



EUROPEAN GENERAL PRACTICE
RESEARCH NETWORK

92nd EGPRN MEETING
30 April - 1 May 2021
Virtual Conference

Abstract Book

30 April - 1 May 2021

www.egprn.org

COLOPHON

Abstract Book of the 92th European General Practice Research Network Meeting
Virtual Meeting, 30 April - 1 May 2021

Editor-in-Chief:

Prof. Dr. Ana Luisa Neves – Portugal

Editors:

- Assoc. Prof. Dr. Davorina Petek - Slovenia
- Dr. Tiny van Merode - The Netherlands
- Prof. Dr. Thomas Frese - Germany
- Prof. Dr. Pemra C. Unalan - Turkey
- Dr. Claire Collins - Ireland
- Prof. Dr. Jean Yves Le Reste - France
- Prof. Dr. Shlomo Vinker - Israel

Scientific Committee:

- Chair: Prof. Dr. Ana Luisa Neves - Portugal
- Dr. Alexander Bauer - Germany
- Prof. Dr. Thomas Frese - Germany
- Dr. Tiny van Merode - The Netherlands
- Assoc. Prof. Hans Thulesius - Sweden
- Prof. Dr. Jean-Yves Le Reste - France
- Prof. Dr. Pemra Cobek Unalan - Turkey

Editorial Office:

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

This book is available on the EGPRN website: www.egprn.org

ISBN 978-90-829673-6-4

First Published: 10 May 2021

All times listed in book is in the Central European Summer Time (CEST / UTC+2)

Table of Contents

Colophon	2	How does triage by an electronic symptom checker match with triage by a nurse in primary care?	31
Foreword	5	The evaluation of diffuse or focal thyroid pathology and early diagnosis of thyroid malignancy performed by family physicians using artificial intelligence through a European cross-border multicenter ultrasound screening project	32
Foreword	5	Association of sense of coherence and depression in patients with chronic pain: a systematic review and meta-analysis	33
Programme	6	Cardiometabolic Health Reviews in Patients on Antipsychotics: The Impact of Covid-19.....	34
Thursday, 29 April 2021	6	The effect of COVID-19 pandemic on depression and anxiety occurrence among primary healthcare workers: results from a pilot study	35
Friday, 30 April 2021	7	Comprehensive Evaluation of Hypertension Management at the Primary Level in Slovenia: Lessons for the Future	36
Saturday, 1 May 2021.....	9	Developing and tailoring a complex intervention for the primary prevention of cardiovascular disease prior to its implementation in general practices in Belgium.....	37
Online Poster Sessions.....	11	Non-pharmacological interventions to achieve blood pressure control in African patients : a systematic review	38
Keynotes	13	Frequency of occurrence and predictive validity of olfactory and taste dysfunction in patients with SARS-CoV-2 infection.....	39
Prof. Dr. Jako Burgers	13	Rock-a-bye baby: Children's sleep habits and related factors.....	40
Prof. Dr. Ana Luisa Neves	14	Translation and validation of two Parkinson's disease specific burden questionnaires, for patients and caregivers, from German into French.....	41
Abstracts	15	A new data collection project for studies of the process of diagnosis in primary care: collecting data on reasons for encounter and diagnoses in episodes of care in Europe.....	42
COVID-19-What do we miss?.....	15	Automatic ABI measurements in primary care - agreement with patients' symptoms and examination	43
Post-lockdown impact of the COVID-19 pandemic on patients affected by chronic diseases in Europe.....	16	Expanding role of family physician's team in early cancer detection for multimorbid patients.....	44
Regional management of the COVID pandemic in Germany: A nation-wide survey among general practitioners	17	Feasibility study of a competence-based teaching method (Toolbox GP) on the learning success of medical students and satisfaction of supervising physicians: How to integrate Entrustable Professional Activities into general practice teaching	45
Are we sitting too comfortably? What evidence do we have regarding sedentary behaviour among GPs?	18	Impact of the Covid-19 pandemic on burnout syndrome in family doctors	46
How do patients rate the importance of parameters considered patient-relevant in recent studies? A cross-sectional survey among German general practice patients	19	Monitoring the clinical course and baseline characteristics of COVID-19 patients in Primary Health Care in Greece: An ongoing study.	47
Is Continuity of Care Associated With Use of Health Care Services?.....	20	Post-Covid: implications on patients lives.....	48
Immediate or delayed prescription of antibiotics – factors that influence general practitioner decision	21	Predicting and preventing long-term invasive ventilation - a project presentation of PRiVENT.....	49
Perceptions on Multi-Issue Consultations in an Irish Primary Care Setting.....	22	Quality of Life Assessment in primary care during COVID-19 pandemic using EuroQol	50
Reducing Unnecessary Emergency Department Admissions in Children with Respiratory Tract Infection Symptoms: A Controlled Educational Intervention Study From Turkey.....	23		
Cerumen Impaction Removal in General Practices: A Comparison of Approved Standard Products	24		
Goal-oriented care: a concept analysis.....	25		
Privacy by design and data minimisation in RADAR project.	26		
A Qualitative Study to explore access and barriers to integrated care among vulnerable patients with diabetes mellitus in Belgium.	27		
Impact of Covid-19 Confinement Measures on Chronic Diseases Managed in Primary Health Care.	28		
Quality of Life in People With Lymphedema	29		
Adoption and evaluation of a completely digital general practice clerkship – cross-sectional survey and cohort comparison among German medical students.....	30		

The Initiative of German Practice-Based Research Networks – DESAM-ForNet.....	51	Randomized controlled trials on prevention, diagnosis, and treatment of diabetes in African countries - a systematic review	72
Premature ejaculation in primary care: communication strategies versus usual care for male patients consulting for a sexual, urogenital or psychological reason; the GET UP cluster randomized controlled trial.....	52	Identifying the obstacles to colonoscopic screening of first-degree relatives with a family history of colorectal cancer. Where do GPs stand?.....	73
Skills in National Core Curriculum: National Survey of General Practitioners in Turkey.....	53	Implementation of the Health Balanced Scorecard in the Health Center of Varis, Greece. Measuring clinical indicators for gynecology cancer..	74
Towards a Core Curriculum for Italian Family Medicine: results of a transparent, participatory and collective writing.	54	Clinical presentation of Bulgarian patient with possible COVID-19.....	75
Usability of a communication tool used by general practitioners and public health workers during the COVID-19 pandemic: a proof-of-concept study..	55	COVID-19 as a case study of the tension between politics and science, evidence and practice, healthcare and economics.	76
Adaptation of the Vaccine Hesitancy Scale to Turkish: Validity and Reliability Study	56	COVID-19's impact on primary care and related mitigation strategies: A scoping review.....	77
Demographic Evaluation of Hospital Staff Before Covid Vaccination	57	Experiences of individuals affected by Covid-19: A qualitative study among patients from German family practice settings.....	78
General practice attendances among patients attending a post-COVID-19 hospital clinic: A pilot study.....	58	Impact of COVID-19 in coronary heart disease follow-up in primary care.....	79
Demonstrating a paradigm shift in the approach to vertigo in primary care. VERTAP Project	59	Primary care for patients with coronary heart disease during the COVID-19 pandemic in Germany	80
Effects of covid-19 pandemic on the mental health of female Family Doctors.....	60	Analysis of COVID-19 complicated vascular cases from General Practice perspective	81
The Relationship Between Poor Upright Static Standing Posture and Musculoskeletal System Symptoms in Adults Admitted Ankara University Faculty of Medicine Hospital Family Medicine Polyclinics.....	61	Doctor –patient consultations in C-19: rapid development and deployment of a virtual patient to support providers breaking bad news.....	82
“Coping Self-Efficacy Scale” Evaluation of the Turkish Validity and Reliability of the Scale	62	How COVID-19 has affected general practice consultations and income – General Practitioner cross sectional population survey evidence from Ireland	83
Baseline characteristics and external validity of older multimorbid patients with polypharmacy and general practitioners enrolled in a randomized controlled primary care trial	63	Primary Healthcare Professionals' Preparedness during the first wave of the COVID-19 pandemic in Greece.....	84
Does multimorbidity predict the number of patient contacts: a matter of definition	64	Integrating Hepatitis C Care for opioid substitution treatment patients: Feasibility, Clinical and Cost Effectiveness	85
What GPs need to know about paediatric COVID-19: CME curriculum.....	65	Intra-articular and soft tissue corticosteroids injections and risk of infections	86
Willingness of German general practitioners to participate in long-term research networks	66	Patients' Satisfaction and Perception about Quality of Health Care in an Urban Primary Health Center of Athens, Greece	87
“What should medical students learn to be prepared for rural practice? Qualitative analysis of expert interviews with German rural physicians”.....	67	Priorities in integrated care: A scoping review.	88
Associations of chronic medication adherence with emergency room visits and hospitalization.....	68	Use of Epinephrine Autoinjectors in patient with Hymenoptera venom allergy and food anaphylaxis among 8 Italian GPs	89
Cardiovascular combined target in type 2 Diabetes: sex and socio-economic status differences in primary care.	69	Author Index	90
Integrating primary and secondary care to enhance chronic disease management: A scoping review.	70		
Lack of glycemic control measures, a new risk factor for the development of cardiovascular disease in patients with type 2 diabetes.....	71		

Foreword

Closing evidence gaps in general practice & family medicine

Dear colleagues and researchers,

Patients rightly expect us to provide them with the best possible medical treatment. Therefore, we increasingly used and refined the principles of evidence-based medicine over the past two to three decades in our research. During the recent past, the evidence published in scientific journals and elsewhere has started to grow at an unprecedented pace, now nearly doubling within only four years. On average, a new medical article today is published every 15 seconds. To an enlarging extent the evidence informing our clinical decision making comes from our very own setting. But there is not only a change in quantity: a growing number of today's clinical trials also encompasses the patients' preferences and comprises relevant details needed for the implementation in clinical decision making.

However, increasing the quantity of evidence can in itself create a variety of new problems: health care professionals are challenged to remain up to date with new evidence like never before. Systematic reviews show that adherence to guideline recommendations in daily routine care varies widely from 20 to over 80%. Thus, despite the rapidly growing knowledge, a varying share of patients is still likely to receive suboptimal treatments, inappropriate diagnostics, unsafe medications, and costly but ineffective care. Incorporating new evidence into daily practice usually takes several years already. This "evidence to practice gap" might even get bigger the more evidence there is.

At the same time, we still face an ongoing lack of evidence in other domains. This is partly due to the characteristics of research in primary care, e.g., varying organizational structures, practice team compositions, or different contexts caused by the health care system and its legal boundaries. Besides these contextual factors, research in primary care often times deals with complex interventions and patients with very heterogeneous characteristics which leaves us with many potential sources of uncertainty when we try to put together guidelines based on evidence in our field of research.

Fortunately, in the wake of the digitisation new and promising ways of combining and integrating evidence e.g., learning health care systems, big data analysis and machine learning are at our disposal. Nonetheless, closing evidence gaps is an ongoing challenge that is only in part solved by creating new or more evidence or combining more and more information. In fact, we will still have to perform a constant assessment of evidence gaps, both in generating evidence and in translating evidence into practice. Ideally, this assessment is followed by a prioritisation of research questions and, in addition, existing evidence gaps should be addressed in trials in real-world conditions.

We cordially invite you to come to the 92th EGPRN meeting, to identify gaps of evidence and to discuss ways in which problems related to evidence gaps in general practice and family medicine could be researched and rectified.

Programme

Thursday, 29 April 2021

09:00 - 10:00

Presenters Orientation Meeting 1

We welcome all presenters and session chairs to join this meeting to familiarize themselves with the presentation user interface, ask questions and resolve any technical issues. You may join anytime during this one hour session. Everyone who joins will be catered one by one on a first come first serve basis

Please watch the 3 minute long introductory video:

<https://www.youtube.com/watch?v=d6tF6APirR0>

- Burak Usgurlu

17:30 - 18:30

Presenters Orientation Meeting 2

We welcome all presenters and session chairs to join this meeting to familiarize themselves with the presentation user interface, ask questions and resolve any technical issues. You may join anytime during this one hour session. Everyone who joins will be catered one by one on a first come first serve basis

Please watch the 3 minute long introductory video:

<https://www.youtube.com/watch?v=d6tF6APirR0>

- Burak Usgurlu

Friday, 30 April 2021

09:00 - 10:30	Pre-conference Workshop 1 Writing for Publication – Meet the Editors for Tips and Tricks! Please click here to learn more about this workshop. This workshop requires additional registration to attend. This session will be held on Zoom. Please install Zoom to attend this session. <ul style="list-style-type: none">• Jelle Stoffers• Helena Liira
10:30 - 10:35	End of Pre-conference Workshop 1
11:00 - 12:30	Pre-conference Workshop 2 How to read a paper: critical appraisal skills for randomised controlled trials papers. Please click here to learn more about this workshop. This workshop requires additional registration to attend. This session will be held on Zoom. Please install Zoom to attend this session. <ul style="list-style-type: none">• Michael Harris
12:30 - 12:45	End of Pre-conference Workshop 2
13:00 - 13:35	Opening of the Meeting by EGPRN Chairperson & Keynote Speaker <ul style="list-style-type: none">• Davorina Petek (EGPRN Chairperson)• What matters most? Development of a research agenda for general practice - Jako Burgers (Keynote Lecturer)
13:35 - 13:45	Break
13:45 - 14:45	Plenary Session - Theme Papers: COVID-19 <ul style="list-style-type: none">• Claire Collins (Chair)• COVID-19-What do we miss? - Nevena Ivanova• Post-lockdown impact of the COVID-19 pandemic on patients affected by chronic diseases in Europe - Alexis Astruc• Regional management of the COVID pandemic in Germany: A nation-wide survey among general practitioners - Manuela Schmidt
14:45 - 14:55	Break
14:55 - 15:55	Parallel Session A - Theme Papers: General aspects of general practice <ul style="list-style-type: none">• Jean Yves Le Reste (Chair)• Are we sitting too comfortably? What evidence do we have regarding sedentary behaviour among GPs? - Richard Mayne• How do patients rate the importance of parameters considered patient-relevant in recent studies? A cross-sectional survey among German general practice patients - Christine Kersting• Is Continuity of Care Associated With Use of Health Care Services? - Emmi Lautamatti

14:55 - 15:55

Parallel Session B - Freestanding Papers: General aspects of general practice

- Pemra C. Unalan (Chair)
- Immediate or delayed prescription of antibiotics – factors that influence general practitioner decision - Katarina Stavrikj
- Perceptions on Multi-Issue Consultations in an Irish Primary Care Setting - Shane Dunlea
- Reducing Unnecessary Emergency Department Admissions in Children with Respiratory Tract Infection Symptoms: A Controlled Educational Intervention Study From Turkey - İkbal Hümay Arman

15:55 - 16:05

Break

16:05 - 17:05

Parallel Session C - Theme Papers: General aspects of general practice

- Jean Yves Le Reste (Chair)
- Cerumen Impaction Removal in General Practices: A Comparison of Approved Standard Products - Jean-Francois Chenot
- Goal-oriented care: a concept analysis - Dagje Boeykens
- Privacy by design and data minimisation in RADAR project. - Johannes Hauswaldt

16:05 - 17:05

Parallel Session D - Freestanding Papers: Chronic conditions

- Kathryn Hoffmann (Chair)
- A Qualitative Study to explore access and barriers to integrated care among vulnerable patients with diabetes mellitus in Belgium. - Stijn De Baets
- Impact of Covid-19 Confinement Measures on Chronic Diseases Managed in Primary Health Care. - Sabela Couso Viana
- Quality of Life in People With Lymphedema - Lorena Rodríguez Elena

17:05 - 17:15

Break

17:15 - 18:20

Parallel Session E - Theme Papers: Digital health and Summary of the Day

- Shlomo Vinker (Chair)
- Adoption and evaluation of a completely digital general practice clerkship – cross-sectional survey and cohort comparison among German medical students - Marina Fehl
- How does triage by an electronic symptom checker match with triage by a nurse in primary care? - Tuomas Koskela
- The evaluation of diffuse or focal thyroid pathology and early diagnosis of thyroid malignancy performed by family physicians using artificial intelligence through a European cross-border multicenter ultrasound screening project - Mihai Iacob
- Summary of the Day - Jako Burgers

17:15 - 18:15

Parallel Session F - Freestanding Papers: Mental health

- Pemra C. Unalan (Chair)
- Association of sense of coherence and depression in patients with chronic pain: a systematic review and meta-analysis - Alejandra Aguilar-Latorre
- Cardiometabolic Health Reviews in Patients on Antipsychotics: The Impact of Covid-19 - Simon Erridge
- The effect of COVID-19 pandemic on depression and anxiety occurrence among primary healthcare workers: results from a pilot study - Matic Mihevc

18:20 - 18:20

End of the conference day

Saturday, 1 May 2021

- 09:30 - 10:10 **Plenary Session & Chairperson Report & Keynote Speaker**
- Davorina Petek (EGPRN Chairperson)
 - Digital technologies: opportunities and challenges for better, safer and more equitable primary care - Ana Luisa Neves (Keynote Lecturer)
- 10:10 - 10:20 **Break**
- 10:20 - 11:20 **Parallel Session G - Theme Papers: Cardiovascular diseases**
- Lieve Peremans (Chair)
 - Comprehensive Evaluation of Hypertension Management at the Primary Level in Slovenia: Lessons for the Future - Črt Zavrnik
 - Developing and tailoring a complex intervention for the primary prevention of cardiovascular disease prior to its implementation in general practices in Belgium - Naomi Aerts
 - Non-pharmacological interventions to achieve blood pressure control in African patients : a systematic review - Monique Cernota
- 10:20 - 11:20 **Parallel Session H - Freestanding Papers: Sleep and neurological disorders**
- Tiny Van Merode (Chair)
 - Frequency of occurrence and predictive validity of olfactory and taste dysfunction in patients with SARS-CoV-2 infection - Esperanza Romero Rodríguez
 - Rock-a-bye baby: Children's sleep habits and related factors - Gizem Limnili
 - Translation and validation of two Parkinson's disease specific burden questionnaires, for patients and caregivers, from German into French - Sabine Bayen
- 11:20 - 11:30 **Break**
- 11:30 - 13:10 **Parallel Session I - One Slide Five Minutes Presentations**
- Ferdinando Petrazzuoli (Chair)
 - A new data collection project for studies of the process of diagnosis in primary care: collecting data on reasons for encounter and diagnoses in episodes of care in Europe. - Jean Karl Soler
 - Automatic ABI measurements in primary care - agreement with patients' symptoms and examination - Aleksandra Danieluk
 - Expanding role of family physician's team in early cancer detection for multimorbid patients - Aurimas Rapalavičius
 - Feasibility study of a competence-based teaching method (Toolbox GP) on the learning success of medical students and satisfaction of supervising physicians: How to integrate Entrustable Professional Activities into general practice teaching - Nicola Amarell
 - Impact of the Covid-19 pandemic on burnout syndrome in family doctors - Volodymyr Kramarchuk
 - Monitoring the clinical course and baseline characteristics of COVID-19 patients in Primary Health Care in Greece: An ongoing study. - Magda Gavana
 - Post-Covid: implications on patients lives - Nuno Parente
 - Predicting and preventing long-term invasive ventilation - a project presentation of PRiVENT - Noemi Sturm
 - Quality of Life Assessment in primary care during COVID-19 pandemic using EuroQol - Alba Pons Revuelta
 - The Initiative of German Practice-Based Research Networks - DESAM-ForNet - Leonor Heinz
- 11:30 - 12:55 **Parallel Session J - Freestanding Papers: Miscellaneous & Training**

