**

The results will be announced after the study is finished

### **Conclusions:**

Telemedicine would be a tool kit for chronic illness management in primary care.

### **Points for discussion:**

What precautions should be taken to prevent bias?

What is your opinion about excluding criterias?

**Web Based Research Course Presentation / Finished study****The Emotions Experienced by Family Medicine Residents and Final Year Medical Students During Their Patient Encounters: A Qualitative Study**

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**Keywords:** emotions, medical students, family medicine residents, doctor-patient communication

**Background:**

The family medicine residents and final year medical students are challenged with increased workload and they experience various emotions during their patient encounters. They are confronted with uncertainties in their role descriptions and they witness illness, sufferings and deaths as part of their everyday duties. Only several studies have focused on these experiences to find out what the family medicine residents and medical students were literally feeling. The aim of this study was to explore the family medicine residents and final year medical students' emotions during their patient encounters.

**Research questions:**

What do the family medicine residents and final year medical students feel during their patient encounters?  
How do family medicine residents and final year medical students deal with emotionally challenging situations?

**Method:**

This qualitative study was performed with 12 family medicine residents and 24 final year medical students using a convenience sample from two medical faculties to explore and analyse their emotions. Data were gathered by means of focus group interviews, including six interviews conducted and recorded through online meetings.

**Results:**

Three main themes emerged from the data regarding residents' and students' emotions. The first theme was the perceived negative feelings on the climate of clinical settings. The most commonly encountered emotions were the tension and anxiety followed by frustration and uncertainty. The second theme was the challenge of reflecting emotions during patient encounters. They stated that they struggled with hiding their emotions from the patients. The third one was feelings of insufficiency. Both residents and students thought that they had insufficient medical knowledge and skills.

**Conclusions:**

The family medicine residents and final year medical students are challenged with emotions during their patient encounters. Therefore, medical educators have to be aware of the need to support them even more than usual during uncertain times with prioritizing residents' and students' wellbeing.

**Points for discussion:**

Do medical educators take into account of residents' or medical students' emotions during patient interviews?

What could be done in order to help family medicine residents and medical students to cope with their negative emotions during their education?

**Theme Paper / Finished study****Issues patients with mild COVID-19 faced during home isolation: a qualitative research in Greece**

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**Keywords:** primary care, mental health, social impact, COVID-19, Greece

**Background:**

Coronavirus disease 2019 (COVID-19) burdened health systems worldwide, whilst the adopted regulations, such as physical distancing, use of masks, lockdown laws or quarantine affected society's structure and cohesion.

**Research questions:**

Experience and issues faced by Greek patients with mild Covid-19, in no need of hospitalisation, during home isolation in the third pandemic wave. Patients' expectations towards pandemic management strategies.

**Method:**

Thirty-seven patients participated in this qualitative study. Selection criteria were: adulthood; sex; recently positive tested; mild COVID-19. Telephone semi-structured interviews were carried out in spring 2021, concluded when data saturation was reached, were audio-recorded and transcribed verbatim. Thematic analysis was used to identify key emergent themes. A preliminary thematic framework was developed, applied to all transcripts and refined iteratively. Four main issues were identified: everyday needs; psychological issues; social issues; information and guidance.

**Results:**

All participants were provided with necessary food and medication. Isolation from the rest of the family was not always possible, mainly due to absence of space. Of particular concern was securing supplies for those living alone and isolating from younger family members.

Fear of transmission to vulnerable groups, hospitalization, no recovery and irreversible side effects was predominantly articulated. Anxiety, insecurity, guilt and alienation, whereas joy and relief prevailed during confinement and rehabilitation respectively.

COVID-19 disrupted the normal functioning of families and led to revision of interpersonal relationships. Patients avoided re-integration in society, due to transmitter's stigma. Solidarity is highlighted.

Media over-information promotes fear. Mild illness raises doubts about the validity of such information. Primary Health Care (PHC) physicians provide guidance, monitoring and psychological support. The need for ongoing, lifelong medical support and assistance services is strongly expressed.

**Conclusions:**

Isolation, unofficial information overload and monitoring issues were predominantly affecting Greek patients. Highlighted topics demonstrate the need for PHC reorganization in order to deal more effectively with future pandemics.

**Points for discussion:**

Are issues faced by Greek patients relevant/comparable to that of other countries?

Best practices regarding confinement management by overseas primary healthcare professionals

Focus areas for strengthening primary health care

**Theme Paper / Finished study****Participation of transgender and gender diverse people in the development of primary health care based on the free and informed consent model: A thematic synthesis of community resources**

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**Keywords:** Transgender Persons; Health Services for Transgender Persons; Community Participation; Organization and Administration; Human Rights; Review

**Background:**

Developing primary care involves providing community-based services tailored to the population's needs. Among sexual minorities, transgender and gender-diverse people (TGD) form a heterogeneous and growing population, with a prevalence of up to 4.5% of adults and 8.4% of children and adolescents. International evidence points to systemic barriers in accessing care that justify transforming existing organizations. The free and informed consent model is widely promoted, both on health promotion and rights-based grounds, moving issues of access, assessment and coordination to family doctors. International examples have demonstrated the validity and effectiveness of such systems, but general practitioners remain under-trained to the needs and health issues of TGD people.

**Research questions:**

The aim of this participatory study is to establish an overview of the barriers and opportunities for promoting the health of TGD people. To do so, it relies on the expertise of NGOs and aims to produce a thematic synthesis that will support policy-making.

**Method:**

We conducted a literature review on health care systems' organizational transformations. We included publications in French and in English, relayed by TGD associations in Western contexts. Eligible articles were subjected to bibliometric and quality assessments before inclusion in the thematic synthesis.