- Thomas Frese (Chair)
- Premature ejaculation in primary care: communication strategies versus usual care for male patients consulting for a sexual, urogenital or psychological reason; the GET UP cluster randomized controlled trial - Marie Barais
- Skills in National Core Curriculum: National Survey of General Practitioners in Turkey - Özlem Coşkun
- Towards a Core Curriculum for Italian Family Medicine: results of a transparent, participatory and collective writing. - Alice Serafini
- Usability of a communication tool used by general practitioners and public health workers during the COVID-19 pandemic: a proof-of-concept-study - Angelina Müller

13:10 - 13:20 **Break**

13:20 - 14:20 **Parallel Session K - Theme Papers: COVID-19**

- Philippe-Richard Domeyer (Chair)
- Adaptation of the Vaccine Hesitancy Scale to Turkish: Validity and Reliability Study - Cigdem Apaydin Kaya
- Demographic Evaluation of Hospital Staff Before Covid Vaccination - Gökçe İşcan
- General practice attendances among patients attending a post-COVID-19 hospital clinic: A pilot study - John Broughan

13:20 - 14:40 **Parallel Session L - Research Course Presentations**

- Ferdinando Petrazzuoli (Chair)
- Shlomo Vinker (Chair)
- Demonstrating a paradigm shift in the approach to vertigo in primary care. VERTAP Project - Eva Peguero
- Effects of covid-19 pandemic on the mental health of female Family Doctors - Maria Bakola
- The Relationship Between Poor Upright Static Standing Posture and Musculoskeletal System Symptoms in Adults Admitted Ankara University Faculty of Medicine Hospital Family Medicine Polyclinics - Ayşe Çölgeçen
- "Coping Self-Efficacy Scale" Evaluation of the Turkish Validity and Reliability of the Scale - Ozden Gokdemir

14:30 - 14:40 **Break**

14:40 - 15:25 **Plenary Session - Theme Papers: Multimorbidity & frailty & Summary of the Day & Closing**

- Ana Clavería (Chair)
- Baseline characteristics and external validity of older multimorbid patients with polypharmacy and general practitioners enrolled in a randomized controlled primary care trial - Katharina Tabea Jungo
- Does multimorbidity predict the number of patient contacts: a matter of definition - Katharina Schmalstieg
- Introduction to the 93rd EGPRN Meeting, Halle - Germany - Thomas Frese (Speaker)
- Summary of the day and closing of the conference - Davorina Petek (Speaker)

15:40 - 15:40 **End of the conference**

Online Poster Sessions

The posters will be open to visitors at the Virtual Poster Hall during the event.

Poster Session 1 - Training and evidence-based practice

- What GPs need to know about paediatric COVID-19: CME curriculum - Lyubima Despotova-Toleva
- Willingness of German general practitioners to participate in long-term research networks - Larissa Virnau
- "What should medical students learn to be prepared for rural practice? Qualitative analysis of expert interviews with German rural physicians" - Kay Klinge

Poster Session 2 - Chronic diseases

- Associations of chronic medication adherence with emergency room visits and hospitalization - Michal Shani
- Cardiovascular combined target in type 2 Diabetes: sex and socio-economic status differences in primary care. - Sara Ares Blanco
- Integrating primary and secondary care to enhance chronic disease management: A scoping review. - Sara Murtagh
- Lack of glycemic control measures, a new risk factor for the development of cardiovascular disease in patients with type 2 diabetes - Fernando Alvarez-Guisasola
- Randomized controlled trials on prevention, diagnosis, and treatment of diabetes in African countries - a systematic review - Angelika Sandholzer-Yilmaz

Poster Session 3 - Cancer and screening:

- Identifying the obstacles to colonoscopic screening of first-degree relatives with a family history of colorectal cancer. Where do GPs stand? - Clara Blanchard
- Implementation of the Health Balanced Scorecard in the Health Center of Varis, Greece. Measuring clinical indicators for gynecologycancer. - Michael Dandoulakis

Poster Session 4 - COVID-19 (Part 1)

- Clinical presentation of Bulgarian patient with possible COVID-19 - Lyubomir Kirov
- COVID-19 as a case study of the tension between politics and science, evidence and practice, healthcare and economics. - Jean Karl Soler
- COVID-19's impact on primary care and related mitigation strategies: A scoping review. - John Broughan
- Experiences of individuals affected by Covid-19: A qualitative study among patients from German family practice settings - Leonard Kierer
- Impact of COVID-19 in coronary heart disease follow-up in primary care - Ileana Gefaell
- Primary care for patients with coronary heart disease during the COVID-19 pandemic in Germany - Nathalie Mähl

Poster Session 5 - COVID-19 (Part 2)

- Analysis of COVID-19 complicated vascular cases from General Practice perspective - Lyubima Despotova-Toleva
- Doctor –patient consultations in C-19: rapid development and deployment of a virtual patient to support providers breaking bad news - Teresa Pawlikowska
- How COVID-19 has affected general practice consultations and income – General Practitioner cross sectional population survey evidence from Ireland - Robyn Homeniuk
- Primary Healthcare Professionals' Preparedness during the first wave of the COVID-19 pandemic in Greece - Smyrnakis Emmanouil

Poster Session 6 - Miscellaneous

- Integrating Hepatitis C Care for opioid substitution treatment patients: Feasibility, Clinical and Cost Effectiveness - Geoff McCombe
- Intra-articular and soft tissue corticosteroids injections and risk of infections - Galia Zacay
- Patients' Satisfaction and Perception about Quality of Health Care in an Urban Primary Health Center of Athens, Greece - Maria Bakola

- Priorities in integrated care: A scoping review. - Corey Burke
- Use of Epinephrine Autoinjectors in patient with Hymenoptera venom allergy and food anaphylaxis among 8 Italian GPs - Claudia Negri

Keynote Lecture

Prof. Dr. Jako Burgers

Professor in 'Promoting Personalized Care in Clinical Practice Guidelines' at the Department of General Practice and Care and Public Health Research Institute of Maastricht University, Senior Consultant at the Dutch College of General Practitioners (NHG) and practicing primary care physician in the Netherlands.

What matters most? Development of a research agenda for general practice

Research in general practice covers the whole of medicine, including clinical and contextual issues. Defining the focus of research is therefore not easy. Knowledge and preferences of researchers and funding agencies may dominate above the real problems faced by patients and society. In addition, topic selection and prioritisation are often not coordinated, which may lead to duplication and research waste. A research agenda could help focusing on the issues that matters most.

In the Netherlands, we developed a national research agenda involving general practitioners (GPs), researchers, patients and other relevant stakeholders in healthcare. We reviewed knowledge gaps from 90 Dutch general practice guidelines and received input from 48 healthcare stakeholders to formulate research questions relevant for general practice. This resulted in a long list of 787 research questions. These were prioritised by practising GPs (n=232) in an online survey and in an invitational conference including GPs (n=48) and representatives of other stakeholders in healthcare (n=16). The prioritising procedure resulted in 24 top 10 lists of research questions categorised according to ICPC chapters and to overarching themes as person-centred care, eHealth, and organisation of care. An advisory board composed of representatives of general practice research departments, the Dutch College of GPs, GP trainees, and patient organisations supported the whole process.

The national research agenda provided a enormous boost in general practice research as well as in collaboration between research departments. A national general practice research programme has been launched to address the questions in the agenda. Collaboration instead of competition between research departments and institutes is encouraged within this programme. They are united in a national consortium supported by the Dutch College of GPs with the aim to facilitate collaboration between data registration networks and to initiate large scale multicentered trials.

The Dutch general practice research agenda could be seen as an example for other countries and for international collaboration. Opportunities to collaborate within the EGPRN to set up an international research agenda are challenging. This could include cross-border themes such as infectious diseases, migrant care, and planetary health. A shared agenda could also increase the chances for obtaining European funding. It is time now for international collaboration in general practice research contributing to health that matters to all.

Keynote Lecture

Prof. Dr. Ana Luisa Neves

Center for Health Technology and Services Research, University of Porto

Digital technologies: opportunities and challenges for better, safer and more equitable primary care

Digital technologies may improve quality of primary care by improving patient empowerment, access to personal health information, and increased involvement in the self-management of their health and disease. However, with the widespread use of these digital solutions, there is a growing need to evaluate their impact, in order to better understand their risks and benefits, and to inform health policies that are both patient-centred and evidence-based. It is therefore critical to evaluate their impact, and map it against the six domains of healthcare quality: patient-centredness, effectiveness, efficiency, safety, timeliness and equity.

Using digital platforms, such as patient portals and mobile apps as tools to provide patients with access to their health information can positively impact health outcomes (i.e. glycemia levels) and improve patient safety outcomes, such as general adherence and medication safety. However, more studies are necessary to enhance meta analytical power and assess the impact in other domains of care.

For decades, digital technologies have promised to help address many challenges in primary care. Around the world, countless initiatives have made considerable efforts to implement remote care approaches into their existing healthcare systems. However, despite the promise, a wide range of barriers have limited widespread adoption, including cultural, regulatory and policy, social security, industrial and technical, knowledge, financial, and market-related barriers.

With the onset of COVID-19, we experienced another radical transformation in primary care - the shift to remote care. Over the course of a few weeks, primary care physicians and patients worldwide have swiftly transitioned from face-to-face consultations to remote solutions. Remote care has reduced risks of viral transmission by deflecting patient flow from healthcare physical facilities, whilst simultaneously allowing physicians to continue providing care to vulnerable patients who require shielding. It has supported the triage of patients with COVID-19 related symptoms (potentially optimising the use of limited healthcare resources), supported monitoring of COVID-19 patients, and strengthened epidemiological surveillance efforts. In addition to COVID-19-related care, digital tools have also contributed extensively to the provision of care for both chronic diseases and, in some circumstances, acute care. However, some concerns have also been raised, particularly concerning potential safety issues regarding the monitoring COVID-19 patients, and worsening health inequalities for patients who are not technologically literate or have hearing impairment.

As primary care embraces technology (ie, with virtual care and telemedicine), there are important concerns about the impact of digital approaches widening the digital divide, i.e. entrenching healthcare disparities for low-income, racial-ethnic minority and linguistically diverse populations. It is therefore critical that future research widely evaluates patient interest, access and skills to using digital care tools, leading to the development of tailored interventions to match patient preferences and needs. In this context, mixed-methods approaches and implementation science studies can be an important tool to understand use, usability, and uptake, as well as impact on health outcomes.

Theme Paper / Finished study**COVID-19-What do we miss?**

Nevena Ivanova

Medical University-Plovdiv, Bulgaria, Department of Urology and general medicine, plovdiv, Bulgaria. E-mail: nevenai@yahoo.com

Keywords: COVID-19, GP, cardiovascular

Background:

COVID-19 (SARS-CoV-2 virus) is a novel coronavirus which emerged in Wuhan, China in December 2019 and became pandemic in March 2020. COVID-19 symptoms are nonspecific and their severity can vary. Most common symptoms are fever, dry cough and tiredness. COVID-19 mainly affects the respiratory tract from mild symptoms to bilateral pneumonia and acute respiratory distress syndrome. Due to a global inflammatory response and endothelial damage, COVID-19 may predispose to cardiovascular disorders. GPs are first line doctors, so it is of great importance to diagnose including complications and make a proper decision about the treatment

Research questions:

Recognition of cardiac coronavirus complications in general practice

Method:

Study of several cases with cardiac coronavirus complications in outpatient cardiology clinic. Patients were diagnosed positive for COVID-19 and treated by GP according to established protocol.

Results:

Along with the most common symptoms, all of the patients complained anxiety, emotional instability and depressive thoughts. On 8-9th day of disease's onset occurred chest discomfort, heaviness, dagggers, palpitations and arrhythmias. Those were interpreted by GP as panic attacks and psycho-emotional disorders and treated with sedatives. Because of no effect on the cardiac symptoms even acceleration and worsening, patients sought for consultation with cardiologist on 30-40th day. In cardiology clinic an ECG and echocardiography were performed which findings revealed pericarditis with pericardial effusion. A proper treatment was prescribed and patients were followed with regular checkups for 1 month by cardiologist.

Conclusions:

COVID-19 is a multisystem disease which leads to various symptoms and could affect cardiovascular system. GP being a front line doctor and gate keeper should be familiar with possible cardiac coronavirus complications, suspect and recognize their development. It would reflect to an early diagnose and treatment so to avoid further severe complications. More case reports, discussion and collaboration between GPs and cardiologists are needed for better results

Theme Paper / Finished study**Post-lockdown impact of the COVID-19 pandemic on patients affected by chronic diseases in Europe**

Alexis Astruc, Bruno Halioua, Jean Zetlaoui, Meryem Harrizi, Alexis Bombezin--Domino, Lise Radoszycki

Department of General Practice, University Sorbonne Paris Nord, 93000 Bobigny, France. E-mail: alexis.astruc@yahoo.fr

Keywords: primary care, COVID-19, chronic diseases

Background:

Patients with Chronic Medical Conditions (CMC) require regular access to healthcare professionals and have to take long-term treatments. The COVID-19 pandemic may affect their clinical outcomes.

Research questions:

What is the impact of the COVID-19 epidemic on patients with CMC in Europe?

Method:

This observational cross-sectional study was conducted using an online questionnaire available on a social network of patients (Carenity) from June 3rd, 2020 to October 7th, 2020. It included adult patients from France, Germany, Italy, Spain and the United Kingdom, with any CMC.

Results:

2,861 patients were included, 75% woman (n=2 136), with a mean age of 54 years old, and most frequently affected by asthma (22%, n=619), type 2 diabetes (16%, n=467), chronic obstructive pulmonary disease (12%, n=332). 89% (n=2538) of them were taking a long-term treatment. 17% (n=433) modified their treatment intake, 30% (n=132) of whom without notifying their doctor. Consultations were strongly impacted: from the start of the epidemic, 30% (n=872) of patients had difficulty in finding an available doctor, and 28% (n=794) consulted their doctor less frequently since end of lockdown (45%, n=1287, during lockdown). 75% (n=2135) of patients had long-planned medical consultations or procedures canceled because of the epidemic. Of those, 63% (n=1343) could not reschedule all of them. 39% (n=1109) feel their health status have deteriorated because their disease management was modified during lockdown. 34% (n=973) of patients used tele-consultation: 80% (n=782) of them deemed it satisfactory and 59% (n=570) were willing to use it for their future CMC follow-up. Patients also reported lacking information, mainly regarding treatment-related risks, and precautions when returning to work. 46% (n=1316) were not satisfied with the information they received.

Conclusions:

COVID-related changes in CMC patients' behavior and medical care may have health consequences. They should be closely monitored to make sure CMC patients are not the collateral victims of the epidemic.

Points for discussion:

Implications on treatment intake and difficulty in finding an available doctor / Long-planned medical consultations or procedures canceled because of the epidemic

Originality of this real-life patient study

Limitations regarding the lack of access to non-hospitalized patients or patients unable to complete an online questionnaire

Theme Paper / Ongoing study no results yet**Regional management of the COVID pandemic in Germany: A nation-wide survey among general practitioners**

Manuela Schmidt, Anika Thielmann, Simon Kugai, Nicola Amarell, Katrin Balzer, Daniela Eggers, Linda Gärtner, Pascal Nohl-Deryk, Angelina Müller, Beate Müller, Birgitta Weltermann

University of Bonn, University Hospital Bonn, 53127 Bonn, Germany. E-mail: manuela.schmidt@ukbonn.de

Keywords: general practice; pandemic management; pandemic preparedness

Background:

The COVID pandemic is a challenge necessitating pandemic management on all levels of the health care system. The current German national pandemic plan lacks detail for regional management. A revision is vital to general practitioners who play a key role, as 6 of 7 COVID patients in Germany are treated ambulatory. In Germany, different regional structures and processes, such as COVID practices, diagnostic centers, COVID taxis, and COVID home care teams, were developed to better serve the needs posed by the pandemic as well as to maintain regular patient care. International studies show that adaptable primary care is essential to meet pandemic demands and that implemented strategies in general practices have a high influence on local infection rates. The study is funded by the German Federal Ministry for Research and Education.

Research questions:

To identify the experiences of general practitioners across Germany with existing and new health care structures and processes during the pandemic.

Method:

The web-based questionnaire addresses general practitioners' experiences with regional pandemic management: newly implemented structures and processes, both for patient care and general interactions, communication and cooperation with partners in the health care system, usage and need for pandemic information, personal burden, own capacity for pandemic decision-making, and lessons learned. The questionnaire is pretested among general practitioners from two primary care teaching institutions. The survey is distributed nationwide among German general practitioners. For assessment, standardized instruments such as the net promotor score, adapted to include topics of pandemic plan and clinical governance frameworks are applied.

Results:

The survey will be conducted in February 2021. Results will be available at the congress.

Conclusions:

The results will be used to support the revision of the German national pandemic plan.

Theme Paper / Finished study**Are we sitting too comfortably? What evidence do we have regarding sedentary behaviour among GPs?**

Richard Mayne, Nigel Hart, Neil Heron

Queen's University Belfast, BT9 6AF Belfast, United Kingdom. E-mail: rmayne02@qub.ac.uk

Keywords: General Practice, Sedentary Behaviour, Physical Activity

Background:

Excessive sedentary behaviour is associated with a number of adverse health outcomes and increased all-cause mortality. GPs who are more physically active are more likely to recommend physical activity to their patients.

Research questions:

What is the current evidence regarding levels of sedentary behaviour among GPs?

Method:

A systematic review was conducted to establish the evidence regarding current levels of sedentary behaviour among GPs. Subsequently, a multi-item questionnaire survey (modified version of the International Sedentary Assessment Tool (ISAT)) was disseminated to GPs in Northern Ireland. A purposive, maximally varied sample of 20 survey participants were then recruited to wear thigh-worn accelerometers and complete a sleep/work log to obtain objective data regarding their sedentary behaviour. This allowed comparison of subjective, self-reported data with objective, accelerometer data.

Results:

Systematic Review:

Search criteria returned 1707 studies. 34 full texts were reviewed and 2 studies included in the final review. Both were cross-sectional surveys of satisfactory methodological quality and a high risk of bias.