**Results:**

We centralized the resources of 18 French and European organizations and included 25 eligible documents following a quality analysis. 3047 data were extracted and coded, then developed into 5 themes that allowed us to model the actions, obstacles and opportunities to improve care for the TGD population.

**Conclusions:**

Health promotion of TGD people focuses on discrimination, care pathways, access to care, transmission of knowledge and research. The main obstacles are the role of medical specialists, pathologization, epistemic injustice and the low political priority of their health issues. The main opportunities will rely on ensuring that decision-making allows for the implementation of a pragmatic and collaborative health policy in this context.

**Points for discussion:**

The development of accessible primary health care services based on international examples

Knowledge transfer and the development of evidence-based and inclusive common knowledge

The prioritization of TGD people's needs within the needs of the population and the positive impact on the overall health care provision

**Theme Paper / Finished study****The process of diagnosis of cancer and the effect of the primary care in this process: a single center survey analysis**

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**Keywords:** cancer diagnosis, early diagnosis, cancer delay, diagnostic delay**Background:**

Cancer diagnosis process can be affected by many factors related to the patient, physician and health system. In order to increase early diagnosis, problems at each step should be determined and precautions should be taken. There are studies showing that cancer misdiagnosis constitutes the majority of diagnostic errors in primary care. In this study, our aim is to determine the factors affecting the timely diagnosis of cancer and the role of primary care in this process.

**Research questions:**

What are the effects of primary care and other effective factors in the cancer diagnosis process?

**Method:**

Our research has conducted in various outpatient clinics of Marmara Univercity Pendik Training and Research Hospital, between February 1 and May 31, 2019. Aged over 18 and diagnosed with cancer in the last six months included. The data collected through a questionnaire, by face-to-face interview.

**Results:**

176 patients with a mean age of 55 participated, 45% of them stated that they applied to the primary care first when they had a complaint. Median time between first recognizing the symptoms to admission was 30 days. 45% of the patients stated that they waited for the symptoms to go away on their own. The mean time from the first suspicion of cancer to diagnosis was 39.7 days. 19% of them stated that they applied to primary care with the symptoms that were present at the time of diagnosis. There was no significant difference between the diagnostic interval and diagnosis stage and the health institution patients first applied.

**Conclusions:**

There is no referral system in our country, patients can apply to any health institution. In our study, there was no relationship between admission steps and early diagnosis. Primary care has a significant advantage in the early diagnosis of cancer with its accessibility and holistic approach, its role in this field needs to be increased.

**Points for discussion:**

How can the role of primary care in the cancer diagnosis process be increased

How to increase community use of primary care.

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Are Thoughts, Attitudes, and Perceptions Regarding Sexual Risks Same Among Different Ethnic Groups of Foreign Medical Students in Ukraine?**

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**Keywords:** Sexually transmitted infections, primary care, prevention, risky sexual behaviors; knowledge of STI/HIV; university students

**Background:**

Since more than one million new cases of sexually transmitted infections (STIs) are reported every day on a worldwide scale, making STIs a public health problem. One-third of all new cases of curable STIs occur in people under the age of 25. In addition to the acute effects of the illnesses, sexually transmitted diseases have the potential to cause catastrophic long-term consequences. The majority of STIs occur among young people, mostly as a result of variables such as curiosity, social pressure, a lack of information and skills, hazardous sexual activities, and substance abuse. In addition to this different ethnic groups have different opinions on the matter.

**Research questions:**

The purpose is to ascertain similarities and differences about knowledge, behavior, attitudes concerning STIs risks and their prevention among foreign medical students at Uzhgorod National University (UzhNU).

**Method:**

A descriptive cross-sectional study will be conducted among 1500 foreign students at UzhNU. This population is unique because they come from different countries of Asia, Europe and Africa with different opinions regarding sexual behavior and STIs. An interviewer-administered questionnaire will be used to obtain data. The questionnaire will measure their awareness of STIs as well as their hazardous sexual behavior in connection with STIs. This will be the first phase of the study.

The subsequent phases will consist of a qualitative study to understand why the differences and similarities occur among our selected population and the final study will be to assess if usage of a web-based screening adviser developed by the research team would influence their knowledge, attitudes towards STIs.

**Results:**

The results of first phase of ongoing survey will be presented on the EGPRN conference in May 2022.

**Conclusions:**

The results will be utilized to raise awareness about STIs and to develop preventive measures for foreign students.

**Points for discussion:**

Is difference in sexual relationship and STI knowledge behavior and attitude correlated with age, sex, ethnicity or religion of the foreign students?

Can the evaluated difference in sexual health attitude and behavior be found among foreign students of the other countries?

What methods of changing students' attitude may become a best option in sexual education?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Artificial intelligence supported web application design and development for supporting rational drug use**

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**Background:**

Polypharmacy, which increases with age, is generally the simultaneous use of two or more drugs. The main complications of polypharmacy are drug side effects, inappropriate drug, drug-drug and drug-disease interactions, increased treatment costs, hospitalization and mortality. In the last three decades, criteria have been published around the world to identify inappropriate drug use in the elderly. In addition to drug prospectuses and guidelines in the treatment of chronic diseases, there are various tools to prevent polypharmacy side effects.

**Research questions:**

Current criteria, guidelines and tools don't consider patient age, comorbidity and medications as a whole. This causes polypharmacy side effects. On the other hand, a more systematic patient-focused approach is very time consuming.

**Method:**

Our research is a methodological study and it is planned to design an artificial intelligence supported web application.

**Results:**

Our web application will provide physicians with quick and easy access to dozens of current criteria and guidelines for rational drug regulation in order to minimize inappropriate drug use in the geriatric age group, and also offer a drug alternative that can be used safely in the elderly. In addition, it will help the clinician to use rational drugs in daily practice by detecting patient-focused drug-drug and drug-disease interactions. The statistical evaluation part of our study continues and the conclusion and discussion section will be presented at the congress.