Sedentary Behaviour Study:

Out of 1999 GPs in Northern Ireland, the questionnaire received 352 valid responses (response rate of 18%). Overall mean workday sedentary time for GPs was 10 hours 20 minutes. Overall mean non-workday sedentary time was 4 hrs 47 minutes. Only 6% of GPs had access to an active workstation, such as a standing desk, however 61% of those who didn't have an active workstation would consider using one. 81% of GPs reported they are spending more time sitting in work now than prior to the COVID-19 pandemic. 87% of GPs would prefer less time sitting in work.

Conclusions:

Sedentary behaviour among GPs has increased since the onset of the COVID-19 pandemic, with the vast majority of GPs exceeding the recommended daily levels of sedentary behaviour. Further research is required to identify ways of reducing sedentary behaviour and increase physical activity among GPs.

Points for discussion:

How can we reduce sedentary behaviour among GPs?

What are the barriers and facilitators to reducing sedentary behaviour among GPs?

How does the sedentary behaviour among GPs in Northern Ireland compare to GPs working in other countries?

Theme Paper / Finished study**How do patients rate the importance of parameters considered patient-relevant in recent studies? A cross-sectional survey among German general practice patients**

Christine Kersting, Julia Hülsmann, Klaus Weckbecker, Achim Mortsiefer

Professorship of Primary Care & Institute of General Practice and Interprofessional Care, Faculty of Health, Witten/Herdecke University, 58448 Witten, Germany. E-mail: christine.kersting@uni-wh.de

Background:

In order to make informed choices based on their individual preferences, patients need to be adequately informed about treatment options and their potential effects. This implies that studies determine the effects of care based on parameters which are relevant to patients. Our scoping review of recent studies revealed a high variety of parameters considered relevant to patients, which addressed as well processes as outcomes of care. It is unclear, which of them are most important for patients across diseases.

Research questions:

How do patients rate the importance of process- and outcome-related parameters considered patient-relevant in previous studies?

Method:

The study was designed as cross-sectional survey among German general practice patients. Ten teaching and research practices of the Institute of General Practice and Interprofessional Care supported the study. During a two-week period in fall 2020 patients willing to participate self-administered a short questionnaire. The questionnaire evaluated 32 parameters considered patient-relevant in previous studies on a 5-point Likert-Scale ranging from 'not relevant' to 'highly relevant' and offered a free-text field for additional parameters. The free-text answers were inductively categorized by two researchers (CK, JH), while quantitative data were analyzed using descriptive statistics in SPSS.

Results:

Data from 299 patients were eligible for analysis. The parameter 'confidence in therapy' was rated most important, followed by 'prevention of comorbidity' and 'mobility'. Overall, all parameters despite 'sexuality/sexual function' and 'frequency of healthcare service utilization' were rated important or highly important. Free-text analyses revealed 16 new parameters. Those most frequently mentioned were 'confidence in practitioner', 'inclusion of alternative medicine/treatment methods', 'enough time in physician consultation', and 'being heard'.

Conclusions:

Both, parameters addressing processes and outcomes of care have a high significance for patients. Interestingly, the newly mentioned parameters predominantly addressed processes of care. Further research is needed to understand how patients set priorities and balance between parameters to make choices.

Theme Paper / Ongoing study with preliminary results**Is Continuity of Care Associated With Use of Health Care Services?**

Emmi Lautamatti, Markku Sumanen, Risto Raivio, Kari Mattila

Tampere University, 33580 Tampere, Finland. E-mail: emmi.lautamatti@tuni.fi

Keywords: Continuity of care, health care services

Background:

Continuity of primary health care is defining characteristic of high-quality health care. There is evidence of continuity of care having associations with use of health care services. In Finland continuity of care in primary care has decreased and at the same time use of hospital services, examinations and consultations have increased.

Research questions:

Is continuity of care associated with use of health care services? Does continuity of care increase the quality of care by decreasing unnecessary examinations and consultations? Is there a patient group that benefits from continuity of care more than others?

Method:

The data are part of Health and Social Support –study (HeSSup) based on a random Finnish population sample. There were 11924 respondents in 2003 and 15993 in 2012. Participants were divided into three groups according to the single repeated question of continuity of care. We asked the use of laboratory tests, consultations or other examinations in the questionnaires. Logistic regression analysis was used to study association of age, gender, education, self-assessed health, ability to function, chronic diseases and continuity of care with more frequent use of health care services.

Results:

Participants in the group who had continuity of care in 2003 and 2012 had more illnesses than participants in other groups. In the same group also the use of other examinations, consultations and hospital services was more frequent than in other groups. Factors associated with the findings are still under study. The results will be announced in the congress.

Conclusions:

Patients with chronic diseases need and usually get more health care services than the other population. Patients pursue authorities to implement continuity of care, which also guarantees good quality of care.

Points for discussion:

Trends of continuity of care around Europe.

Increased use of health care services - is continuity of care cost-effective?

In Finland team-based models in organizing primary health care are a hot topic. What is the future of continuity of care?

Freestanding Paper / Finished study**Immediate or delayed prescription of antibiotics – factors that influence general practitioner decision**

Katarina Stavrikj, Valentina Risteska - Nejasmic, Aleksandar Kirkovski, Nikica Jovanovski, Martin Angelov, Bekim Ismaili, Marta Tundzeva

Center for Family Medicine, Medical Faculty, 1000 Skopje, North Macedonia. E-mail: kstavric@hotmail.com

Keywords: antibiotic prescription, primary care, acute respiratory infections

Background:

Respiratory tract infections are one of the most common causes for antibiotic prescription in primary care. The inappropriate and over use of antibiotics leads to increased emergence of antimicrobial resistance.

Research questions:

What are the factors that influence prescription pattern of antimicrobials in patients with acute respiratory tract infections in primary care in Macedonia.

Method:

A cross sectional study, based on a representative sample of 87 general practitioners (GP) was conducted during the period of 4 weeks in November 2019. All patients with episode of acute respiratory infection (ARI) were involved in the survey. We used special questioner that was used during the same survey in 2014/2015 year. The association between diagnosis, patient sociodemographic factors and manner of antibiotic prescription (immediate or delayed prescription) was investigated. For statistical analysis was used program Statistica.

Results:

Antibiotic was prescribed to 4237 patients (53%) with ARI. GP used immediately manner of prescription for 2878 patients (77.39%) while delayed prescription for 841 patients (22.61%).

Most frequently immediate antibiotic was prescribed for diagnosis J03 Tonsillitis 32.45%, J20 Bronchitis 19.74% and J02 Pharyngitis 16.33%. Delayed prescription was more often used for J03 Tonsillitis 24.39%, J02 Pharyngitis 21.64% and J20 Bronchitis 20.33%.

Multiple regression analysis was run to predict prescription manner of antibiotics. Lower age, workday - Friday and follow up visit statistically significantly predicted delayed prescription of antibiotics ($p < 0.05$).

Perception of doctors for delayed prescription of antibiotics were mainly difficulties to follow up (20.33%), presence of complication (14.39%), patient pressure (11.41%) and uncertainty in diagnosis (6.66%), while for immediate prescription it was indication for antibiotics (79.95%).

Conclusions:

Exploring the factors that influence the doctors decision for immediate or delay prescription of antibiotics for ARI is important for improving antibiotic stewardship in primary care and closing evidence based gap.

Points for discussion:

1. How to change doctors' attitude towards use of guidelines?
2. Methods for antibiotic stewardship in primary care

Freestanding Paper / Finished study**Perceptions on Multi-Issue Consultations in an Irish Primary Care Setting**

Shane Dunlea

ICGP, Dunlea, Ireland. E-mail: shanedunlea@rcsi.ie

Keywords: "Primary care" "consultation" "multiple-issues" "General practice"**Background:**

Consultations involving multiple issues are a common feature of general practice (GP), which have implications for both doctor and patient in terms of time allocation, structuring of the consultations, and safely addressing and following up on all issues involved.

Research questions:

This research project was a basic descriptive study in which the perceptions and attitudes of both doctor and patients were explored in relation to consultations involving multiple issues.

Method:

All GP trainers and GP trainees of the fourteen Irish National Training Schemes were invited to complete an anonymous online survey. Patient participants were recruited from the waiting rooms of two Dublin based practices. The data from both surveys were then collated and analysed to identify any patterns that emerged.

Results:

The results of the doctors' survey showed the perception of a high incidence of consultations involving multiple issues (mean number of issues per consultation 2.52). The majority of doctors (65%) favoured a policy of capping number of issues per consultation, but only 7% of practices had such a practice policy in place. A variety of strategies were used in multi-issue consultation by doctors. The majority of doctors (65%) indicated their management of these consultations was influenced by whether the patient was a private or public patient. These consultations were found to adversely impact upon doctors' time management, stress level, and act as a source of concerns regarding clinical safety. The patient survey indicated the average number of issues brought to the consultation was 1.37 and the average number of issues patients felt it was reasonable to address in a consultation was 2.29. "Being able to address all issues brought on the day" was ranked highly important by patients.

Conclusions:

Multiple issues consultations are a common feature of the GP consultation and a common source of stress for doctors.

Points for discussion:

How common are multiple issue consultations?

How do multi-issues consultations impact GP's

What are the strategies that can be used, and are used, in this type of consultation.

Freestanding Paper / Finished study

Reducing Unnecessary Emergency Department Admissions in Children with Respiratory Tract Infection Symptoms: A Controlled Educational Intervention Study From Turkey

İkbal Hümay Arman, Kübra Temel Aslan, Yusuf Arman, Cigdem Apaydin Kaya

Marmara University School of Medicine, 34871 İstanbul, Turkey. E-mail: ikbalhumay@gmail.com

Keywords: family practice, signs and symptoms, pediatric emergency medicine, unnecessary, respiratory tract infections

Background:

Respiratory tract infections(RTI), the most common cause of emergency applications in children, can mostly be managed in Family Health Centers(FHC). This requires the right attitude towards RTI symptoms(RTIS).

Research questions:

Can education of mothers reduce unnecessary emergency admissions of children with RTIS and improve their knowledge, attitudes and behaviors(KAB) about RTIS(KABaRTIS)?

Method:

This study was a controlled educational intervention in mothers of 6 months–6 years old children. Sample size was calculated as at least 58+58 and reached with convenient sampling. The intervention group was given one-on-one, face-to-face training and a brochure prepared by the researchers. RTIS management and alarm findings were emphasized. Likert-type questions about KABaRTIS, fever-related practices; health services received by their children, number and reasons of applications were compared before(B) and after(A) intervention in control(C) and intervention(I) groups. The scale's cronbach- α coefficient was 0,68-0,72.

Results:

223 mothers participated in the study, but it was completed with 178 people(C=118,I=60). There was no significant difference between the groups before the intervention. KAB scores of both groups increased after the intervention(C=B:76.9-A:82.2;I=B:76.9-A:83.6;p<0.001), but the difference between the two groups was not significant(p=0.193). In both groups, emergency admissions for RTIS decreased, but the C-group went to the emergency for RTIS less (p=0.014/p=0.492). The median of the number of admissions decreased for both groups(B:1-A:0,p=0,180). However, emergency department applications due to severity of symptom/disease increased in C-group and decreased in I-group.

Conclusions:

There may be a few reasons for not seeing the expected difference between intervention and control group after the intervention. The study population went to the emergency departments less than the average of Turkish population. The training was done in one session. Educational content may have increased sensitivity of mothers in I-group. The importance of this study is being the first educational intervention planned in Turkey to reduce unnecessary emergency admissions in children. However, further long-term studies needed.

Points for discussion:

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

How can the interventional methods be more accesible and successful?

What do you think about extending this intervention to society through social interactions?

Theme Paper / Published**Cerumen Impaction Removal in General Practices: A Comparison of Approved Standard Products**

Jean-Francois Chenot, Fritz Meyer, Rebekka Preuß, Aniela Angelow, Elisabeth Meyer, Simone Kiel

Institute for Community Medicine, Dept. General Practice, 17475 Greifswald, Germany. E-mail: jchenot@uni-greifswald.de

Keywords: cerumen; cerumenolytic agents; ear irrigation; earwax removal; pre-treatment.

Background:

Ear irrigation is a commonly used method for removing earwax in general practice. There is no firm evidence if no pre-treatment is as good as pre-treatment with various standard preparations.

Research questions:

To assess the effectiveness of no pre-treatment compared to pre-treatment with commercially available cerumenolytics and to assess which preparation is best suited for pre-treatment.

Method:

This is a pragmatic observational study of patients with cerumen treated from a single GP with 3 different preparations or no preparation prior to standardized ear irrigation. Generalized linear mixed models with logit link function were performed to assess the effectiveness of pre-treatment with different preparations and no pre-treatment. The models were adjusted for age group (<70, ≥70) and sex.

Results:

A total of 168 patients (298 ears, 58 % female, median age 65 years) consulted for obstructive cerumen, some of them several times. The cerumen was successfully removed in 70% (208/298). Comparing any preparation to no preparation (aggregated comparison), the odds ratio for complete clearance was 1.35 (95% confidence interval: 0.69-2.65). Comparing the preparations individually, the odds ratio of the docusate-sodium-based preparation was 1.87 (95% CI: 0.79-4.42) indicating a higher effectiveness. Although, not statistically significant. Ear irrigation was less successful for patients aged ≥ 70 years (OR = 0.48, 95% CI: 0.23-0.98).

Conclusions:

The aggregated comparison indicates a slight trend toward a higher effectiveness of any pre-treatment compared to no pre-treatment. The effect-size of docusate-sodium-based pre-treatment indicates a higher effectiveness of cerumen impaction removal. Nevertheless, superiority could not be shown conclusively according to the statistical significance given the restricted sample size.

Points for discussion:

Should GPs remove earwax, is there an safety issue?

What is the next step after unsuccessful ear irrigation?

Theme Paper / Finished study**Goal-oriented care: a concept analysis**

Dagje Boeykens, Pauline Boeckxstaens, An De Sutter, Lies Lahousse, Peter Pype, Patricia De Vriendt, Dominique Van De Velde

University of Ghent, Gent, Belgium. E-mail: dagjeboeykens@gmail.com

Keywords: goal-oriented care, goal-setting, patient-centeredness, chronic conditions, multimorbidity, concept analysis

Background:

The healthcare system is faced by an ageing population, increase in chronic conditions and multimorbidity. Multimorbid patients are faced with multiple parallel care processes leading to a risk for fragmented care. These problems relate to the disease-oriented paradigm. In this paradigm the treatment goals can be in contrast with what patients value.

The concept of goal-oriented care is proposed as an alternative way of providing care. There is a need to translate this concept into tangible knowledge so providers can better understand and use the concept in clinical practice. The aim of this study is to address this need by means of a concept analysis.

Research questions:

How can goal-oriented care be understood for people with chronic conditions in primary care?

Method:

This concept analysis using the method of Walker and Avant is based on a literature search in PubMed, Embase, Cochrane Library, PsychInfo, CINAHL, OTSeeker, and Web of Science. The method provides eight iterative steps: select a concept, determine purpose, determine defining attributes, identify model case, identify additional case, identify antecedents and consequences, and define empirical referents.

Results:

The analysis of 37 articles revealed that goal-oriented care is a dynamic and iterative process of three stages: goal-elicitation, goal-setting and goal-evaluation. The process is underpinned by the patient's context and values. Provider and patient preparedness are required to provide goal-oriented care. Goal-oriented care has the potential to improve patients' experiences and providers' well-being, to reduce costs, and improve the overall population health. The challenge is to identify empirical referents to evaluate the process of goal-oriented care.

Conclusions:

A common understanding of goal-oriented care is presented. Further research should focus on how and what goals are set by the patient, how this knowledge could be translated into a tangible workflow, and should support the development of a strategy to evaluate the goal-oriented process of care.

Points for discussion:

The balance between providing care based on clinical guidelines and providing care according to the patients' needs and preferences.

What is needed to convince professionals of apply goal-oriented care in their clinical practice?

'What matters to the patient?': what goals do patients set?

Theme Paper / Finished study**Privacy by design and data minimisation in RADAR project.**

Johannes Hauswaldt

University Medical Center Göttingen, Institute of General Practice, 37073 Göttingen, Germany. E-mail: johannes.hauswaldt@med.uni-goettingen.de

Keywords: Privacy protection, data security, primary care practice, electronic medical records, secondary research

Background:

Primary care practice (PCP) teams' inclusion into research at microlevel demands building and maintaining a complex research infrastructure. Privacy protection and data security have to be considered and incorporated from starting point when using PCP's computerised medical records (EMR).

Research questions:

Which concepts for privacy protection have been realised during the RADAR project, and which are to be kept or extended in future practice based research networks?

Method:

Concept analysis and artifact evaluation.

Results:

The multiprofessional RADAR project team generated and followed a comprehensive privacy protection and IT-security concept. It named responsible controllers and time limits for data storage. Of four different data access models, restricted access was realised in RADAR project, but in future may be replaced by controlled access. Privacy by design as a concept was included into RADAR project's conceptualisation right from the beginning, and its 7 foundational aspects can be recognised.

Recommended de-identification of EMR was followed in a multi-level single-use pseudonymisation scenario. Still in practice, we decoupled health data from corresponding patient-identifying information by splitting EMR data into IDAT (identifying) and MDAT (medical). Re-identification attacks, by attribution, inference or aggregation, have not been observed in RADAR project. Data when transferred always was encrypted. Present legal conditions impede realising factual anonymisation.

Data minimisation was realised, together with purpose and storage limitation. For data minimisation we confined EMR data extraction to 40 predefined data fields from a small number of consenting use case patients. These 40 variables were arranged into 11 semantic groups and correlated with the core data set of medical informatics initiative.

Conclusions:

Privacy by design and data minimisation concepts are incorporated into RADAR project and thus made it feasible in Germany.

Future efforts are needed into building and maintaining a strong and transparent legal, ethical, governance and data security framework for PCP teams' inclusion into research.

Points for discussion:

Which additional elements or aspects of privacy protection for those involved do you suggest?

Do you know blueprints or best practice examples for a legal, ethical, governance and data security framework, for PCP teams' inclusion into research?

Which technical or organisational solutions are especially favourable for privacy protection in secondary data analysis?

Freestanding Paper / Almost finished study**A Qualitative Study to explore access and barriers to integrated care among vulnerable patients with diabetes mellitus in Belgium.**

Stijn De Baets, Katrien Danhieux, Josefien Van Olmen, Roy Remmen, Gareth White, Edwin Wouters

University of Antwerp, 2610 Wilrijk, Belgium. E-mail: stijn.debaets@uantwerpen.be

Keywords: Diabetes Mellitus Type 2 - financial aspects - psychosocial aspects - qualitative research - barriers to care

Background:

Effective interventions for control of diabetes are available, but do not reach vulnerable populations. Also in Belgium, they risk being excluded from care, partly because of socio-economic exclusion and compounding health problems that concur in reducing people's ability to cope with disease. The aim of this study is to examine why some People With Diabetes (PWD) do not benefit from integrated care in its current form in Belgium.

Research questions:

1) what is the variation in care and support experienced and available, by PWD and what is the influence of other context and patient-related factors? 2) What are incentives and barriers to care and self-management for PWD? 3) What are core drivers of out of cost for their disease?

Method:

A qualitative study design is used. Patients, purposively selected by a continuum sampling strategy, were included. An inductive thematic analysis, using semi-structured interviews was used. Interviews were audio-recorded and transcribed verbatim.

Results:

7 themes were mentioned by PWD: (1) financial aspects, (2) supporting assistive devices (3) the care process, (4) psychosocial aspects, (5) lifestyle, (6) quality of care, (7) distance to care. On the one hand, the results show that related factors can impede the care for the patient's condition to an important extent. On the other hand, patients also report several aspects that can affect their well-being in a positive way.

Conclusions:

Vulnerable people experience multiple barriers to care and self-management, even in a high income country like Belgium. Whereas some relate to the patient context, others are linked organizational care elements.

Points for discussion:

Financial barriers

The importance of informal caregivers

The influence of psychosocial aspects

Freestanding Paper / Ongoing study with preliminary results**Impact of Covid-19 Confinement Measures on Chronic Diseases Managed in Primary Health Care.**

Sabela Couso Viana, Bárbara Oliván Blázquez, Fátima Dios Quiroga, Ana Clavería Fontán, Beatriz González Álvarez, Magallon Botaya

Instituto de Investigación Biomédica de Galicia Sur, 15894 Teo, Spain. E-mail: sabelacouso@gmail.com

Keywords: confinement, digital health, chronic disease, primary health care, covid-19.

Background:

To contain the spread of the first wave of the COVID-19 pandemic, home lockdown for 10 weeks was enforced in Spain. This confinement measure has had a direct impact on health care organisation, as well as on lifestyles and multiple social behaviours. These aspects may have influenced on the health of citizens, especially those with chronic pathologies.

Research questions:

Have patients with chronic diseases with prevalence higher than 5% and their clinical follow-up from Primary Care worsened after home closure?

Method:

Study design: Observational study with data extracted from the primary care electronic medical records of a Spanish Health Region (Aragon).

Period: Data was collected during 6 months before lockdown (14/09/19-14/03/20), during confinement (14/03/20-03/05/20) and 6 months (03/05/20-03/11/20) and 12 months (03/11/20-03/05/21) following confinement.

Participants and sample size: All patients over 16 years-old with at least one active episode of any diseases with prevalence higher than 5% and some clinical parameter to assess their follow-up from Family Physicians.

Variables: sex, age, copayment, episode (coded with International Classification of Primary Care) and their clinical parameters. Selected pathologies and clinical parameters were: Diabetes (glucose concentration(mg/dl), glycated haemoglobin(%)); arterial hypertension (systolic blood pressure(mmHg), diastolic blood pressure(mmHg)), dyslipidaemias (total cholesterol(mg/dl), C-HDL(mg/dl), C-LDL(mg/dl), Triglycerides(mg/dl)); hypothyroidism (TSH(μ U/mL) and free T4(μ g/dL)); and chronic renal disease (creatinine(mg/dl)). BMI will also be checked before and after lockdown.

Analysis: Descriptive analysis and means comparison at pre-post lockdown with Wilcoxon or t-student test for repeated measures of clinical parameters.

Results:

A total of 732,585 patients were included, 54.1% were women, the mean age was 56.7 years (SD 18.6 years) and 67.17% (95%CI:67.06%-67.28%) of the sample had an income of less than 18,000 euros. Information of clinical parameters and conclusions will be presented at the congress.

Freestanding Paper / Ongoing study with preliminary results**Quality of Life in People With Lymphedema**

Lorena Rodríguez Elena, Raquel Refusta Ainaga, Belén Miró Palacios, Bárbara Oliván Blázquez, Sabela Couso Viana, Magallon Botaya

Institute for Health Research Aragón (IIS Aragón), 50006 Zaragoza, Spain. E-mail: anerol.er@gmail.com

Background:

The prevalence of lymphedema is 1.15 / 100,000 inhabitants, but this figure is higher among those affected by certain types of cancer.

Research questions:

The objective of this study is to analyze the quality of life in people with lymphedema.

Method:

72 people with a diagnosis of lymphedema were recruited. The study variables were sex, age, type of lymphedema (primary or secondary), part of the body affected (upper or lower limb). The SF-36 questionnaire was also administered (physical function, physical role, body pain, general health, vitality, social function, emotional role, and mental health). A comparison analysis was performed according to sex, type of lymphedema, and part of the body affected.

Results:

66 women (91.7%) and 6 men (8.3%) took part in the study, with a mean age of 53.20 years (SD: 11.5), 40.3% had primary lymphedema, and 45.8% have affected one or both upper extremities. The mean of the SF-36 questionnaire was 112.38 (SD: 21.66). There were no significant correlations between age and SF-36 scores. There were no significant differences according to sex and the affected limb, but there were in relation to the type of lymphedema, being lower the quality of life (body pain, general health, social function and emotional role) in people suffering from a lymphedema in the lower limbs.

Conclusions:

It is necessary to delve into factors that may be related to a low quality of life in people with lymphedema.

Points for discussion:

Why people suffering from a lymphedema in the lower limbs have lower quality of life?

What factors could be involved in this result?

What other questionnaires could be used?

Theme Paper / Finished study**Adoption and evaluation of a completely digital general practice clerkship – cross-sectional survey and cohort comparison among German medical students**

Marina Fehl, Vera Gehres, Anne-Kathrin Geier, Thomas Mundt, Kay Klinge, Markus Bleckwenn, Tobias Deutsch

Selbstständige Abteilung für Allgemeinmedizin, 04107 Leipzig, Germany. E-mail: marina.fehl@medizin.uni-leipzig.de

Keywords: general practice, clerkship, online teaching, undergraduate medical education

Background:

During the COVID 19 pandemic the university of Leipzig completely switched to online teaching. Thus, we developed a practice-oriented digital equivalent of a mandatory two-week general practice (GP) clerkship. The digital clerkship mainly contained clinical cases, visual diagnoses, informational and examination videos, as well as regular possibilities for exchange (e.g. video chat) with associated GP teachers in their practices, faculty members and fellow students.

Research questions:

How did the participants accept, use and evaluate the new format and its single components regarding working enjoyment, learning gain, practical relevance and insights into general practice? How do evaluations differ from those of two previous semesters?

Method:

Cross-sectional survey among 4th year (of six) medical students at Leipzig medical faculty completing their digital mandatory GP clerkship between April and June 2020. Additional cohort comparison with evaluations of two previous semesters.

Results:

Out of 192 students who completed the digital clerkship 99 participated in the study (51.6%). For the cohort comparison evaluations from 277 students of the two previous semesters (conventional clerkship) were available. The majority of the participants reported to have enjoyed the online-based clerkship (88%), to have learned a lot (90%), to have gained insights into general practice (77%), and perceived high practical relevance (91%). Two thirds stated that the new formats should complement also future clerkships. Clinical cases, visual diagnoses, examination videos and communication with GP teachers were rated best regarding working enjoyment, learning gain, practical relevance and insights into a GP's work. Cohort comparison revealed partially better evaluations regarding knowledge transfer for the digital clerkship while imparting of skills and attitudes was evaluated worse.

Conclusions:

Our digital teaching formats were well accepted by the students. Especially learning from selected clinical cases, visual diagnoses, video tutorials, and explicit slots for exchange with GP teachers and faculty members have high potential to complement future conventional clerkships usefully.

Points for discussion:

Did you gain experience with similar digital teaching formats in general practice during the pandemic?

Do you think digital teaching formats have the potential to usefully complement GP clerkships?

Which digital formats do you perceive to have rather great or rather low potential?

Theme Paper / Almost finished study**How does triage by an electronic symptom checker match with triage by a nurse in primary care?**

Tuomas Koskela, Ville Liu, Minna Kaila

Tampere University, Faculty of Medicine and Health Technology, 33520 Tampere, Finland. E-mail: tuomas.koskela@tuni.fi

Keywords: triage, symptom checker, eHealth**Background:**

In Finland, Omaolo® electronic symptom checkers (ESCs) were developed to make triage for primary care patients. Based on analysis of the patient's responses to a standard set of questions, the ESC classifies him/her as emergent, urgent, not urgent, or advices on self-care. At present, there are 16 ESCs in use, and integrated into primary care electronic services. The user (patient) answers questions about their symptoms on the Omaolo® website and gets triage guidance. The idea is to help the user to more adequately assess their condition, and to ease the professionals' triage workload.

To our knowledge, ESCs have previously been studied only by using standardized patient vignettes.

Research questions:

How does triage by an ESC match with triage by a nurse? How safe is triage by ESC?

Method:

Patients were recruited in primary health care waiting rooms. They were there asked to use the ESC to triage themselves, and then taken to the nurse, who did the same without knowing the ESC guidance. After the triage decision, the nurse accessed the ESC guidance and commented on it if that case was a mismatch. The participating nurses were experienced in triage for at least two years. Data on 14 different ESCs were collected in ten primary health care centers in 2019-2020.

Results:

For preliminary results 700 cases were explored. In 55 % of cases, the triage was exactly same by nurse and symptom checker. Out of 189 cases classified as urgent by nurse, 25 were classified as not urgent or as self-care by ESC. We explored the cases in detail in which the patient safety was possibly threatened, but found no need to change the algorithm. The final results will be displayed in the congress.

Conclusions:

The patient safety of the ESC triage was not threatened although the percentage of the matches was quite low.

Points for discussion:

When can you rely on symptom checker?

Theme Paper / Finished study**The evaluation of diffuse or focal thyroid pathology and early diagnosis of thyroid malignancy performed by family physicians using artificial intelligence through a European cross-border multicenter ultrasound screening project**

Mihai Iacob

Advitam Medicis Medical Center, Family Medicine and Pediatrics, the Ultrasound Working Group, Euvekus., 300150 TIMISOARA, Romania. E-mail: dr_iacob@yahoo.com

Keywords: thyroid malignancy, artificial intelligence, smart thyroid ultrasound software, ultrasound screening, diffuse or focal thyroid pathology

Background:

This project has three stages. The first step was the development of a smart computerized diagnostic algorithm used to stratify the risk in thyroid pathology, Ultrasound-based. It set the optimum time to achieve a thyroid biopsy (FNAB). We have used the latest international classifications (two-international-scores: EU-TIRADS/ACR_TIRADS), besides a scoring made by us, correlated with the pathological-results. The second stage included a Targeted Thyroid Screening in a population with high-risk, statistically significant. Finally, we are launching a cross border interdisciplinary multicenter US Screening.

Research questions:

How can we early diagnose thyroid malignancies at the high-risk population in primary healthcare by using new medical technology and artificial intelligence?

Method:

We report a targeted thyroid screening performed on 4386 - apparently healthy - adults with oncological risk factors+, aged over 20 years, followed for five years. We used the TIRADS classification by Russ modified and Strain Elastography, with both the elastographic scores by Rago and semiquantitative Strain Ratio (SR), for standardization and to establish if fine needle aspiration biopsy (FNAB) should be performed. The positive patients with focal thyroid lesions founded at this screening by family doctors were validated by endocrinologists through ultrasonography, FNAC, and histopathological or cytological examination. We designed an Ultrasound Scoring System (USS) for predicting malignancy and a diagnostic algorithm software. All patients were stored and counted into a Smart Thyroid Ultrasound Software. Finally, we compared ultrasound scores designed by us, with the histological results as Gold Standard method.

Results:

In this study they were found: 861 patients with thyroid diffuse disease and 696 with focal lesions. Prevalence of thyroid pathology was: 38.99% (95% CI:37.54% to 40.45%) with screening sensitivity: 96.49% specificity: 96.52% and a high accuracy of 96.51%, PPV:94.66%, NPV:97.73%, statistically significant, $p < 0.01$. The ROC analysis of our US methods confirmed a higher level of diagnostic accuracy of Strain Elastography, $p < 0.001$, AUC=0,995, 95% CI:0,97 to 1. Our cut-off-value of SR was: 2.5.

Conclusions:

Performing Doppler Triplex Ultrasound Screening together with Strain Elastography, had the best accuracy for the analysis of the vascular network and the tumor stiffness, for differentiating 'benign versus malignant' of the thyroid tumors and for diagnosis of the diffuse thyroid diseases by family physicians with uses of the artificial intelligence as a support tool for the risk stratification.

Points for discussion:

How can we improve the early diagnosis of thyroid malignancies in the context of increasing their prevalence in industrialized countries?

Is it possible to perform thyroid ultrasound in a multidisciplinary screening team by family doctors specially trained in this regard?

How can artificial intelligence help us with ultrasonography technology as a diagnostic method in the practice of family doctors?

Freestanding Paper / Finished study**Association of sense of coherence and depression in patients with chronic pain: a systematic review and meta-analysis**

Alejandra Aguilar-Latorre, Bárbara Oliván Blázquez, Ángela Asensio-Martínez, Celia Álvarez Bueno, Iván Cavero Redondo, Magallon Botaya

Institute for Health Research Aragón (IIS Aragón), 50009 Zaragoza, Spain. E-mail: aaguilar@iisaragon.es

Keywords: Sense of coherence, depression, chronic pain, systematic review, meta-analysis

Background:

Chronic pain is a significant complaint that generates distressing consequences for those who suffer it. Pain and depression concur as a context of comorbidity and both share underlying stress conditions. Sense of coherence (SOC) is a factor that determines how well a person manages stress and stays healthy. Its relationship with depression is highly reported.

Research questions:

Our objective was to assess the size of the available evidence on the association of SOC with depression in patients with chronic pain.

Method:

A systematic review and meta-analysis were performed. Searches were conducted from April 01 to May 31, 2020, in PubMed, Web of Science, Embase, PsycINFO, Psycodoc, ScienceDirect and Dialnet. The evidence regarding the relationship between SOC and depression in patients with chronic pain was summarized and compared.

Results:

162 articles were identified. Ten studies were included in the qualitative analysis and nine in the quantitative analysis. The pooled correlation coefficient was -0.55 (95%: -0.70; -0.41). The heterogeneity across the studies was considerable ($I^2 = 94.8\%$; $p < 0.001$). The sensitivity analysis showed that the pooled correlation coefficient was not modified after removing any study. The random-effects meta-regression models for the association between SOC and depression showed that age ($p = 0.148$) and the percentage of women ($p = 0.307$) were not related to heterogeneity across studies. No publication bias was detected ($p = 0.720$).

Conclusions:

The included studies indicate that SOC is an important factor in depression levels in chronic pain patients. Most of the included studies showed a moderate association between SOC and depressive symptoms. Our results therefore present implications for the design of healthy public policies and rehabilitation programs. Adopted a systematic salutogenic orientation to focus on cognitive and emotional resources that are available, strengthen them and created new ones would be very useful.

Points for discussion:

Health promotion research could be based on the Salutogenesis model.

Clinicians who care for patients with chronic pain should take into consideration their patients' psychosocial backgrounds and assess their level of SOC for analyzing the risk of depression.

As it is known, SOC may be modified by life experiences and through intervention. Mental health should be integrated across medical specialties to better manage the psychological needs of this population.

Freestanding Paper / Finished study**Cardiometabolic Health Reviews in Patients on Antipsychotics: The Impact of Covid-19**

Simon Erridge, Christopher Watts

York Medical Practice, W2 1NY London, United Kingdom. E-mail: se1412@ic.ac.uk

Keywords: Covid-19; Health Reviews; Serious mental illness; psychosis; cardiovascular disease**Background:**

Antipsychotics are associated with metabolic disturbances adversely affecting cardiometabolic health. Routine cardiometabolic monitoring is subsequently an important component of care in patients on antipsychotics. During the Covid-19 pandemic there has been a transition towards remote consulting. Understanding the effect of the pandemic on routine primary care activity may help avoid potential adverse health outcomes.

Research questions:

This study aimed to identify the local impact of the Covid-19 pandemic on cardiometabolic monitoring in patients on antipsychotics.

Method:

A cross-sectional analysis was performed of patients on antipsychotic medications at a suburban South-West London practice. Patients were identified through a search via EMIS Web. Inclusion criteria included those registered permanently and commenced on medication prior to 17th December 2018. Primary outcomes included difference in yearly incidence of recorded weight, waist circumference, pulse, blood pressure, fasting blood glucose, HbA1c and lipids. Statistical significance was defined by $p < 0.050$.

Results:

Fifty-three patients met the inclusion criteria. The mean patient age was 52.2 (± 17.4). A total of 64 antipsychotics were on repeat prescriptions, with quetiapine ($n=18$; 28.1%) and olanzapine ($n=18$; 28.1%) being the most commonly prescribed. Comparing 2019 against 2020, there was no statistically significant difference in incidence of recorded weight (2019:49.2%; 2020:49.2%; $p=0.698$), waist circumference (2019:10.2%; 2020:6.8%; $p=0.486$), pulse (2019:20.3%; 2020:11.9%; $p=0.672$), blood pressure (2019:59.3%; 2020:44.1%; $p=0.821$), fasting blood glucose (2019:5.1%; 2020:0.0%; $p=1.000$), HbA1c (2019:72.9%; 2020:49.2%; $p=0.613$), lipids (2019:55.9%; 2020:39.0%; $p=0.251$).

Conclusions:

A reduction in cardiometabolic monitoring was observed in this studied population, locally, in 2020. This was not statistically significant but may be clinically significant on an individual patient basis for long-term health outcomes. It is important that any potential adverse effects on different populations of increased remote consulting during and beyond the Covid-19 pandemic are identified, so that health systems may be reconfigured to ensure robust follow up and reduce excess mortality.

Points for discussion:

Cardiometabolic monitoring has declined in this study during the Covid-19 pandemic in this at risk group - how can primary care address the shortfall of activity created by the pandemic?

How will primary care best adjust its consulting structure in the future to ensure that a drive towards remote consultations does not affect the ability for different patient populations to access care?

Does remote consulting widen health inequalities?

Freestanding Paper / Ongoing study with preliminary results**The effect of COVID-19 pandemic on depression and anxiety occurrence among primary healthcare workers: results from a pilot study**

Matic Mihevc, Marija Petek Šter

Medical Faculty University of Ljubljana, 1000 Ljubljana, Slovenia. E-mail: matic.mihevc@gmail.com

Keywords: COVID-19, pandemic, anxiety, depression, healthcare workers, primary care**Background:**

Coronavirus disease 2019 (COVID-19) pandemic has had a profound negative effect on the population's mental health. Healthcare workers (HCW) are among the high-risk group to face mental and physical consequences associated with exposure to the COVID-19 related stressors.

Research questions:

The study aimed to evaluate the prevalence and risk factors associated with depression and anxiety episodes among HCW during COVID-19 pandemic in the primary healthcare centre (PHC) and nursing home (NH).