**Conclusions:**

In order to support rational drug use, the patient should be considered as a whole with age, comorbidities and medications.

**Points for discussion:**

Is it possible to design a patient-oriented web application that automatically detects polypharmacy side effects as potential inappropriate drug, drug-drug interaction and drug-disease interaction?

How much time does this application save when practicing rational drug use?

With this web application, will it be easier for the physician to approach patients holistically?



**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Brightest brains in drain: Is the intention of immigration increasing among family medicine trainees? A cross-sectional study in Turkey**

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**Keywords:** Migration in Turkey, family medicine trainees, job satisfaction, working conditions, financial problems, violence and safety in healthcare, academic issues

**Background:**

The “brain drain” (defined as the migration of educated and talented workers to more developed countries in search of better conditions) of the health workforce has been an important issue worldwide. These mobility trends cause societies to lose an unreplaceable part thus creating not only some short-term issues in the healthcare system but also some irrecoverable problems in the distant future. Unsatisfactory working conditions, work overload, insufficiency of training opportunities, and financial problems have been pointed out as major factors leading to the migration of healthcare professionals. Job satisfaction is described as various attitudes related to each other like the job itself, salary, expectations, etc. There has been a negative trend in the respect shown to medical doctors by society in Turkey. Moreover, workplaces have become ‘unsafe’ due to violence in healthcare settings. Given that immigration of Turkish physicians has grown exponentially in the last years. We wonder how and why family medicine trainees sit in these migratory flows of doctors.

**Research questions:**

Are family medicine trainees in Turkey intending to move abroad?  
What are their main reasons to leave?  
Is the idea of immigration related with job dissatisfaction?  
Which countries they prefer to live, why?

**Method:**

An online questionnaire will be conducted among the family medicine trainees in Turkey. Minnesota Job Satisfaction Questionnaire will be included in the research. Data will be analyzed by using SPSS and descriptive, logistic regression, and chi-square tests.

**Results:**

Results will be available by the time of the congress.

**Conclusions:**

No conclusions yet.

**Points for discussion:**

What kind of preventive actions can be taken for family medicine trainees to decrease the trend to move abroad?

Are those intentions related with the scores of Minnesota Job Satisfaction Scale?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Effectiveness of exercise interventions to improve long-term patient-relevant cognitive and non-cognitive outcomes in patients with mild cognitive impairment: protocol of a systematic review.**

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**Keywords:** exercise intervention, mild cognitive impairment, patient-relevant outcomes, long-term effects, systematic review

**Background:**

Mild Cognitive Impairment (MCI) is acknowledged to be a psychiatric disorder best described as a syndrome with characteristic clinical symptoms. MCI patients have an elevated risk of developing dementia over time with a yearly conversion rate of 15-41%. Since severe states of dementia are costlier, the cost of care may be substantially reduced by delaying the onset of dementia in patients with MCI using secondary preventive measures such as exercise.

**Research questions:**

What is the effectiveness of exercise interventions to improve long-term patient-relevant cognitive and non-cognitive outcomes in patients with MCI?

**Method:**

We will systematically search five electronic databases from 1995 onwards to identify trials reporting on the effectiveness of exercise interventions to improve long-term (12 months+) patient-relevant cognitive and non-cognitive outcomes in adults (50+ years) with MCI (all causes).

Two independent reviewers will screen titles/abstracts/full texts, extract data from the selected studies and present evidence in terms of study/population/intervention/comparator characteristics and long-term patient-relevant cognitive and non-cognitive outcomes. Risk of bias (RoB) will be independently assessed by two reviewers using the Cochrane Collaboration RoB 2.0 tool. Additionally, the reporting quality of the exercise interventions will be assessed using the Consensus on Exercise Reporting Template (CERT). The quality of evidence for every outcome will be evaluated using the GRADE approach.

A quantitative synthesis will only be conducted if studies are homogeneous enough for effect sizes to be pooled. Where quantitative analysis is not applicable, data will be represented in tabular form and synthesized narratively.

**Results:**

This review will allow a detailed quality assessment of interventional research that investigates the effect of exercise in patients with MCI, highlights methodological shortcomings, and makes recommendations for future RCTs in this field of research.

**Conclusions:**

To the best of our knowledge, no systematic review exists that evaluates long-term patient-relevant, cognitive and non-cognitive effects of exercise interventions in MCI populations.

**Points for discussion:**

Recommendations based on the effectiveness of exercise interventions in patients with MCI

Recommendations for future RCTs on the effectiveness of exercise interventions in patients with MCI

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Evaluation of paediatric patients with recurrent abdominal pain using C-RADS questionnaire**

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**Keywords:** abdominal pain, children, C-RADS, depression

**Background:**

Recurrent abdominal pain (RAP) is a frequent reason for referral to paediatric emergency. Apley and Naish has defined RAP as abdominal pain at least 3 times in three months which affects child's daily activities. Its diagnosis and treatment are difficult and mostly accompanied by psychiatric problems which makes it a high cost and wearing condition, disturbing life quality.

**Research questions:**

Is recurrent abdominal pain related with anxiety and depression in children between 5-18 years old?

**Method:**

Paediatric patients between 5-18 years old who are admitted to emergency unit with abdominal pain as primary complaint will be included by random sampling method. Patients with previous psychiatric diagnoses, with antipsychotic/antidepressant medication use, with malignancy, with communication(language, hearing, vision) problems will be excluded. The Turkish version of C-RADS questionnaire consisting of 47 questions will be applied to the patients face to face in order to differentiate between somatization and anxiety, depression and stress caused by abdominal pain. The duration of the study is 6 months.