Method:

A cross-sectional survey among 36 PHC and 33 NH HCW was performed in December 2020. Depression, anxiety, and COVID-19 coping strategies were assessed with PHQ-9, GAD-7, and brief COPE questionnaires, respectively. Additionally, exposure to twenty-two COVID-19 related stressors was assessed on a 5-point Likert scale. An independent samples t-test, chi-squared test, ROC analysis, and logistic regression model were used for statistical analysis.

Results:

The prevalence of depression and anxiety was 30.4% and 20.3%, respectively. Significantly higher levels of depression (45.5 % vs. 16.7%, $p = 0.009$) and anxiety (30.3% vs. 11.1%, $p = 0.048$) were observed in NH compared to PHC group. Independent predictors of depression were high school education (OR 7.68, 95% CI 1.77-33.33, $p = 0.006$) and exposure to ≥ 7 COVID-19 stressors (OR 4.81, 95% CI 1.27-18.20, $p = 0.021$). Independent predictors of anxiety were high school education (OR 9.93, 95% CI 2.14-46.08, $p = 0.003$), years of service (OR 0.95, 95% CI 0.90-0.99, $p = 0.034$) and exposure to > 10 COVID-19 stressors (OR 6.38, 95% CI 1.71-34.01, $p = 0.021$).

Conclusions:

COVID-19 pandemic is associated with significantly higher levels of depression and anxiety in NH compared to PHC HCW. High school education and exposure to a higher number of COVID-19 stressors were independently predictive of depressive and anxiety episode.

Points for discussion:

What might be the reasons for a higher prevalence of depression and anxiety among NH than PHC HCW?

Which strategies should be introduced at the start of the pandemic to alleviate the physical and mental burden on the HCW?

Theme Paper / Finished study

Comprehensive Evaluation of Hypertension Management at the Primary Level in Slovenia: Lessons for the Future

Črt Zavrnik, Valentina Katka Prevolnik Rupel, Nataša Stojnić, Majda Mori Lukančič, Miriam Cerar, Zalika Klemenc-Ketiš, Antonija Poplas Susič

Community Health Centre Ljubljana, SI-1000 Ljubljana, Slovenia. E-mail: crt.zavrnik@zd-lj.si

Keywords: hypertension, integrated care, scale-up, primary care

Background:

Despite the subsequent tendency to focus on patient-centered integrated care of hypertension at the primary level in Slovenia, many patients with this disease are still treated suboptimally. There is an urgent need to gain a comprehensive overview of the current implementation of integrated care in order to improve it for the future.

Research questions:

The aim of this study is to analyse the weaknesses and strengths of the current hypertension management strategy at the primary level in Slovenia – the implementation of integrated care, the costs and the perspective of the stakeholders of what to scale up.

Method:

Three substudies were conducted. (1) The Integrated Care Package (ICP) Grid questionnaire assessed the current implementation of integrated care (identification, treatment, health education, self-management support, structured collaboration and care organization). (2) The qualitative study of 15 focus groups and 23 semi-structured interviews with stakeholders at the micro, meso and macro levels identified facilitators and barriers to scaling integrated care. (3) Hypertension costs (direct from medical records and out-of-pocket from the survey) were evaluated in a sample of 287 patients.

Results:

Implementation of integrated care using ICP Grid showed that the elements of self-management and structured collaboration were weakly implemented. Stakeholders identified the organization of primary health care as a facilitator; on the other hand, true teamwork and patient-centered care were constrained by hierarchy and a very heavily skewed medical approach. The total per capita cost of hypertension management was €269.00 per year, of which 22.8% was out-of-pocket costs.

Conclusions:

This study allows the formulation of a new roadmap for future (self-)management of hypertension at primary level in Slovenia. The implementation of some new interventions such as patient empowerment and their self-treatment, laic educators and the use of mHealth represent a possible solution to the above challenges.

Points for discussion:

Which interventions can facilitate patient-centered care for hypertension at the primary level?

How can we address the overburden on health workers?

Theme Paper / Almost finished study**Developing and tailoring a complex intervention for the primary prevention of cardiovascular disease prior to its implementation in general practices in Belgium**

Naomi Aerts, Sibyl Anthierens, Kathleen Van Royen, Lieve Peremans, Peter Van Bogaert, Hilde Bastiaens

University of Antwerp, Department of Primary and Interdisciplinary care, 2610 Wilrijk, Belgium. E-mail: naomi.aerts@uantwerpen.be

Keywords: implementation, intervention development, general practice, primary care

Background:

Cardiovascular diseases (CVDs) are the world's leading cause of mortality. CVD and risk factors can be prevented by addressing unhealthy lifestyle behaviors. In Belgium, contextual factors pose a burden on primary health care and despite national guidelines, systematic implementation of prevention is lacking. This work is part of Horizon 2020 project 'SPICES', which aims to implement risk profiling and communication, and behavior change counseling.

Research questions:

Our aim was to design and tailor an evidence based complex intervention for the primary prevention of CVD, prior to its implementation in general practices in vulnerable city districts in Belgium.

Method:

Development of the intervention was based on a systematic review of international guidelines and a contextual analysis with stakeholder interviews. Acceptability, adoption and appropriateness were assessed through interviews and implementation strategies were tailored to the resources, needs and preferences of the implementers at general practice level. Our participatory action research design allows ongoing process evaluation throughout the implementation to adapt the intervention or strategies where needed.

Results:

The intervention is designed to support awareness of CVD risk and modification and maintenance of healthy lifestyle behaviors to decrease individual CVD risk. We developed a guidebook to communicate the individual CVD risk as a result. The behavior change counseling component consists of ten lifestyle coaching sessions with set intervals, delivered by a practice nurse over one year, in interaction with the available community resources. Given the implementers' concerns around intervention complexity and competence gap, one of the most important implementation strategies applied is training of all providers of one or more components of the intervention, prior to the implementation.

Conclusions:

This study provides a practical example of translating evidence into practice, outlining the development and tailoring of an evidence based intervention designed in co-creation with multi-level stakeholders to reduce the risk of CVD.

Points for discussion:

Used methodology and approach.

The process of implementing evidence-based interventions GP practices in other contexts.

Theme Paper / Finished study**Non-pharmacological interventions to achieve blood pressure control in African patients : a systematic review**

Monique Cernota, Eric Kröber, Tamiru Demeke, Thomas Frese, Sefonias Getachew, Eva Johanna Kantelhardt, Susanne Unverzagt

Institute of General Practice and Family Medicine, Center of Health Sciences, Martin-Luther-University Halle-Wittenberg, 06112 Halle/Saale, Germany. E-mail: Monique.cernota@me.com

Keywords: systematic review, Africa, hypertension, raised blood pressure, non-pharmacological interventions, randomized controlled trials

Background:

Prevalence of hypertension is still rising in many African countries. However, the awareness remains low, hindering adequate screening, treatment and adherence to lower the long-term risk of organ damage.

Research questions:

This systematic review aimed to evaluate evidence on non-pharmacological strategies to decrease blood pressure (BP) in hypertensive patients from African countries.

Method:

We performed a systematic review (CRD42018075062) and searched Medline, Central, CINAHL and study registers until June 23, 2020 for randomized studies on interventions to decrease BP of patients with hypertension in African countries. We assessed the study quality using the Cochrane risk of bias tool and calculated random-effects meta-analyses for non-pharmacological interventions on BP.

Results:

A total of 5564 references were identified, of them 24 studies with altogether 18,376 participants from six African countries were included. These studies investigated educational strategies to improve adherence of patients (12 studies) and their treatment by health care professionals (5 studies), individualized treatment strategies (2 studies) and strategies to change lifestyle via enhanced physical activity (4 studies) or modified nutrition (1 study). Nearly all studies on educational strategies stated improved knowledge and adherence of patients, but only three studies showed a clinically relevant benefit on BP control. All studies on individualized strategies (renin/aldosterone profile; chronotherapy) and lifestyle behavior change (e.g. training programs, reduced salt consumption) resulted in clinically relevant effects on BP.

Conclusions:

The identified studies offer effective low-cost interventions including education, task shifting strategies, individualized treatment and lifestyle modifications to improve BP control. All strategies were tested in African countries and can be used for recommendations in evidence-based guidelines on hypertension in African settings.

Points for discussion:

Available studies concentrate in urban areas of few African countries, which limits the generalizability of the results.

Internal validity might be restricted due to the partial unfeasibility of double-blinding.

Freestanding Paper / Published**Frequency of occurrence and predictive validity of olfactory and taste dysfunction in patients with SARS-CoV-2 infection**

Esperanza Romero Rodríguez, Luis Ángel Pérula De Torres, Jesús González-Lama, Celia Jiménez García, Faustino Rider Garrido, Yolanda Ortega López, Diego Pajares Conde, Miguel Ramírez Baena, Ignacio Párraga Martínez, Grupo Colaborativo Epicovid, Rosa Sánchez Montero

IMIBIC, Córdoba, Spain. E-mail: espe_mrr@hotmail.com

Keywords: COVID-19; SARS-CoV-2; olfaction disorders, dysgeusia

Background:

Olfactory and taste dysfunction (OD,TD) have been considered symptoms attributable to SARS-CoV-2 infection. Although these clinical features may occur prior to the general symptoms of such infection, their presence in certain populations, especially those with mild symptoms, has not been clarified.

The aim of the study was to estimate the frequency of OD and TD, and its predictive validity in patients with SARS-CoV-2 infection detected in Primary Care.

Research questions:

What is the frequency of OD and TD, and its predictive validity in patients with SARS-CoV-2 infection detected in Primary Care?

Method:

A cross-sectional study was carried out in the Spanish National Health System through an epidemiological survey administered to patients who required the RT-PCR test (real-time polymerase chain reaction in a nasal/pharyngeal swab) for the detection of SARS-CoV-2. Odds Ratio(OR)(s) were estimated to measure the magnitude of the association between OD or TD, and the presence of SARS-CoV-2 infection. Sensitivity, specificity, and positive and negative predictive values (PPV,NPV) of these symptoms were also calculated in the study sample.

Results:

Of 1038 patients screened, 209(20.1%) had SARS-CoV-2 infection. OD and DG were detected in 64.4%(95%CI: 56.0-72.1) and 56.2% (95%CI:47.9-64.2) of subjects with infection, respectively. The OR for OD and TD was 12.2(95%CI: 8.26-18.06) and 7.95 (95%CI: 5.48-11.53), respectively. OD showed a sensitivity of 45.0% (95%CI: 37.6-51.5), a specificity of 93.7% (95%CI: 91.8-95.0), a PPV of 64.4% (95%CI: 56.0-72.1), and a NPV of 87.1% (95%CI: 84.7-89.2), while the TD presented a sensitivity of 41.1% (95%CI: 34.4-46.1), a specificity of 91.9% (95%CI: 89.8-93.7), a PPV of 56.2% (95%CI: 48.0-64.2) and a NPV of 86.1% (95%CI :83.6-88.3).

Conclusions:

More than half of the subjects with SARS-CoV-2 infection have olfactory or taste dysfunction. The presence of these clinical features could be considered of diagnostic utility due to its ability to predict infection in more than half of the cases.

Points for discussion:

Frequency of OD and TD in patients with SARS-CoV-2 infection detected in Primary Care

Predictive validity of OD and TD in patients with SARS-CoV-2 infection detected in Primary Care

Freestanding Paper / Finished study**Rock-a-bye baby: Children's sleep habits and related factors**

Ece Saykan Balatacı, Gizem Limnili, Nilgün Özçakar

Dokuz Eylül University Faculty of Medicine, 35340 izmir, Turkey. E-mail: gizemkismali@gmail.com

Keywords: sleeping habits, school-aged children

Background:

Adequate sleep is important for both healthy development and optimum daytime functioning in children for all ages. School period in which positive preschool behaviors reinforced is essential for child development. Inadequate sleep in school-aged children has negative effect on mood, attention and school performance.

Research questions:

What are the sleeping habits and related factors of school-aged children in Izmir, Turkey?

Method:

This cross-sectional study was enrolled with 1152 parents who has elementary school-aged child. A form which consists children's sociodemographic features and Children's Sleep Habits Questionnaire (CSHQ) and Strength and Difficulties Questionnaire (SDQ) was used.

Results:

Of the participants, 68.9% have sleeping problems according to CSHQ. Sleep problems were frequent if the child does not have a sibling, educates in upper grade at school, sleeps late, watches TV before sleeping, does not read a book before sleeping, has behavioral and emotional problems or attention deficit/hyperactivity disorder. Attention deficit/hyperactivity disorder, emotional problems, peer problems and behavioral problems were found to be significantly higher in those with sleep problems($p<0.001$).

Conclusions:

Sleeping problems would decrease if parents are informed about sleep hygiene, regular and appropriate sleep, and if families and physicians are educated about emotional and behavioral problems that may accompany sleeping problems.

Points for discussion:

Family Physicians should be aware of sleeping problems in school-aged children can be related to behavioral disorders.

What should family physicians do with a school-aged child if they have such a problem?

Freestanding Paper / Finished study**Translation and validation of two Parkinson's disease specific burden questionnaires, for patients and caregivers, from German into French**

Sabine Bayen, Jean Heutte, Jean-Charles Vanderbecken, Caroline Moreau, Luc Defebvre, Wassil Messaadi, David Devos, Nassir Messaadi

University of Lille, Department of General Practice, 59000 Lille Cedex, France. E-mail: kroehnchen@hotmail.fr

Keywords: parkinson's disease, burden questionnaire, patient's perspective, caregiver's perspective, general practice, France

Background:

Parkinson's Disease (PD) is a common neurodegenerative condition. It's various clinical expression affects patient's and caregivers' psycho-social well-being. To assess the PD-related psychosocial burden in a dyad (patient and spouse), two specific questionnaires exist in German. The Bela-A-K and Bela-P-K, questionnaires allow healthcare professionals to cross-check the patient's (Bela-P-K) and the spouse's (Bela-A-K) perspective of well-being despite PD. Four dimensions are explored: physical performance, emotional charge, social relationships, and couple/family life. The study purpose was to translate, to test among French patients and spouses, and to validate the translated versions.

Research questions:

How strong are the questionnaires' internal consistency and temporal stability?

Method:

The questionnaires have been translated from German into French, using the forward and backward translation, followed by a cultural cross-check. The participants were recruited by a GP and a PD-nurses and invited to test the consensual French version in its online administered version, created via the Lime Survey® software. The participants had to fill out the questionnaires twice to respect the "test-re-test" method. Five days after their first assessment, they answered again. Data analysis was performed, using the SPSS software.

Results:

Nineteen couples participated in the study, 18 patients (14 M/4F); 18 spouses (4M/14F).

The Bela-A-K showed a strong temporal stability, whereas it was weak for the dimension of social relationships. The Bela-P-K showed a strong internal consistency, but significant differences for ten items between the moment of test and retest. Some items of the Bela-P-K must be simplified to improve its temporal stability, considering the patient's changing form on the day. The items related to the dimension of social relationships must be adjusted for the Bela-A-K.

Conclusions:

The questionnaires are useful and reliable. They contribute to a positive psychological dyad-centred follow-up and positive health education in case of PD.

Points for discussion:

Interesting cross-check of the daily life experience with Parkinson's disease between patients and caregivers

One-Slide/Five Minutes Presentation / Study Proposal / Idea**A new data collection project for studies of the process of diagnosis in primary care: collecting data on reasons for encounter and diagnoses in episodes of care in Europe.**

Jean Karl Soler, Thomas Frese, Brendan Delaney, Christos Lionis, Dimitris Kounalakis, Mehmet Urgan, Heidrun Lingner, Nicola Buono

MIPC, RBT2418 Rabat, Malta. E-mail: info@thefamilypractice.com.mt

Keywords: EPR, ICPC, primary care, family medicine, diagnosis, data analysis, learning healthcare systems

Background:

For many years the Transition Project has been unique in collecting data on reasons for encounter (RfEs, including symptoms and complaints) and diagnoses in an episode of care (EoC) model, allowing the study of incidence and prevalence of both, and especially relationships between RfEs and episode titles.

Research questions:

1. To establish a formal collaboration led by EGPRN to re-vitalise the routine collection of practice-based data on RfE and EoCs
2. To develop and implement a data collection tool which interfaces with existing electronic medical record (EMR) systems, which can alternatively stand-alone as a basic EMR
3. To collect and analyse data on RfEs, interventions and diagnoses collected with ICPC in an EoC model, to empirically inform the epidemiology of primary care
4. To make such data available for research into the process of diagnosis and the development of diagnostic decision support systems

Method:

The steps to develop such a system and the software to analyse and publish such data will be explained, based on the prior published experiences of the authors.

Results:

A successful outcome of the presentation would be the creation of a formal collaboration between EGPRN, MIPC and partner academic and software organisations to present a formal project plan to EGPRN in the immediate future.

Conclusions:

This proposal is expected to potentially raise the profile of EGPRN as a repository of high quality data from primary care, and a major partner in the future development of diagnostic decision support systems and learning healthcare systems in primary care.

Points for discussion:

1. Discussion of the utility of such empirical data for primary care and family practice in Europe,
2. Discussion of the utility of analysis of diagnostic data from different populations,
3. Discussion on the formalisation of such an academic collaboration.

One-Slide/Five Minutes Presentation / Ongoing study with preliminary results**Automatic ABI measurements in primary care - agreement with patients' symptoms and examination**

Aleksandra Danieluk

Medical University of Bialystok, 15-089 Bialystok, Poland. E-mail: danieluk.aleksandra@gmail.com

Keywords: ankle-brachial index, peripheral artery disease**Background:**

Peripheral artery disease (PAD) increases cardiovascular risk even in asymptomatic patients. Accurate and efficient diagnostic tools for PAD patients are needed. Recently there have been attempts to establish a reliable method of automated ankle-brachial index (ABI) identification. This raises a question whether such methods can be feasible in primary care.

Research questions:

Do automatic ABI measurements provide new information about patients at risk of PAD?

Method:

Cross-sectional study performed at a primary care office on patients over 60 years old. Physical examination aimed at PAD diagnosis and Edinburgh questionnaire was performed as well as an automatic ABI measurement. Automatic ABI measurements were taken with use of Dopplex Ability Automatic ABI System. Incidence of lack of pulse on posterior tibial artery, PAD suspicion based on the Edinburgh questionnaire and incorrect ABI results were compared.

Results:

Initial results of the study are presented, with 42 patients included at this point. 54.76% of patients had an abnormal ABI result (ABI lower than 0.98, higher than 1.3 or an incorrect pulse volume waveform). Normal ABI ranges for Dopplex Ability were established in this study based on publication by Lewis et al. When establishing ABI ranges at 0.9-1.3, only 40.48% of patients had an abnormal ABI result. 73.91% of patients with an abnormal ABI result had posterior tibial pulse present and Edinburgh questionnaire negative for PAD symptoms. This accounted for 40.48% of all the patients.

Conclusions:

Automatic ABI allows to include more patients into PAD suspicion group, including patients with no typical changes in physical examination or characteristic symptoms.

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Expanding role of family physician's team in early cancer detection for multimorbid patients**

Aurimas Rapalavičius, Leonas Valius, Ida Liseckienė, Gediminas Urbonas, Juratė Ezelskienė, Olga Vasiliauskienė, Aiste Česnulevičienė, Laimutis Gedminas

Lithuanian University of Health Sciences, 50103 Kaunas, Lithuania. E-mail: aurimas.rapalavicius@ismuni.lt

Keywords: multimorbidity; early cancer detection; primary care; family physician's team

Background:

Cancer (Ca) is ranked number 10 among patients with Multimorbidity (MM) in Lithuania. MM negatively affects patients' participation in Ca screening, provides a challenge to timely diagnosis and is associated with advanced stages of Ca.

Primary care is crucial for timely diagnosis but complexity of symptoms, especially in MM patients, result in delayed or reluctant approach in pursuit for Ca diagnosis. Therefore, a progressive and holistic approach is necessary for early Ca detection and management in MM patients.

Aiming to provide better quality and accessibility of care to patients with MM, "Telelispa" project, funded by EU, will be carried out in the period of 2020-2022 in Lithuania with one of the research objects being to evaluate family physician's team (FPT) progressive and holistic approach benefits and capabilities in early Ca detection.

Research questions:

How FPT's progressive and holistic approach to early Ca detection may affect the diagnosed stage of Ca?

Method:

385 patients with MM and 385 in control group from 7 different primary health care settings (urban and rural) will be included in the "Telelispa" project, which is based on Chrodis Plus. Holistic evaluation for MM patients will be performed by FPT, consisting of family physician and a case manager, as follows:

- complete audit of performed national Ca screening programs: prostate, cervical, colorectal and breast Ca.
- expanded evaluation of risk factors and family history of Ca and physical examination, including teledermatoscopy.
- review or assigning tests if not done per year (based on country's Family medicine norm): blood analysis (for anemia), chest X-ray and abdominal ultrasound for possible corresponding Ca.
- FPT's progressive and holistic approach will be assessed by comparing diagnosed Ca stages with control group and national average stages of corresponding Ca

Results:

Ongoing project. The results of the project will be used for a set of recommendations.

Conclusions:

Ongoing project.

Points for discussion:

What national guidelines do other countries have for early Ca detection in primary care?

How progressive and holistic approach can affect the landscape of early Ca detection?

One-Slide/Five Minutes Presentation / Study Proposal / Idea**Feasibility study of a competence-based teaching method (Toolbox GP) on the learning success of medical students and satisfaction of supervising physicians: How to integrate Entrustable Professional Activities into general practice teaching**

Nicola Amarell, Dorothea Wild, Birgitta Weltermann

Institute of General Practice and Family Medicine, University of Bonn, 53127 Bonn, Germany. E-mail: nicola.amarell@ukbonn.de

Keywords: Elective general medicine/general practice, clerkship, medical students, medical education, teaching medical students in primary care, Entrustable Professional Activities, undergraduate medical education

Background:

Motivating medical students to go into primary care is crucial in ensuring a sufficient supply of future General practitioners (GP). Unfortunately, students often find clerkships in general medicine underwhelming. The quality of activation can vary greatly and has a significant impact on students' interest in primary care. The concept of Entrustable Professional Activities (EPA) might help to offer motivating and competence-based medical education. EPAs comprise two complementary parts: 1) professional activities based on everyday medical work and 2) the level of supervision. This linking of activity and supervision level creates a performance-based operationalisability of medical education.

Research questions:

Is a Toolbox GP based on EPAs a feasible method to improve the teaching situation and student satisfaction in general practices?

Method:

Our teaching intervention "Toolbox GP" was developed under consideration of standardized learning/teaching contents for GP based on the concept of EPAs and is a format that allows maximum flexibility to the situation in teaching practices. Six GP teaching practices of the Institute of Family Medicine of the University Hospital Bonn and six medical students of the Rhenish Friedrich Wilhelm University of Bonn will be invited to test the new toolbox teaching concept for two weeks. Evaluation is planned using semi-standardized questionnaires and the think-aloud-method to optimize the teaching method.

Results: The piloting will be conducted during the next weeks. Results are expected to be available at the congress.

Results:

The piloting will be conducted during the next weeks. Results are expected to be available at the congress.

Conclusions:

The results of this feasibility study will be used to prepare a future implementation study of a comprehensive EPA-based teaching concept for GP practices including didactic workshops for supervising physicians, a toolbox with GP-specific tasks for medical students, and additional online learning materials.

Points for discussion:

How can teaching interventions be implemented and measured in GP practices?

What are the most effective methods for conducting faculty development for supervising general practitioners?

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Impact of the Covid-19 pandemic on burnout syndrome in family doctors**

Volodymyr Kramarchuk, Pavlo Kolesnyk, Hanna Batsiura, Albina Zharkova, Natalia Zaverukha, Vladyslav Berezniakov, Iuliia Perig

Ukrainian Family Doctors Association, 04112 Kiev, Ukraine. E-mail: vvkram@ukr.net

Keywords: burnout syndrome, covid-19, family doctors

Background:

Doctors of all specialties are more or less susceptible to professional burnout syndrome. Many of the factors that contribute to its progression have long been known: the psychological atmosphere in the work collective, responsibility for the result of work, work overload, age (especially for doctors aged 20 to 40), intense perception of professional responsibilities.

Research questions:

How did the COVID-19 pandemic, lockdown and vaccine problems affect burnout?

Method:

Online questioning of family doctors using the Maslach Burnout Inventory (MBI). The procedure takes no more than 10 minutes, it is quite simple

Results:

The results will assess the impact of the Covid-19 pandemic on the emotional state of primary care physicians, and will also provide relevant data on the prevalence of professional burnout syndrome.

Conclusions:

The Covid-19 pandemic is most likely to have a negative impact on primary care physicians and hasten the burnout process. The results will increase efforts to provide psychological assistance to family doctors.

Points for discussion:

Has the Covid-19 epidemic affected the psychological state of family doctors?

How to provide psychological support to family doctors?

Free online consultations for family doctors who are under increased stress and need psychological help as an effective prevention tool

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Monitoring the clinical course and baseline characteristics of COVID-19 patients in Primary Health Care in Greece: An ongoing study.**

Magda Gavana, Anastasia Karagiannaki, Antonia Aikaterini Bourtzinakou, Spyridon Graidis, Dimitra Foteini Pourtoulidou, Aikaterini Vasiliki Touriki, Kleo Evripidou, Panagiotis Rafail Gavrilis, Alexandra Ioannidou, Myriam Karagianni, Nikolaos Kasotakis, Anastasia Malliora, Eleni Pappi, Evangelia Savvidou, Emmanouil Smyrnakis

Medical School Aristotle University of Thessaloniki, 57004 N.Michaniona, Greece. E-mail: magda.gavana@gmail.com

Keywords: primary health care, pandemic response, covid-19, distance monitoring

Background:

Primary care can play an important role in the COVID-19 pandemic response by making an early diagnosis of COVID-19 infection in the community, reducing the demand for further hospital services and preventing further community transmission of the infection.

Research questions:

The study's main objective is to evaluate the health progress of confirmed SARS-CoV2 cases with mild clinical presentation who were treated exclusively by primary care physicians and of close contacts with COVID-19 patients who were monitored during their quarantine.

Method:

This retrospective cohort study will be implemented by medical students as field researchers. It will be conducted in a semi-urban COVID-19 referral Health Centre in Northern Greece that faced heavy morbidity rates during the second pandemic wave. Anonymized data from patients' medical records will be used to investigate risk determinants and the baseline characteristics of the COVID-19 patients in the community. Patients' and close contacts data collected during regular distance monitoring throughout the whole quarantine period will be assessed regarding patients' symptoms and clinical findings, risk factors, morbidity, duration and severity of symptoms and final outcome.

Results:

Currently, the study is at the recruitment stage. The primary outcomes will be related to monitoring the clinical course of patients with mild COVID-19 infection and that of close contacts of confirmed cases, assessing the risk factors of the disease and presenting the demographics of these patients. The analysis will be performed in order to associate the clinical course of patients with predictors for disease burden or comorbidity.

Conclusions:

As this is an ongoing study, we aim to present crucial aspects of distance monitoring of patients with mild COVID-19 infection thus strengthening primary care services in implementing their role in the pandemic response and exploring their contribution to monitoring post-COVID-19 complications as a follow-up study is also planned.

Points for discussion:

pandemic response in low capacitated primary health care settings

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Post-Covid: implications on patients lives**

Nuno Parente

Tâmega e Douro Family Care Unit, 4460-205 Porto, Portugal. E-mail: nunomiguelpm@gmail.com

Keywords: post-covid; symptoms; quality of life**Background:**

COVID-19 affected primary care in terms of organization and healthcare response. Family doctors felt a need to rearrange and find ways of redefine consultations. There was a clear impact on patients mental health, family relations and newly physical long-term effects. There's a need to understand how patients are re-inserted in their daily routine and how are they managing it.

Research questions:

How do patients' quality of life and community comeback are being done?

Method:

Retrospective cohort study; population enrolled in portuguese COVID19 platform "TRACE-COVID" defined as "healed" at 60 and 90 days post-discharge; randomized sample; anonymous questionnaire (it included demographic variables as age, sex, and schooling and others; persisting symptoms (from physical to psychological), quality of life, work adaptation, past medical problems, COVID19 disease evolution, discharge date (need to extension), among others.

Results:

Awaiting

Conclusions:

Not for now

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Predicting and preventing long-term invasive ventilation - a project presentation of PRiVENT**

Noemi Sturm, Florian Bornitz, Jan Meis, Dorothea Kronsteiner, Timm Frerk, Joachim Szecsenyi

Department of General Practice and Health Services Research, University Hospital Heidelberg, Heidelberg, Germany. E-mail: noemi.sturm@med.uni-heidelberg.de

Background:

Specialised weaning treatment proved to successfully wean patients who had failed spontaneous breathing trials and would otherwise depend on continuous invasive ventilation.

Therefore, PRiVENT will develop a prognosis model to detect patients at risk of long-term invasive ventilation offering expertise to wean those in non-specialised clinics.

The study commences in July 2021 and is funded by Germany's innovation fund (01NVF19023).

Research questions:

Does the PRiVENT-intervention raise the chance to wean patients at high risk of long-term invasive ventilation?

Method:

PRiVENT is a prospective, interventional, unblinded, non-randomised multicentre study with a partially parallel control group using healthcare claims data from AOK BW. Inclusion criteria are invasive ventilation for ≥ 96 hours, ≥ 30 years of age and at least 1 comorbidity, excluding neuromuscular diseases.

The prognosis model will be set up by clinical expertise, literature review and healthcare claims data. Four weaning-centres will cooperate with 40 ICUs within Baden-Württemberg. Knowledge and therapy recommendations will be exchanged in interprofessional weaning boards and weaning councils to treat $\approx 1,500$ high-risk patients. Discharge and quality management, e-learning, and publicity work will complement the intervention.

The primary endpoint will be investigated using a mixed logistic regression model incorporating random effects to control for the clustering effect of centres. Secondary endpoints will be analysed descriptively. Further, health economic analyses and process evaluation will be conducted.

Results:

The PRiVENT-intervention is expected to identify patients' risk for long-term invasive ventilation, to wean those at risk and, conversely, decrease the number of ventilated patients.

Conclusions:

If the study demonstrates to prevent long-term invasive ventilation, the PRiVENT-intervention may be integrated into standard health-services. Thereby, improving patients' and relatives' quality of life, reducing costs in outpatient care, closing knowledge gaps, and strengthening the role of special therapists and interprofessional teamwork.

Points for discussion:

1. From a GPs' perspective, how could transition from inpatient to outpatient care be improved in these patient groups a) successfully weaned vs. b) requiring invasive ventilation)?

2. How could GPs best get involved and contribute to better care of ventilated patients?

One-Slide/Five Minutes Presentation / Ongoing study no results yet**Quality of Life Assessment in primary care during COVID-19 pandemic using EuroQol**

Alba Pons Revuelta, Helena Abadín Carcedo, Sara Freire López, Marta Pereira Da Costa Carvalho, Antonio Ángel Regueiro Martínez, Ana María Romero García, Carmen Rico Padín, Víctor Manuel Lois López, Concepción Camiño Redondo, Diego Canedo Cotelo, María Adela Otero Gondar, Manuel Castro Segad, Fabiola González De Oliveira, Carmen Santos Novas, María Del Rosario Lago Fernández, Mar Serrano González, Irene Pardo Planas, Sonia María Gomara Villabona, Minia Enjo Rey, Ana Clavería Fontán

Vilanova de Arousa Primary Care Center, 36620 Vilanova de Arousa, Spain. E-mail: albaponsrevuelta@gmail.com

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

Background:

COVID-19 global pandemic has caused an impact over physical and mental health population. Thus, multiple restrictive measures were initiated, such as social distancing and home confinement, and a huge reorganization of health care, both in primary care and hospital settings.

There are different studies on COVID-19 focused on its clinical presentation, management in intensive care units, treatments, etc. It was found that there wasn't many publications about the quality of life assessment in general population. To analyze how it has changed due to COVID-19 pandemic can give us the necessary tools to anticipate the needs of our population and prevent the worsening of their health status.

Research questions:

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

Method:

Prospective cohort study, randomly selected patients out of those assigned to the Vilanova de Arousa Health Center (10.000), that meet the criteria. A semi-structured telephone survey will be performed, including EQ-5D-5L and sociodemographic data, three times between June 2020 to August 2021.

Descriptive analyzes of the main study variables will be carried out, both demographic and related to EQ-5D-5L and to the semi-structured survey. Qualitative variables will be presented as frequency and percentage and quantitative variables as mean and standard deviation. Differences by sex and age groups will be analyzed. P is considered significant if <0.05 .

For the statistical analysis of the variables related to quality of life at the beginning, during and at the end, the McNemar and Wilcoxon statistical tests will be used for the categorical and quantitative variables respectively, as they are repeated measures.

Results:

Ongoing study, there are no preliminary results yet. The data from the first two interviews will be presented.

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 we are going to obtain?

One-Slide/Five Minutes Presentation / Ongoing study no results yet**The Initiative of German Practice-Based Research Networks – DESAM-ForNet**

Leonor Heinz, Nicole Bethge

Deutsche Stiftung für Allgemeinmedizin und Familienmedizin, 10117 Berlin, Germany. E-mail: koordinierung@desam-fornet.de

Keywords: Practice-Based Research Networks, general medicine, primary care, research infrastructure

Background:

In the GP's office, people of all ages receive longitudinal care for a wide range of medical conditions. However, there is a lack of well-founded answers for many relevant questions in general practice. Research results generated in controlled specialty settings are only partially transferable to patients in real-world practices. Doctors and their patients need better evidence – and clinical researchers need a vehicle to carry out research in primary care. Practice-based research networks serve as a bridge connecting the university and the general practice setting to find relevant evidence and to improve population health.

Research questions:

To strengthen the role of family medicine in Germany, the Federal Ministry of Education and Research (BMBF) is funding 6 regional primary care research networks with one coordination office, joined within the Initiative of Practice-Based Research Networks – DESAM-ForNet. The funding period is limited to five years, and it is unclear what will happen afterwards. However, it is hoped to establish common standards within the Initiative to allow cross-network collaboration and to build a sustainable research infrastructure.

Method:

The 6 participating networks and the coordination office have been planned as autonomous projects. The challenge to develop a mutual base in research processes (as interoperability of the IT-infrastructure and common criteria for research readiness) is addressed in regular meetings and working groups. A steering committee as a central decision-making body for all matters of the Initiative has been implemented.

Results:

With common standards and interoperability between networks, a sustainable foundation for practice-based research will be created. The Initiative aims to accredit and qualify a total of 1700 research practices by the end of 2024.

Conclusions:

With the German Initiative of Practice-Based Research Networks – DESAM-ForNet, we want to establish a sustainable infrastructure in the general practice setting enabling research that really matters to GPs and their patients.

Freestanding Paper / Finished study**Premature ejaculation in primary care: communication strategies versus usual care for male patients consulting for a sexual, urogenital or psychological reason; the GET UP cluster randomized controlled trial**

Marie Barais, Marine Costa, Camille Montalvo, Vincent Rannou, H el ene Vaillant Roussel, David Costa, S ebastien Cadier, Bruno Pereira

universit e de bretagne occidentale, d epartement universitaire de m edecine g en erale, 29238 brest cedex 3, France. E-mail: marie.barais@gmail.com

Keywords: premature ejaculation, general practice, sexual dysfunction

Background:

Premature ejaculation is the most common sexual dysfunction among men. A previous qualitative study identified six communication strategies described by general practitioners (GP) who had tackled the topic with their patients during consultations.

Research questions:

Is training in communication skills implementing these six strategies more effective than usual care on the incidence of patients bringing up the topic of premature ejaculation with their GP?

Method:

Cluster randomized controlled trial, stratified over four geographical areas comparing an intervention group that received a training session on the six strategies, and a control group that provided routine medical care. Participants were male patients between 18 and 80 years old and consulting for a sexual, urogenital or psychological reason were included. The intervention was a communication skill training session for GPs on the use of the six strategies identified in the previous qualitative study. The primary outcome was the efficacy of the training session in communication skills compared with usual care, evaluated as the percentage of patients who discussed the topic of premature ejaculation with their GP. The secondary objectives were: i) percentage of enrolled patients with premature ejaculation (identified by a score >9 of the Premature Ejaculation Diagnostic Tool filled in four weeks after the consultation); and ii) variation in quality of life (SF-12 scale score) of the enrolled patients between baseline and week 4 after the consultation for a sexual, urogenital or psychological reason.

Results:

130 patients were included by 32 GPs (n=16 in the intervention group and n=16 in the control group). The number of enrolled patients who discussed about premature ejaculation was higher in the intervention group than in the control group (42% vs. 4.9%, absolute difference = 37% 95%CI [24% to 50%], p <0.001).

Conclusions:

Training GPs in communication strategies to talk about premature ejaculation improves its detection.

Points for discussion:

tackling premature ejaculation in general practice

experience with cluster randomized controlled trial

Freestanding Paper / Finished study**Skills in National Core Curriculum: National Survey of General Practitioners in Turkey**

Özlem Coşkun, Yavuz Selim Kiyak, Işıl İrem Budakoğlu, Dilek Öztaş, Özgür Erdem

Gazi University, Ankara, Turkey. E-mail: drozlemcoskun@gmail.com

Keywords: general practice, core curriculum, national survey, practical skills

Background:

Views and competency levels of general practitioners (GPs) are essential in the way of developing undergraduate medical curriculum. There is no nationwide study conducted to understand what GPs think about practical skills in National Core Curriculum for Undergraduate Medical Education (NCC) in Turkey.