**Results:**

not applicable

**Conclusions:**

not applicable

**Points for discussion:**

Family practitioners may hold a biopsychosocial approach when approaching recurrent abdominal pain in paediatric age group

Biopsychosocial approach is useful for prevention of unnecessary referrals to emergency departments

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Factors Affecting Cognitive Functions In Elderly People**

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**Keywords:** dementia, elderly, cognitive impairment, montreal cognitive assessment scale**Background:**

The aim of our study is to draw attention to the minority elderly population and to try to determine the factors affecting cognitive functions in these individuals. Because we know that; not every cognitive disorder is Alzheimer disease, but there are also reversible types of dementia (depression, hypothyroidism, B12 deficiency, etc.). Our main goal is to identify these patients who can be easily diagnosed and treated by family physicians. It is also very important to follow up individuals who may be at risk for dementia more frequently and to referral to the specialist when necessary.

**Research questions:**

Can GPs recognize the early symptoms of dementia?

Is dementia underdiagnosed?

How often is reversible dementia at elderly population?

**Method:**

190 people, 106 females and 84 males, between the ages of 65-91 from a training health center in İstanbul were included in the study. We used a questionnaire which assessed sociodemographics, medical history, Montreal Cognitive Assessment Scale (MoCA), Geriatric Depression Scale and yearly routine blood tests (glucose, TSH, T4, B12, folic acid, hemogram, HbA1c, ferritin etc.). Geriatric Depression Scale consists of 30 yes-no questions based on self-reporting and easy for elderly people. As result 0-10 point is "no depression" and total score is 30 points. The Montreal Cognitive Assessment scale was designed as a quick screening instrument for evaluation of mild cognitive dysfunctions. The maximum number of scores in test is 30; the result of 21 or more scores is considered as normal. We investigated the potential factors of cognitive impairment.

**Results:**

Results will be available at the congress.

**Conclusions:**

Ongoing research.

**Points for discussion:**

What national guidelines do other countries have for early detection of dementia in elderly?

Is the Montreal Cognitive Assessment Scale (MoCA) suitable for mild cognitive impairment detection among people aged over 65?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Implementation of blood pressure and blood glucose telemonitoring in elderly patients with hypertension and type 2 diabetes at primary care level in Slovenia**

Matic Mihevc, Majda Mori Lukančič, Črt Zavrnik, Tina Virtič, Tanja Kocjan Stjepanovič, Nataša Stojnić, Marija Petek Šter, Zalika Klemenc Ketiš, Antonija Poplas Susič

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**Keywords:** mHealth, telemonitoring, blood pressure, blood glucose, elderly, primary care

**Background:**

Arterial hypertension (AH) and type 2 diabetes (T2D) represent a substantial burden on the public health system, with an exceptionally high prevalence in patients aged  $\geq 65$  years. One approach to reduce the increasing prevalence and improve clinical outcomes in patients with AH and T2D could be integrated care supported by telemonitoring of blood pressure (BP) and blood glucose (BG).

**Research questions:**

This study aims to test the acceptability, clinical effectiveness, and cost-effectiveness of telemonitoring in elderly patients with AH and T2D at the primary care level.

**Method:**

A multi-centre, prospective, randomised, controlled trial will be conducted. Patients aged  $\geq 65$  years with AH and T2D will be randomised in a 1:1 ratio to a mHealth intervention or standard care group. Patients in the intervention group will measure their blood pressure (BP) twice weekly and blood glucose (BG) once monthly. The readings will be synchronously transmitted via a mobile application to the telemonitoring platform, where they will be reviewed by a general practitioner. The primary endpoint will be a change in systolic BP (SBP) and glycated haemoglobin (HbA1c) relative to standard care up to 12 months after inclusion. Secondary endpoints will be a change in diastolic BP, fasting BG, lipid profile, behavioural risk factors and appraisal of diabetes score relative to standard care up to 12 months after inclusion. Acceptability will be assessed quantitatively using the theoretical framework of acceptability tool and qualitatively with semi-structured interviews. Costs will be assessed using a human capital approach where labour and material costs will be evaluated.

**Results:**

Telemonitoring will result in significant reductions in SBP and HbA1c in the intervention group but will be associated with increased workload and costs.

**Conclusions:**

This study will provide new evidence for expanding the telemonitoring network at the primary care level and modifying telemonitoring protocols to achieve the best clinical and cost-effective outcomes.

**Points for discussion:**

What are the advantages and disadvantages of using telehealth in elderly patient populations?

What factors should be considered in establishing a telemonitoring measurement protocol that would be appropriate for the individual and would result in high compliance?

In addition to telemonitoring, what activities should be planned to facilitate patient self-management support?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Implementation of peer support for optimisation of integrated primary care in patients with concomitant diabetes and arterial hypertension**

Tina Vrtič, Majda Mori Lukančič, Matic Mihevc, Črt Zavrnik, Tanja Kocjan Stjepanovič, Nataša Stojnić, Zalika Klemenc Ketiš, Antonija Poplas Susič

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**Keywords:** peer support, integrated primary care, self-management support

**Background:**

Comprehensive patient-centred care is essential in the management and control of type 2 diabetes (T2D) and arterial hypertension (AH). Introduction of peer support represents a promising new method for optimising integrated primary care in patients with concomitant T2D and HT through enhancing self-management support, empowering family members and other informal caregivers in local community which will contribute to sustainability of the healthcare system. Key functions of peer support are: i) assistance in daily management, ii) social and emotional support, iii) linkage to clinical care, iv) ongoing and sustained support.

**Research questions:**

- Is introduction of peer support for patients with T2D and/or AH feasible and acceptable at the primary health care level in Slovenia?
- Does intervention have the effect on participants' quality of life, perceived support and level of empowerment?