Research questions:

1. What are GPs' views on the minimum level of competency required in a GP about skills listed in the NCC?
2. What skills do GPs feel most and least competent?
3. Is there any difference between newly graduated and experienced GPs' competency levels?

Method:

This is a cross-sectional study carried out between 01/10/2017 and 01/09/2018. 27652 primary care physicians who work in Turkey were surveyed about the 136 skills listed in NCC. The participants rated the minimum required competency level for every skill on 0–4 level and stated whether they felt themselves competent in these skills. Descriptive statistics and Chi-Squared Test were performed.

Results:

4117 (14.9%) participants answered.

The most selected category was:

- “Level3—Should be able to do the skill in cases which are frequent and not complex” for 123 (90.4%) skills,
- “Level2—Should be able to do the skill according to the guidelines in a state of emergency” for 10 (8.1%) skills,
- “Level4—Should be able to do the skill even in complex cases” for 3 (2.2%) skills.

The skills that are felt most competent were:

- Taking blood pressure (85.2%)
- Hand washing (84.0%)
- Writing a prescription (83.0%)

The least competent were:

- Pericardiocentesis (11.6%)
- Pleural puncture (13.5%)
- Lumbar puncture (16.4%)

For 47 skills, the percentage of the 0-5 years' graduates who did not feel competent is significantly lower than 5+ years' graduates.

Conclusions:

Self-perceived competency levels vary among skills but surgical procedures constitute the weakest part. GPs are more incompetent in the skills that they rarely perform, therefore they need continuing education.

Points for discussion:

What continuing medical education methods could be used to keep GPs fresh in terms of the skills that are rarely performed?

Freestanding Paper / Ongoing study with preliminary results**Towards a Core Curriculum for Italian Family Medicine: results of a transparent, participatory and collective writing.**

Alice Serafini, Stefano Celotto, Jacopo Demurtas, Giuseppe Febbo, Davide Luppi, Alessandro Mereu, Nicola Pecora, Giorgio Sessa, Luigi Brachitta, Peter Konstantin Kurotschka, Ilaria Rossiello, Elena Rubatto

Local Health Service of Modena, 41121 Modena, Italy. E-mail: alice.serafini@hotmail.it

Keywords: Core Curriculum; GP training;

Background:

Scientific evidence shows how Family Medicine (FM), internationally recognized as an academic and scientific discipline, has a significant impact on the health of the community and on the appropriate use of public resources. Despite this, in Italy, the national legislation of reference for the FM training does not define the educational programs to be followed, the competences to be acquired, the teaching and learning methods of the discipline or the criteria of evaluation for the achievement of the title of General Practitioner. A project for writing a Core Curriculum of the Italian GP and the dedicated working group "MMG Core Curriculum Task Force" have been promoted by the Movimento Giotto (MG, member of the Vasco da Gama Movement).

Research questions:

To elaborate a Core Curriculum that establishes what, where, how to learn and how to evaluate the specialized competences of the professional FM

Method:

From February to May 2019, a transparent process of collective and participatory writing took place, through different phases: An internal call through the MG for the recruitment of the Coordinator's Task Force (9 coordinators); Self-training and drafting of the index of the document, in a comparative perspective; A public Call to recruit collaborators (52 young Italian FM) for the collective drawing up of the chapters; A peer review of the contents produced;

Results:

A 200 pages document "Towards the Core Curriculum of General Medicine" has been produced, divided into three chapters describing: the rationale of the project, the Core Competencies and the clinical skills identified in five macro-areas of clinical practice.

Conclusions:

The proposal document, thus necessarily still incomplete, needs a deeper reflection and sharing with other actors of the health system. The MG aims to proceed to further steps in the coming months, in order to build consent on the document (Delphi Method or Consensus Conference).

Points for discussion:

What are the strengths and limitations of the participatory methodology used from MG to build the document?

What could be the best methodology to proceed to further steps and build consent on the document?

What could be the role of EGPRN and the international community of FM researchers?

Freestanding Paper / Ongoing study no results yet**Usability of a communication tool used by general practitioners and public health workers during the COVID-19 pandemic: a proof-of-concept-study**

Angelina Müller, Pascal Nohl-Deryk, Sylvia Schulz-Rothe, Phillip Elliott, Anika Thielmann, Beate Müller, Corina Guethlin, Ferdinand Gerlach

Goethe-University Frankfurt, 60590 Frankfurt, Germany. E-mail: a.mueller@allgemeinmedizin.uni-frankfurt.de

Keywords: usability; communication; COVID-19; pandemic management

Background:

With rising numbers of Covid-19 patients and patients requiring testing and quarantine, administrative burden increased and new challenges for existing communication pathways emerged. While at the beginning of the pandemic communication between local health authorities and general practitioners in Germany was heavily relying on telephone and fax machine, resources for exchange of real-time information were limited. In order to explore whether an instant messaging app could affect communication structures between local health-care players in the pandemic, we conceptualized a proof-of-concept-study testing deployment of a communication tool in two regions in Germany.

The study is funded by the German Federal Ministry for Research and Education and part of the COVID-19-national research network.

Research questions:

To identify the experiences of general practitioners and local health authorities with an app for safe instant communication.

Method:

We conducted a proof-of-concept-study comprising implementation and evaluation of an instant messenger app used by general practitioners, local health authorities and COVID-specialists in the Rhein-Main-area in Germany. Participants started to use the app in November 2020. Online questionnaires are used to assess usability. We used a pretested German translation of the mobile health app usability questionnaire (MAUQ).

Results:

Participants will use the app in the next weeks and subsequently rate it. Results will be available at the congress.

Conclusions:

The results can provide further insights in suitable deployment of communication apps in health-care settings.

Points for discussion:

- Are there apps for communication between sectors in other regions/countries?
- What are the experiences so far?
- How were other evaluation studies conducted in this setting?

Theme Paper / Finished study**Adaptation of the Vaccine Hesitancy Scale to Turkish: Validity and Reliability Study**

Kübra Temel Aslan, Cigdem Apaydin Kaya, Pınar Ay

Marmara University School of Medicine, İstanbul, Turkey. E-mail: kubratemel13@gmail.com

Keywords: vaccine hesitancy, vaccine refusal, vaccine, immunization, scale validation, scale adaptation

Background:

A standard, valid measurement tool that assesses vaccine hesitancy will help develop research and immunization policies and identify individuals with vaccine hesitancy and overcome hesitations. The aim of this study is to adapt a Turkish translation of Vaccine Hesitancy Scale formed by the WHO SAGE Vaccine Hesitancy Working Group.

Research questions:

Is the Vaccine Hesitation Scale a valid and reliable scale in Turkish society?

Method:

This is a reliability and validity study. The study was carried out with parents of 0-18 months old children who applied to a Training Family Health Center in Istanbul. After translated Likert-type Vaccine Hesitancy Scale (answers from 1 to 5, high scores indicate low vaccine hesitation) in to Turkish, a test-retest method and Cronbach alpha coefficient were used for reliability research then exploratory factor analysis was used for construct validity.

Results:

No statistical difference was found between test-retest scores of the scale (43.55 ± 4.5 ; 43.70 ± 4.4 ; $r=0.97$; $p<0.001$). Cronbach alpha coefficient was 0.73. As a result of the exploratory factor analysis, two factors emerged: "lack of confidence" and "risk perception". The mothers were more hesitant than the fathers ($p=0.005$), non-working mothers were more hesitant than working mothers ($p=0.026$). Those with high income were less hesitant than those with low income ($p=0.002$). The fathers between the ages of 30-39 years were more hesitant than the fathers between the ages of 18-29 years ($p=0.019$).

Conclusions:

Our results suggest that the Turkish version of the Vaccine Hesitancy Scale is a reliable and valid scale. The VHS can be used in Turkish parents to assess vaccine hesitancy.

Theme Paper / Finished study**Demographic Evaluation of Hospital Staff Before Covid Vaccination**

Gökçe İşcan, Funda Yildirim Baş

Suleyman Demirel Üniversitesi, 32100 Isparta, Turkey. E-mail: dr_gokcedilek@yahoo.com

Keywords: covid 19, vaccination, hospital staff, covid vaccination**Background:**

Despite the decisive value of vaccination in reducing the global burden of infectious diseases, the anti-vaccination movement is developing. Our hospital staff in Turkey which groups to be vaccinated first, we wondered whether the bias for covid vaccination.

Research questions:

Is there a relationship between the hospital staff's covid-19 status and their desire to be vaccinated?
What are the reasons for staff who do not want to be vaccinated?

Method:

We designed a web-based survey with a focus on demographic properties, working status, desire to be vaccinated, being covid or not, chronicle diseases they have. The survey was sent to 2000 staff and students (4th to 6th-year medical students). 949 people returned to the survey. The data were analyzed using SPSS-22. The chi-square test was used for comparisons.

Results:

47,45% (949) of 2000 staff answered the survey of those aged 18-61 years (32,64±9,79). 501 of them were women (%52,8), 448 of them were men (%47,2). 72 participants got covid (%7,6); 27 participants (%2,8) had suspicious Covid 19 contact in the past 14 days. 925 participants (%97,5) want to be vaccinated and 24 participants (%2,5) did not want. 357 participants (%37,6) had chronic disease. 56 hypertension (%27,1), 42 lung disease (%11,8), 40 hypothyroidism (%11,2), 32 diabetes mellitus (%9) were the most chronicle diseases. Women got covid more than men and it was statistically significant ($p=0,001$). There was no statistically difference between age, gender, department or having chronicle disease and want to be vaccinated ($p<0,05$).

Conclusions:

Only 24 of 949 people did not want to be vaccinated. This is a very low proportion because all of them were working in the hospital as students, doctors or employees. Most of them know/see the importance of covid 19 infection. 24 people who did not want to be vaccinated neither had covid nor had any other stated reasons. it's thought-provoking.

Theme Paper / Finished study**General practice attendances among patients attending a post-COVID-19 hospital clinic: A pilot study**

John Broughan, Geoff Mccombe, Gordana Avramovic, Des Crowley, Cheyenne Downey, Joanne Downey, Ronan Fawsitt, Tina Mchugh, Eileen O'connor, Carla Perrotta, Aoife Cotter, John S Lambert, Walter Cullen

University College Dublin, D07 E820 Dublin, Ireland. E-mail: john.broughan@ucd.ie

Keywords: COVID-19; Follow-Up Studies; General Practice; Long-Term Care; Pilot Projects

Background:

About 10%-35% of people with COVID-19 merit medical care within three weeks of infection. However, the prevalence of ongoing care needs among individuals experiencing severe COVID-19 illness is unclear.

Research questions:

What is the prevalence of ongoing care needs among severe COVID-19 patients?

Method:

This pilot study applied a cross-sectional design whereby data was collected from adult patients attending a post-COVID-19 follow-up clinic at the Mater Misericordiae University Hospital, Dublin, Ireland, 3-6 months after their initial presentation at the clinic. Participants completed questionnaires documenting their demographics, medical histories, hospital admissions/re-admissions where applicable, and where relevant, primary care service use following hospital discharge. Analyses were conducted using descriptive/inferential statistics.

Results:

Participants' (n=153) median age = 43.5 (IQR = 30.9-52.1). There were 105 females (68.6%) and 48 males (31.4%). Various medical histories were reported among participants. 67 (43.2%) reported being admitted to hospital for COVID-19. Older individuals, males, ICU admissions, and readmissions were common among hospital attendees. Of the hospital attendees, 16 (24%, 95% CI = 13.7-34.2%) and 26 (39%, 95% CI = 27.3-50.7%) attended general practices within seven and 30 days of hospital discharge. Older adults (median age = 49.8yrs), people with preexisting medical conditions, and individuals admitted to ICU/readmitted to hospital were common among general practice attendees.

Conclusions:

Persistent health issues appear to be common among patients who experienced severe COVID-19 illness. Older adults, people with pre-existing health problems, and individuals who received ICU and/or re-admission care may have greater long-term care needs requiring attention.

Points for discussion:

The importance of understanding long-term care needs in COVID populations, especially those who experience severe COVID-19 illness worthy of emergency hospital treatment.

Which population groups are most likely to experience persistent adverse COVID-19 effect requiring long-term care?

What role can general practice/primary care play in terms of addressing these groups' long-term care needs?

Web Based Research Course Presentation / Ongoing study no results yet**Demonstrating a paradigm shift in the approach to vertigo in primary care. VERTAP Project**

Eva Peguero, Josep Lluís Ballve, Yolanda Rando, Iván Villar, Sebastià Calero, Jennifer Elizabeth Perez, Olga Lucia Arias, Oriol Cunillera, Jesus Almeda

ICS-UNIVERSITAT DE BARCELONA, 08017 Barcelona, Spain. E-mail: evapeguero@ub.edu

Background:

Vertigo is a prevalent pathology whose most frequent cause is benign paroxysmal positional vertigo (BPPV). The treatment of this disease are relocation maneuvers. Although these maneuvers are effective, they are not done routinely.

Research questions:

Is effective a blended course carried out in primary care to improve the professionals adherence to clinical practice guidelines?

Method:

A randomized community trial, by conglomerates (control group -CG- / intervention group -IG-), multicentric and open, taking as unit of allocation the primary health care center (PCC). The professionals of the PCC that are IG would receive the training (the training is online) at the beginning of the study and those of the control group will be offered after concluding it. Scope: 20 PCC of "Dirección de Atención Primaria Costa de Ponent," 10 in the IG and 10 in the CG. The outcome variables will be: Improvement of adherence to guidelines: These variables will be collected in all the population assigned in the follow-up period. Diagnostic records (decrease in diagnoses such as dizziness and increase in specific diagnoses such as BPPV, vestibular neuritis). Decrease of number of referrals to Otorrinolaringologist and neurologist. Decrease in antivertiginous medications prescribed.

Results:

None results yet. This project has won a FISS grant in 2019.

Points for discussion:

Positive results of the study will imply a paradigm shift in the approach to vertigo.

The course which would be easy to extend to other areas.

Effects of covid-19 pandemic on the mental health of female Family Doctors

Maria Bakola, Konstantina Soultana Kitsou, Eleni Jelastopulu

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

Keywords: Female Family Doctors, Mental Health, Covid-19

Background:

Family doctors (FDs), always on the frontline, took the lead in fighting the COVID-19 pandemic by examining, monitoring and giving the necessary treatment in primary health centres, as well as in COVID-19 clinics in hospitals. Globally the female physician workforce increases and the percentage in family medicine is higher, making the tension between career and family more prominent. For many female FDs, balancing the multiple roles of doctor, mother and spouse can be challenging. For some, the COVID-19 pandemic has exacerbated this, making them more vulnerable to problems with their mental health.

Research questions:

What are the effects of the COVID-19 pandemic on the mental health of female FDs in different European countries?

Do female FDs experience dysfunctional coronavirus related anxiety?

Do female FDs experience dysfunctional thinking about COVID-19?

Do female FDs experience reassurance-seeking behaviors associated with concerns over coronavirus infection?

Method:

A quantitative study using an online questionnaire will be developed by the authors, based on the Corona Anxiety Scale (ACS), the Obsession with COVID-19 Scale (OCS) and the Coronavirus Reassurance-Seeking Behaviors Scale (CRBS). The questionnaire will be developed after discussion between the research team, using previous surveys addressing a similar study. The survey questions will then be discussed with colleagues and within the project team, and piloted by FDs outside the project team.

The study population will include FDs from WONCA Europe member countries, using convenience sampling through WONCA social media platforms and European FDs' societies and networks. We will aim for 30 to 50 participants from each participating country.

Results:

This is a project proposal.

Our hypothesis is that female FDs experience effects of COVID-19 pandemic on their mental health.

Conclusions:

Identifying the effects of the Covid-19 pandemic on the mental health of the European female family doctor workforce will allow us to develop strategies to support them.

Points for discussion:

What other areas should we include in the questionnaire? Should we also survey male family doctors, so that we can assess the effect of gender?

Should we include a personality test? Should we also survey other primary healthcare workers?

Are EGPRN colleagues from other countries interested in joining this project?

Web Based Research Course Presentation / Finished study

The Relationship Between Poor Upright Static Standing Posture and Musculoskeletal System Symptoms in Adults Admitted Ankara University Faculty of Medicine Hospital Family Medicine Polyclinics

Ayşe Çölgeçen

Ankara üniversitesi aile hekimliği, 06050 Ankara, Turkey. E-mail: ayse89.1957@gmail.com

Keywords: Poor posture, Nordic, Musculoskeletal system symptoms

Background:

If the center of gravity of the body deviates from the center of gravity axes of good posture, the risk of waist, neck and back pain increases.

Research questions:

Does poor posture increase musculoskeletal symptoms?

Method:

97 people, 44 females and 53 males, between the ages of 18-65, were included in the study. Participants filled in a questionnaire form questioning their socio-demographic characteristics and Nordic Musculoskeletal Questionnaire. Standing static posture analysis was performed observationally with the help of the posture analysis chart. Observation results were scored using the Bragg Posture Chart. Chi square/Fisher's Exact test was used to compare the findings.

Results:

The most common regions showing symptoms in the musculoskeletal system were the lower back, back, neck, knees and shoulders (58.8%, 45.4%, 41.2%, 40.2%, 35.1%, respectively). 16.5% of people did not experience any musculoskeletal symptoms in the last 1 year. The part of the body that most commonly caused limitation in daily activities due to symptoms was lower back (15.5%). In posture examination, poor posture was found mostly in the shoulder and hip regions (89.7%, 86.6%, respectively), and least in the lower back and trunk regions (6%, 6%). Poor posture was detected in 53.6% in the foot alignment 45% in the spine region and 37% in the neck region. 4.1% of all participants had a good (standard) posture in all body parts. Low back complaints were more common in those with poor foot posture ($p = 0.005$). Knee complaints were more frequent in patients with hip asymmetry ($p = 0.01$). No significant relationship was found between the presence of poor posture in other body parts and the presence of symptoms in the musculoskeletal system.

Conclusions:

Musculoskeletal disorders and postural defects are common in the community. Postural defects may cause an increase in musculoskeletal disorders.

Points for discussion:

Musculoskeletal symptoms and postural defects are common..

Postural defects may cause an increase in musculoskeletal disorders.

Our experience in postural assessment in primary care may be insufficient.

“Coping Self-Efficacy Scale” Evaluation of the Turkish Validity and Reliability of the Scale

Ozden Gokdemir, Cetin Akin

1) Izmir University of Economics-Faculty of Medicine 2) DEU-Faculty of Medicine, 35360 Izmir, Turkey. E-mail: gokdemirozden@gmail.com

Keywords: validity; reliability; coping self-efficacy scale, family physicians

Background:

The COVID-19 pandemic became a burden not only for individuals, but also for countries in many areas, such as economics, health systems, and insurance. As a consequence, because of the holistic approach, and “being the first line of defence”, family physicians are on the frontline. Primary care physicians are essential for preventive care and management of chronic diseases, but they are also human and are affected by these crises.