**Method:**

Our pilot study started in May 2021 with random recruitment of 30 patients with T2D and/or AH from two Community Health Centres in Slovenia. Participants will be educated in a total of 15 hours of group and individual training by nurses with special skills to become trained peer supporters. Each peer supporter will voluntarily share his knowledge and experiences among a group of 10 patients with T2D and/or AH in the local community through monthly meetings for 3 months. Outcomes will be evaluated with questionnaires including sociodemographic and clinical data, knowledge about T2D and AH, Appraisal of Diabetes Scale, Diabetes Empowerment Scale, Theoretical Framework of Acceptability and interviews to provide quantitative and qualitative data. Data collection process will last until May 2022.

**Conclusions:**

Implementation of peer support through enabling patients an active role in successful management of their disease could bring educational, psychosocial and behavioural benefits and could serve as a model for future organisation and improvements of integrated care in patients with T2D and/or AH at the primary health care level.

**Points for discussion:**

The impact of Covid-19 pandemic on implementation of peer support in Slovenia.

Peer supporter represents a liaison between Community Health Centre, patients with type 2 diabetes and/or arterial hypertension and the local community.

Peer supporter is a volunteer and ambassador of the associated Community Health Centre.

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Improvement of participation rate in colo-rectal cancer (CRC) screening by training general practitioners in motivational interviewing (AmDepCCR)**

Paul Aujoulat, Delphine Le Goff, Gabriel Perraud, Jean-Baptiste Nousbaum, Michel Robaszekiewicz, Morgane Guillou-Landreat, Jean Yves Le Reste

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**Keywords:** CRC Screening; Early Detection; Motivational Interviewing; Psychological Approach; Professional-Patient relations; Primary Care; Study Protocol

**Background:**

Colo-rectal cancer (CRC) is the second leading cause of cancer death in France (17,712 annual deaths). However, this cancer is preventable in the majority of cases by the early detection of adenomas. In France the organized screening for CRC relies on general practitioners (GPs). The tests delivered by the GPs are carried out in 89% of cases. However, GPs do not systematically offer the test, because of time management and communication.

**Research questions:**

Is training GPs in motivational interviewing effective to increase the OS CRC participation rate of at least 10 percent ?

**Method:**

AmDepCCR is a cluster randomized trial. Patients are prospectively included by their GPs. The study is designed in 2 phases for the GPs: first, GPs who have never participated in motivational interviewing (MI) training, will be recruited then randomly split in 2 groups. Secondly, a 6-day motivational interviewing training will be carried out for the intervention group. Then, patients will be included in both groups during a period of 1 year. The primary outcome will be the number of CRC screenings achieved in each group and its difference. The secondary outcome will be the reluctance to screening and the patient's self-estimated life expectancy at 0, 6, 12 and 24 months using the Health Belief Model (HBM).

**Results:**

Inclusion started in June, 2021. Complete results will be available in 2024.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Oniros : Does a numeric sleep diary improve the appropriation of this tool for patients with sleep disorders in general practice, compared to a paper tool?**

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**Keywords:** sleep diary numeric tool research general practice

**Background:**

The sleep diary is a recommended diagnostic tool for characterizing various sleep and circadian rhythm disorders, by collecting data over several weeks, in the patient's usual living environment. It is free, non-invasive, and less prone to memory bias than retrospective questionnaires. It supports the consultation to explore and discuss sleep hygiene, to set treatment goals and to follow the evolution. Despite these advantages, the handwritten sleep diary is tedious to fill in and time-consuming to analyze, limiting its use and compliance in follow-up. In specialized centres, only a quarter of the patients bring back a sleep diary sufficiently filled to have any clinical interest.

An effective needs to be appropriated both for patient and doctor. This does not seem to be sufficient with the paper sleep diary.

An online sleep diary, "ONIROs", has been developed with the aim of simplifying and standardizing its completion by the patient. It allows the physician to have access to these data, but also to a summary in order to facilitate the interpretation.

**Research questions:**

Our objective is to compare the return rate of an interpretable sleep diary, according to the type of diary (paper and electronic versions), during a general practice consultation dedicated to sleep.

**Method:**

We would plan a mixed method. First, a randomized controlled study on a population consulting a general practitioner with a sleep complaint, in order to keep as close as possible to the usual management of patients with sleep disorders. GP investigators would randomly give one of those diary when a patient comes with a sleep complaint, and planify a dedicated consultation within the next month. Second, a qualitative study based on patients and GPs interviews, to explore their appropriation of the tools, as well as pros and cons of paper and electronic versions.

**Points for discussion:**

the initial submission was rejected by the jury of a call for proposals for methodological issues

discuss the randomization and the choice of control

discuss the qualitative part of the project



**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Population health management through integrated data monitoring**

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**Keywords:** integrated care; routine health data; monitoring of quality of care

**Background:**

The COVID pandemic has shown the importance of data-driven health policy and locally adapted management. However, while ample data exist at the national level, local health authorities in most countries currently lack access to coherent and usable data for their specific population. This study aims to provide a solution by designing, implementing and testing a population-based dashboard for monitoring triple aim indicators for local health authorities.

**Research questions:**

1. Which essential set of triple aim indicators can be derived from existing data sources to be applied in a local setting?
2. How can this data be presented in a dashboard so that it informs local health authorities?
3. Which are the potential legal and administrative implications?

**Method:**

Through an in-depth case study design, we develop a pilot intervention for local health authorities of primary care zones (+/-100.000 inhabitants) in Flanders, Belgium. The intervention is a dashboard for monitoring triple aim indicators of key health problems. Core partners are: data owners, data processors and local health authorities. We selected two geographic areas to test the development and one key health problem as the initial focus of the development, namely diabetes. Indicators will be established through a stakeholder dialogue/delphi method. A process evaluation will assess the legal and administrative implications.

**Results:**

The result will be a uniform dashboard on which local health authorities can access the data needed to establish and address priorities and design strategies to improve both population health and health equity.

**Conclusions:**

Population health management is an increasingly important responsibility for local authorities who need real-time data to perform this task and be accountable. The development of accessible, reliable and user-friendly health dashboards is essential to support policy makers in their responsibility.

**Points for discussion:**

1. What is the role of primary care practices in population management?
2. Which practice-level data can and should be incorporated in a primary care zone dashboard?
3. How do we involve people in the decisions about health management?

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

## **Supporting proactive and integrated chronic care in primary care practices in Belgium**

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**Keywords:** organisation of care, chronic care, primary care practices, change

### **Background:**

Primary care practices are pressured by the increased numbers of patients with chronic diseases and multimorbidity. Due to this increased workload, answering the needs of patients with complex chronic diseases is particularly challenging. These patients would profit from a more proactive and integrated care organisation. Today, Belgian general practitioners can still make big steps towards integrated care. Many want to improve their care organisation, but they lack the knowledge and skills on how to change.

### **Research questions:**

Is a guided change program effective in supporting general practitioners and their team in optimizing their organization of care for patients with chronic diseases?

### **Method:**

The intervention is based upon the ADKAR change model. On multiple study days different care providers will be united. In the first session Awareness on potential improvement is created using the ACIC, an assessment tool based on the chronic care model. In the second session participants' Desire to change is stimulated by reflecting on the ACIC results and defining goals. Knowledge is central in the third session as participants will develop an improvement plan inspired by a overview of existing tools and guidelines. The Activation of the plan will follow in the practices. In a feedback day a few months later the plan and process is evaluated by a second measurement with the ACIC and arrangements are made on how to Reinforce improvements in practice. This session will also contain an evaluation of the program from the view of the participants. A pilot project will be conducted, to adapt the program as much as possible to the needs of the practitioners.

### **Results:**

Results will follow

### **Conclusions:**

This practice improvement project will identify the challenges experienced by primary care practices of organizing chronic care in an integrated manner, and support them to come across those challenges.

### **Points for discussion:**

Which frameworks are best suited to guide the evaluation of this program?

Do you know similar programs and have they been successful? What were the pitfalls?

How can we best support general practitioners and their team in optimizing their chronic care organization?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****The effectiveness of a school-based intervention to decrease the risk of obesity in primary school children: non-randomized clinical study**

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**Keywords:** Keywords: childhood obesity ,overweight, intervention, risk assessment, primary school

**Background:**

The childhood obesity is a growing health problem in our country.

There are many intervention studies mostly designed for the management of the overweight and obese children, however the childhood obesity necessitates risk assessment and interventions to prevent the development of obesity.

**Research questions:**

What is the risk of obesity among primary school children and the effectiveness of a school based and interactive intervention planned for risky students and their parents?

**Method:**

This is a mixed type design with a cross-sectional study to determine the risk prevalence of obesity followed by a non-randomized controlled study to evaluate the effectiveness of an interactive intervention to decrease the determined risk.

Two different primary schools are selected, one for intervention (IG), the other for the control group (CG); primary year students is the universe. A questionnaire, Food Index (FI) and Family Nutrition and Physical Activity tool (FNPA) will be sent to all parents of both schools. The students with fulfilled questionnaires will be recruited in the study, anthropometric measurements will be performed at school. A risk scale defined by the researchers based on the obesity related questions, BMI, FI and FNPA scores. A total of 165 risky children (55 in IG-110 in CG) will form the sample size. This an eight-weeks and ten-sessions intervention; eight for the students only, two for parents, one with all together. The content is designed based on the principles of healthy nutrition; the methods will be interactive, including plays and role-plays. A student-parent education will be provided to the control group. At the 3rd-6th month following the course measurements and risk questionnaires will be repeated.

**Results:**

Primary outcomes: risk prevalence and the decrease in the risk scores.

**Conclusions:**

Our study aims to contribute to primary care by detecting and intervening risky children before obesity develops in primary care.

**Points for discussion:**

Integration of effective and entertaining child friendly interventions to primary school curriculum could prevent childhood obesity.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea**

## **The evaluation of the insulin dose changes in children with Type 1 Diabetes Mellitus diagnosed with vitamin D deficiency/insufficiency following replacement therapy**

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**Keywords:** type 1 diabetes mellitus, vitamin d, family practice, insulin doses

### **Background:**

Diabetes Mellitus (DM) is a chronic disease in which glucose metabolism is affected by insulin deficiency or ineffectiveness, divided into two groups as Type 1 and Type 2. Type 1 DM is frequently seen in the pediatric age group. Recently, it has been shown that vitamin D has effects not only on calcium and bone metabolism, but also on cell differentiation and immunomodulation. Although studies provide evidence that low vitamin D levels are related the prevalence of insulin resistance and DM, data on changes in insulin resistance and the amount of insulin released after vitamin D replacement are limited. Therefore, it is thought that Type 1 DM, which is frequently encountered in primary care, will benefit from a replacement therapy such as vitamin D, whose efficacy and complications can be monitored in primary care.

### **Research questions:**

Can vitamin D replacement reduce the insulin doses required for blood sugar regulation in children diagnosed with Type 1 DM with vitamin D deficiency or insufficiency?

### **Method:**

The sample of the study will consist of children aged 2-18 years, who are followed up with the diagnosis of Type 1 DM in the Pediatric Endocrinology Outpatient Clinic of Başakşehir Çam and Sakura City Hospital, and who have anti-glutamic acid decarboxylase and/or islet cell autoantibody tests. , low C-peptide levels, low-normal body mass indices, vitamin D deficiency or insufficiency, no history of chronic disease affecting vitamin D metabolism or drug use. Insulin doses needed to regulate blood sugar will be checked after three months of vitamin D replacement. In order to evaluate the data obtained in the research, descriptive analyzes, t-test, chi-square and regression analyzes will be performed by accepting the significance level as  $p < 0.05$ .

### **Results:**

Our research is at the idea stage.

### **Conclusions:**

We aim to analyze effects of vitamin D replacement on Type 1 DM children patients insulin doses.

### **Points for discussion:**

Can measuring the vitamin d levels of children with type 1 DM contribute to reducing the insulin doses of these patients and thus increasing their quality of life?

**One-Slide/Five Minutes Presentation / Ongoing study no results yet****Turkish Adaptation of General Practice Assessment Questionnaire (GPAQ) :  
Validity and Reliability Study**

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**Keywords:** General Practice Assessment, GPAQ, Turkish validity and reliability

**Background:**

The "Family Medicine Model," focused on individual/family-oriented delivery and serves as the cornerstone of primary health care services, was established in 2003 as part of the Health Transformation Program, a comprehensive reform project. In December 2010, it was implemented throughout Turkey. Although patient satisfaction ratings are commonly used in assessments, we discovered a need for scales that evaluate the Turkish family medicine system, including family physicians, staff, and the appointment system, because assessing the system is critical for progress.

**Research questions:**

- 1.Which scale can compensate for the lack of general evaluation that we've identified, allowing us to get a general assessment of Turkey's Family Medicine System's progress?
- 2.Is the General Practice Assessment Questionnaire (GPAQ) a valid and accurate scale in Turkish society?

**Method:**

Permission to use the GPAQ scale was obtained via email from Prof. Dr. Martin Roland, a team member that created the original scale. The GPAQ, which consists of 43 questions, was translated from English into Turkish by five independent researchers who adhered to WHO linguistic validation standards. After each team member finished their translation, a discussion session was held to create a standard text and resolve any differences between translations. A different pair of translators returned the Turkish-v1 draft form to English. A linguist then analyzed the agreed-upon text, and the first Turkish version was obtained. This scale was developed to be used in conjunction with the EUROPEP Satisfaction Family Scale, the most similar scale, and has previously been validated. After test-retest part, we intend to begin in February 2022 using face-to-face and online platforms and enroll as many patients as possible.

**Results:**

The study is still ongoing, and no conclusions have been reached. The results may be made available at the congress.

**Conclusions:**

The GPAQ has been culturally and linguistically modified as an evaluation tool in general practice.

**Points for discussion:**

Is there another scale we could use to compare?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Why non-urgent patients go to the Emergency Department? - study at a portuguese Primary Healthcare Center**

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**Keywords:** Primary Care; Primary Healthcare Center; Emergency Department; non-urgent patients; Manchester triage scale; Accessibility

**Background:**

In Portugal, the Healthcare Service is organized so that Primary Care are the first line access to the healthcare system. Simultaneously, Hospital Emergency Departments are open to all population to assist patients with acute, moderate to severe health problems. The access of patients to the Emergency Departments (ED) instead of Primary Care in non-urgent situations leads to overcrowded ED and delays patient assistance. People classified as blue or green in the Manchester triage scale could be managed at the primary health care setting. It is necessary to understand the reasons leading this patients to the emergency departments. We intend to assess if patients belonging to our Primary Healthcare Center go to the ED of the nearest Hospital with non-urgent problems and, if so, explore their motives, so we can work on solutions that answer patient's needs.

**Research questions:**

Why do our non-urgent patients choose the nearest ED instead of their Primary Healthcare Center

**Method:**

Observational study, descriptive and cross-sectional. Initially retrospective, with collaboration of the nearest hospital, to assess how many patients from our Healthcare Center went to their ED during 2021, and a list of those who were assigned with a blue or green bracelet. Then, by phone call, ask this patients to answer a multiple-choice questionnaire about why they preferred the ED at that episode. The primary outcome is to assess the main reasons that led non-urgent patients belonging the our Primary Healthcare Center to resort to the Hospital instead of the Primary care; as secondary outcomes, we will evaluate the proportion of our patients that went to that ED in 2021; Proportion of this patients that have been admitted as blue or green; Proportion of patients admitted as blue or green that, according to the final diagnosis and discharge destination, could be treated at the Primary Care Health Center.

**Freestanding Paper / Finished study****Benefits and limitations of the transfer online of Irish College General Practice (ICGP) continuing medical education (CME) small group learning (SGL) during the COVID pandemic: A national Delphi study.**

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**Keywords:** Continuing medical education, COVID, implementation of guidelines, small group learning

**Background:**

In Ireland CME-SGL has been shown to be an effective way of delivering CME and changing clinical practice.

**Research questions:**

This study sought to determine the benefits and limitations, as reported by GPs, of the relocation of this education from face to face to online learning during COVID.

**Method:**

A Delphi survey method was used to obtain a consensus opinion from a group of GPs recruited via email through their respective CME tutors. All consented to participate by email to the primary researcher (SD). The first of three rounds gathered demographic details and asked doctors to report the benefits and/or limitations of learning online in their established ICGP small groups.

**Results:**

Eighty eight GPs from 10 different geographical areas agreed to participate. Response rates were 72% in round one, 62.5% in round two and 64% in round three. Demographic and practice setting were consistent with those previously published for GPs attending CME-SGL. These GPs (92% consensus) reported that attending their established CME-SGL groups allowed them to discuss the practical implications of applying rapidly changing guidelines in COVID care into practice. They could discuss new local services and compare their practice with others during a time of change (94% consensus); this helped them feel less isolated (98% consensus). They reported that online meetings were less social (60% consensus), and that the informal learning that occurs before and after meetings did not take place (70% consensus). GPs would like to go back to face to face learning in CME-SGL after COVID, but would consider 1-2 online meetings in the winter months when travel is difficult (76% consensus).

**Conclusions:**

GPs in established CME-SGL groups benefited from online learning as they could discuss how to adapt to rapidly changing guidelines while feeling supported and less isolated. They report that face to face meetings offer more opportunities for informal learning.

**Points for discussion:**

Established small group learning helps GPs to implement changing guidelines into practice

Small group learning helps GP to cope with change during COVID

Established small groups help GPs feel less isolated during COVID

**Freestanding Paper / Ongoing study with preliminary results****Developing a Serbian Strategy to improve implementation of primary family violence care**

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**Keywords:** Primary health care, family violence, barriers, facilitators, implementation

**Background:**

Family violence is in Serbia recognized as a criminal act since 2002. Health professionals at primary care level are in a unique position to create safe and confidential environments for facilitating disclosure of violence.

**Research questions:**

How to improve implementation for primary health care tasks of family violence?

**Method:**

Key-person inquiries, developed within the IMOCFAV project, resulted in 26 useful answers about detection, barriers, facilitators, risk-assessment and monitoring. Open-ended responses were coded independently by two readers. Participants were recruited equally from PHC physicians, public health doctors, paediatricians, nurses, midwives, psychologist, forensic, social worker, NGO representatives. We submitted related questions to nominal group discussions. Conclusions will be submitted to further broad analysis using Delphi online questionnaires.

**Results:**

Barriers highlighted were lack of time assessment, suitable infrastructure, insufficient funding and data collection, lack of staff to assess, respond and perform case management; legislation gaps at justice and policy level as well as poor coordination of individual services limit efficacy. Facilitators identified were: public policy for awareness, clearly defined tasks, continuous medical education, knowledge transfer as well as incentives for collaboration. Positive factors are: Public policy in Serbia including the gender perspective; detection, risk-assessment and monitoring are included in protocols. Local implementation could be promoted by prevention and intervention programs, targeted on increasing detection, better management of coordination, incentives for individual efforts; at regional level improved data collection and development of guidance as well as partnerships between health-care sector and statutory bodies, preventive campaigns and emergency measures would enhance performance and efficacy. Further enhancement might result from survivor follow-up, assessment of services' quality with feedback and financial support for Primary health care multidisciplinary collaboration.

**Conclusions:**

Nominal groups concentrate on raising public and professional awareness, capability for a systematic approach, risk assessment and orientation from health care to statutory bodies and NGO's embedded in a public policy approach.

**Points for discussion:**

What is the usefulness of collection key person views to start up consensus development on implementation?

How can Nominal groups contribute to development of a broadly based consensus on local implementation?

Is prioritizing nominal group finding by a broader Delphi study sufficient to develop a good implementation strategy?



**Freestanding Paper / Finished study****Treatment outcomes of acute streptococcal tonsillitis according to antibiotic treatment. A retrospective analysis of 242,366 GABHS tonsillitis cases treated in the community.**

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**Keywords:** Tonsillitis, Pharyngitis, Antibiotic treatment, Penicillin, Benzathine Penicillin, Penicillin G, Upper respiratory tract infections, Primary care, Peritonsillar abscess, Post-streptococcal glomerulonephritis, Rheumatic fever, Post-streptococcal arthritis, Sydenham chorea.

**Background:**

Tonsillitis caused by Group-A Beta-Hemolytic Streptococcus (GABHS) is a common cause for primary physician visits and antibiotic treatment.

**Research questions:**

Does the type of antibiotic treatment used affect the number of additional primary physician visits or the development of complications?

**Method:**

This retrospective study included first cases of culture-confirmed GABHS-tonsillitis who received appropriate antibiotic treatment in the community. Records were reviewed according to type of antibiotic treatment purchased. Primary outcomes were the number of additional primary physician visits within 30, 60 and 90 days from diagnosis. Secondary outcomes were the number of complications within 90 days, including peritonsillar abscess, post-streptococcal glomerulonephritis, rheumatic-fever, post-streptococcal arthritis, chorea and death.

**Results:**

The study included 242,366 participants (55.3% female, 57.6% aged 3-15years). Majority of cases were treated with amoxicillin (n=134,266, 55.4%), followed by penicillin-V (phenoxymethylpenicillin, n=79,109, 32.6%), macrolides (n=15,046, 6.2%), amoxicillin/clavulanate (n=9,077, 3.7%), cephalosporins (n=4,601, 1.9%), and rarely intramuscular benzathine-penicillin (n=267, 0.1%).

On multivariate analysis, compared to penicillin-V treatment, adjusted incidence rate-ratios (IRR) for additional primary physician visits at 30-days were IRR=1.46 (CI 1.33-1.60, p<0.001) for benzathine-penicillin treatment, IRR=1.27 (CI 1.24-1.30, p<0.001) for cephalosporin treatment, IRR=1.15 (CI 1.13-1.17, p<0.001) for macrolide treatment, IRR=1.12 (CI 1.09-1.14, p<0.001) for amoxicillin/clavulanate treatment, and IRR=1.07 (CI 1.06-1.08, p<0.001) for amoxicillin treatment.

Compared to penicillin-V, patients treated with amoxicillin showed decreased adjusted odds-ratios (aOR) of developing a peritonsillar or retropharyngeal abscess (aOR=0.75, CI 0.55-1.02, p=0.07), or developing any complication (aOR=0.68, CI 0.52-0.89, p=0.006). Benzathine-penicillin treated patients showed the highest rates of peritonsillar or retropharyngeal abscess (aOR=8.61, CI 2.71-27.38, p<0.001), or any complication (aOR=10.77, CI 4.37-26.56, p<0.001).

**Conclusions:**

Treatment of acute GABHS-tonsillitis in the community with penicillin-V was significantly associated with fewer additional primary physician visits compared to other antibiotic treatments. Treatment with amoxicillin was significantly associated with reduced development of the rare but serious complications of GABHS-tonsillitis compared to other antibiotic treatments, including penicillin-V.

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