In coping with stress, it is important to recognize the responses to it. There are different types of reaction: affective, cognitive, behavioral, and physical. Affective reactions include restlessness, anger, sadness, tension, anxiety, despair, crying; in the cognitive domain, reactions include concentration difficulty, memory problems, instability, obsessions, and phobias. Behavioral reactions include avoidance, aggression, alcohol consumption, binge eating, and etc.

Research questions:

While this public crisis continues, and healthcare worker burnout is common, how can we measure the physicians’ ability to cope with stress and find new solutions? Could the “Coping Self-Efficacy Scale (CSES)” in Turkish be used as a tool to address this question?

Method:

In this research, validity and reliability will be achieved? by translating CSES into Turkish. The study was designed based on the original research in which the scale form was developed. Permission to use the CSES was received by email. The CSES, consisting of 26 questions, was translated from English into Turkish by three independent researchers, carefully following the linguistic validation process in accordance with WHO guidelines.

FPs in Turkey, are the universe of this study. In scale reliability and validity analysis, it is recommended that the minimum number of participants is 5-10 times the number of items, thus a sample size of 260 participants is acceptable.

Results:

CSES was culturally and linguistically adapted to use as a tool to assess whether FPs have the self-efficacy to cope with emotional problems.

Points for discussion:

Is the sample size appropriate?

How the method could be structured ?

Theme Paper / Finished study**Baseline characteristics and external validity of older multimorbid patients with polypharmacy and general practitioners enrolled in a randomized controlled primary care trial**

Katharina Tabea Jungo, Rahel Meier, Fabio Valeri, Nathalie Schwab, Claudio Schneider, Emily Reeve, Marco Spruit, Matthias Schwenkglenks, Nicolas Rodondi, Sven Streit

Institute of Primary Health Care (BIHAM), University of Bern, 3012 Bern, Switzerland. E-mail: katharina.jungo@biham.unibe.ch

Keywords: Multimorbidity, polypharmacy, older adults, general practitioners, clinical trial, external validity, baseline characteristics

Background:

Multimorbid older adults remain underrepresented in clinical trials, and recruiting general practitioners and their patients for trials is challenging.

Research questions:

This paper aims to describe the baseline characteristics of GPs and patients participating in the 'Optimizing Pharmacotherapy in older multimorbid adults In primary CAre' (OPTICA) trial and to compare them to reference cohorts from a Swiss real-world cohort called the 'Family medicine ICPC Research using Electronic medical records' (FIRE) project. It also investigates patients' willingness to have medications deprescribed.

Method:

In this cross-sectional study, 323 multimorbid (≥ 3 chronic conditions) patients with polypharmacy (≥ 5 regular medications) aged ≥ 65 years and 43 GPs recruited for the OPTICA trial were compared to 22,907 older multimorbid patients with polypharmacy and 227 GPs from the FIRE database. We described patients' baseline willingness to have medications deprescribed using the revised Patients' Attitudes Towards Deprescribing (rPATD) questionnaire.

Results:

The GPs in the FIRE project and OPTICA trial were similar in terms of sociodemographic characteristics and their work as a GP (e.g. aged in their 50s, ≥ 10 years of experience, $\geq 60\%$ self-employed, and $\geq 80\%$ work in group practices). The median age of patients in the OPTICA trial was 77 years and 45% of trial participants were women. Patients participating in the OPTICA trial and patients in the FIRE database were comparable in terms of age, certain clinical characteristics (e.g. systolic blood pressure, body mass index) and health services use (e.g. selected lab and vital data measurements). More than 80% of older multimorbid patients reported to be willing to stop ≥ 1 of their medications if their doctor said this was possible.

Conclusions:

The characteristics of patients and GPs recruited to the OPTICA trial are relatively comparable to characteristics of a real world population, indicating that the findings of the OPTICA trial will have a good external validity. Most patients were open to deprescribing.

Points for discussion:

How can we facilitate the recruitment of general practitioners for research?

How can we facilitate the recruitment of older adults with multimorbidity for research?

Theme Paper / Almost finished study**Does multimorbidity predict the number of patient contacts: a matter of definition**

Johannes Hauswaldt, Katharina Schmalstieg, Wolfgang Himmel

University Medical Center Göttingen, Institute of General Practice, 37073 Göttingen, Germany. E-mail: johannes.hauswaldt@med.uni-goettingen.de

Keywords: multimorbidity; chronic condition; electronic medical record; practice visits; family practice; patient care management

Background:

Care for multimorbid patients is a characteristic feature in general practice. Earlier studies report a strong impact of multimorbidity on number of patient contacts, taken as an indicator of a GP's workload. This association may be overestimated, due to an inflated definition of multimorbidity and lack of a time delimiter in definition.

Research questions:

Which impact does multimorbidity have on the number of patient contacts?

How much changes this association with the definition of multimorbidity?

Method:

The analysis is based on electronic medical records (EMR) of 236,038 patients from 142 practices over 14 years.

We investigated the association between a patient's annual number of contacts and four definitions of multimorbidity, ranging from a simple definition ('two diseases') to an advanced definition ('at least three chronic conditions'). A time delimiter for multimorbidity was included and combined with operationalising the concept of 'chronic condition', allowing for patients to change annually between being a multimorbid patient and a non-multimorbid status. Mixed-effects multiple regression analyses were performed with patient contacts as criterion and four definitions of multimorbidity as separate predictors, controlling for patient and practice characteristics, with beta-coefficients and z-values as measures of effect.

Results:

Annual percentage of multimorbid patients in general practice ranged between 74% (simple model) and 13% (advanced model). Multimorbidity had impact on patients' annual number of contacts, but similar predictors were patient's age and a practice's average annual number of contacts. Differences in impact between the four models of multimorbidity were small.

Conclusions:

Multimorbidity seems to be less prevalent in primary care practices than usually is estimated, if a temporal delimiter is considered and advanced definitions of multimorbidity are applied. Multimorbidity influences a patient's number of contacts and, thus, a GP's workload. Practice characteristics, such as its appointment scheduling, have a similar impact on contact frequency as patient's age or multimorbidity.

Points for discussion:

Which definition of multimorbidity do you prefer, and for what reason?

Strength and weaknesses of applying multimorbidity concepts in PHC?

How can we focus on 'morbidity burden' rather than on counting diagnoses in order to detect complex patients in primary care?

Poster / Almost finished study**What GPs need to know about paediatric COVID-19: CME curriculum**

Lyubima Despotova-Toleva

Bulgarian Long term and Palliative care Society, 4000 Plovdiv, Bulgaria. E-mail: desptol@abv.bg

Keywords: children, COVID-19, SARS-COV-2, General practitioners, continuing medical education**Background:**

The COVID-19 pandemic has become perhaps the biggest global health crisis in recent history - especially in the absence of a safe and effective antiviral treatment. The growing number of published scientific studies has shown that the course of the disease in majority of affected children is not so severe, but there are some very worrying facts.

Research questions:

What GPs need to know about paediatric COVID-19 in order to ensure better care for their paediatric patients?

Method:

For the development of the named above curriculum we have combined elements of five methods for curriculum development (traditional, thematic, programmed, classical, and technological). The methodology was focused mainly on defining needs, selecting appropriate for GPs content and creating teaching materials, incl. "teaching with cases".

Results:

We have developed 20 hours curriculum about paediatric COVID-19 for GPs. After defining the emergency need of such an education, a national project on COVID-19 was developed. In the frame of this project specialists in clinical virology, infectious diseases, paediatrics and general practice were involved. Based on currently published international and national data and research the following topics were selected: SARS-COV-2, clinical virology and immunology, focused on children; COVID-19 pathophysiology in relation to child growth and development; respiratory pathology; cardiovascular pathology, multisystem inflammatory syndrome; neurological and psycho symptoms etc; COVID-19 therapeutic options; short term and long-term evaluation of children during COVID-19 pandemic. The final step (Implementation and Evaluation of the curriculum) will be finished hopefully to the end of this 2021 year.

Conclusions:

The CME paediatric COVID-19 course for GPs will contribute to (1) better understanding the varieties of underlying immunology mechanisms and clinical course of paediatric COVID-19 patients in General practice; (2) to acquiring more knowledge and skills to manage COVID-19 paediatric patients; (3) betimes to recognize emergencies, incl. multi system inflammatory syndrome and other life threatening conditions.

Points for discussion:

1. Do GPs need training how to speak with parents of COVID-19 paediatric patients, having in mind the controversial info in massmedia?
2. What kind of support is needed for GPs to provide better care for paediatric COVID-19 patients?
3. How this kind of training help GPs research to provide "evidence based" decisions about paediatric COVID-19 patients applicable in General Practice?

Poster / Finished study**Willingness of German general practitioners to participate in long-term research networks**

Larissa Virnau, Annett Bräsigg, Tobias Deutsch, Alexander Bauer, Eric Kröber, Markus Bleckwenn, Thomas Frese, Heidrun Lingner

Medizinische Hochschule Hannover (Hannover Medical School), Hannover, Germany. E-mail: Larissa.Virnau@stud.mh-hannover.de

Background:

General practitioners (GPs) have a pivotal role in primary health care. Although transferability of medical-research outcomes from in-patient to out-patient settings is limited, research initiated and run by GPs is scarce while little is known about GPs readiness to commit themselves to research and research networks.

Research questions:

Investigate GPs' willingness to participate in medical research and in research networks, and assess motivating participation-factors and barriers.

Method:

Recruitment to a multicenter cross-sectional survey among German GPs located close to the universities Halle-Wittenberg and Leipzig was based on public available Statutory Health Insurance GP-listings of Saxony and Saxony-Anhalt (survey roll-out September 7th 2020). Descriptive statistics, group comparisons, and logistic regression predicting participation-willingness in research networks were performed using IBM Statistics 25.

Results:

The response rate was 37.1% (336/905). While 57.1% of the GPs were interested to participate in medical research, 33.9% could also imagine playing an active role in a research network. Interest in participation in a research network was positively associated with male sex, younger age, being involved in teaching undergraduates and having previous experiences with medical research. On average, GPs were willing to dedicate about 1.5 h/week to research without being financially rewarded. This time doubled when payment was offered. Main motivators were improving patient care, giving a more realistic picture of GP care, and doing research on topics within their own interest areas. Most GPs were not afraid of reduced earnings; however, time was seen as the main barrier for participation. A reliable contact person at university enhances attractiveness of research. Polypharmacy, chronic diseases, drug safety and adverse drug reactions were elected most important research topics.

Conclusions:

A substantial number of GPs is willing to participate in research. Our study provides helpful insights in barriers and motivators, and may be useful to consider when building new research networks.

Points for discussion:

Have you investigated GPs' willingness to participate in research and what were your results?

Are other countries currently building up research networks?

Is there any interest to pool data and/or findings and compare outcomes?

Poster / Finished study**“What should medical students learn to be prepared for rural practice? Qualitative analysis of expert interviews with German rural physicians”**

Sabine Herget, Kay Klinge, Melanie Nafziger, Stephanie Sauer, Markus Bleckwenn, Tobias Deutsch, Thomas Frese

Selbstständige Abteilung für Allgemeinmedizin Universität Leipzig, 04103 Leipzig, Germany. E-mail: sabine.herget@medizin.uni-leipzig.de

Keywords: medical education, rural curriculum, rural physicians, rural teaching content

Background:

As a contribution to counteracting an increasing physician shortage in rural areas the German universities of Leipzig and Halle-Wittenberg have developed a new teaching project called MiLaMed. Besides targeted advertisement and financial support for all kinds of rural clerkships, new interdisciplinary teaching content addressing rural care has been longitudinally implemented into undergraduate education. Due to a lack of literature describing specific learning content and learning-goals to prepare students for rural practice expert interviews with rural physicians were conducted during the process of curriculum development.

Research questions:

What are the particularities of rural (compared to urban) medical care? Which key competencies should medical students acquire to be prepared for rural practice and which specialties should be involved in a rural curriculum?

Method:

Qualitative content analysis of 19 semi-structured telephone interviews with 19 rural physicians (15 general practitioners (GPs), 4 other specialists).

Results:

Most interviewees reported that a reduced access to medical specialists due to low specialist density, geographical distances, and partially poor infrastructure is a major point shaping the characteristics of rural practice. As a consequence, GPs typically deal with an expanded spectrum of tasks and patients of any age, and the interface and communication between GPs and specialists is of particular importance. Networking and communication skills, problem-solving abilities, delegation of tasks, telemedicine, and sound knowledge and skills regarding diagnostics and treatment were named as key competencies students should acquire. Besides GPs particularly dermatologists, pediatricians, and orthopedists should support a rural curriculum.

Conclusions:

A rural curriculum should address the key competencies highlighted by the study participants including innovative approaches for rural care like telemedicine and delegation. The most relevant disciplines should be involved following an interdisciplinary curricular approach highlighting the interface between generalist and specialist care. The results guided the development of the MiLaMed curriculum.

Points for discussion:

1. In your experience, is there any other difference in rural compared to urban medical care that should be taught in a rural medical curriculum?
2. Is there any experience in building up a rural curriculum in the audience? What subjects are being taught? What is the main focus compared to the regular curriculum?
3. Based on your understanding of rural medicine: Which important aspects were not mentioned in our study?

Poster / Finished study**Associations of chronic medication adherence with emergency room visits and hospitalization**

Michal Shani, Yochai Schonmann, Doron Comaneshter, Alex Lustmen

Clalit Health Service, Family Medicine, 76804 Mazkekret Batya, Israel. E-mail: michal.shani@gmail.com

Keywords: medication adherence, chronic medication use, ER visits, hospitalizations

Background:

Good medication adherence is associated with decreased healthcare expenditure; however, adherence is usually assessed for single medications.

Research questions:

We explored associations of adherence to 23 chronic medications with emergency room (ER) visits and hospitalizations.

Method:

Individuals aged 50-74 years, with a diagnosis of diabetes mellitus or hypertension, treated with at least one antihypertensive or antidiabetic medication during 2017 were included. We determined personal adherence rates by calculating the mean adherence rates of the medications prescribed each individual. Adherence rates were stratified by quintiles. We retrieved information about all the ER visits, and hospitalizations in internal medicine and surgery wards during 2016-2018.

Results:

Of 268,792 persons included, 50.6% were men. The mean age was 63.7 years. Hypertension was recorded for 217,953 (81.1%); diabetes for 160,082 (59.5%); and both diabetes and hypertension for 109,225 (40.6%). The mean number of antihypertensive and antidiabetic medications used was 2.2 ± 1.1 . In total, 51,301 (19.1%) of the cohort visited the ER at least once during 2017; 21,740 (8.1%) were hospitalized in internal medicine wards; and 10,167 (3.8%) in surgery wards during 2017. Comparing the highest adherence quintile to the lowest, odds ratios were 0.64 (0.61, 0.67) for ER visits, 0.56 (0.52, 0.60) for hospitalization in internal wards; and 0.63 (0.57, 0.70) for hospitalization in surgery wards. Odds ratios were similar for the three consecutive years 2016-2018.

Conclusions:

Better medication adherence was associated with fewer ER visits and hospitalizations among persons with diabetes and hypertension. Investing in improving medication adherence may reduce health resources and improve patients' health.

Points for discussion:

chronic care and medication adherence

what is the role of family physician in medication adherence

Poster / Finished study**Cardiovascular combined target in type 2 Diabetes: sex and socio-economic status differences in primary care.**

Sara Ares Blanco, Elena Polentinos-Castro, Francisco Rodríguez-Cabrera, Ileana Gefaell, Luis Sánchez Perruca, Isabel Del Cura González

Spanish Society of Family and Community Medicine semFYC, 28004 Madrid, Spain. E-mail: sararesb@yahoo.es

Keywords: Type 2 diabetes mellitus, sex, primary healthcare, healthcare disparities, observational study

Background:

Few patients with type 2 diabetes (T2D) can achieve the combined target: HbA1c \leq 7%, blood pressure \leq 140/90 mm Hg, LDL $<$ 100 mg/dl. Patients with suboptimal control are at risk of more complications especially low socio-economic status (SES) patients and in women.

Research questions:

Are there differences in achieving combined target control by sex and socio-economic status in T2D?

Method:

Observational, retrospective study based in patients with T2D between 40-75 years in primary care in Madrid (n: 68,535) during 2017-2018.

Primary outcome: combined control (HbA1c \leq 7%, BP \leq 140/90 mm Hg, LDL $<$ 100 mg/dl).

Secondary outcome: Sociodemographic factors, cardiovascular risk factors, micro and macrovascular complications. Descriptive, bivariate analyses and multilevel logistic regression models were performed.

Results:

The mean age was 62.7 years, women: 43.2%. Low SES: 41%. Women had more hypertension (67.2%), and dyslipidaemia (62.7%). Men were more obese (51.1%) and smokers (21.8%).

The optimal combined target was reached by 10% of patients (women: 9.3% vs men: 11.2%, $p < 0.001$), Those in lowest SES obtained better combined targets than those in highest SES (men: 13.4% vs 11.1%, women: 10.6% vs 9.5%). Women had worst combined targets regardless of the SES. Multilevel analysis was performed to analyse the effect of sex and SES: being female (AOR: 1.26, 95%CI: 1.19-1.34), belonging to the lowest SES (AOR: 1.09, 95% CI: 0.77-1.54) and having retinopathy (AOR: 1.44, 95% CI: 1.18-1.75) was associated to suboptimal combined target.

Complications were more frequent in men, men in the highest SES had more coronary heart disease (CHD) and strokes. Women in the lowest SES had more CHD, strokes and retinopathy.

Conclusions:

Optimal combined control target was seldom achieved, men and patients in lowest SES were the ones who achieved it most.

Points for discussion:

Is realistic to reach combined target in T2D?

Which target should we prioritize when we can't achieve all the targets?

Poster / Finished study**Integrating primary and secondary care to enhance chronic disease management:
A scoping review.**

Sara Murtagh, John Broughan, Geoff McCombe, Áine Carroll, Mary Casey, Áine Harrold, Thomas Dennehy, Ronan Fawsitt, Walter Cullen

University College Dublin, D07 E820 Dublin, Ireland. E-mail: john.broughan@ucd.ie

Keywords: chronic disease; integrated care; primary care; secondary care; scoping review;

Background:

In Ireland, as in many healthcare systems, health policy has committed to delivering an integrated model of care to address the increasing burden of chronic disease. But implementing this model is difficult as integrating primary and secondary care is a considerable challenge.

Research questions:

What does the literature tell us about ensuring optimal integration between primary and secondary care in chronic disease management?

Method:

A scoping review framework comprising an iterative six-stage process (Arksey & O'Malley, 2005; Levac et al., 2010) was used to conduct the study. A search was conducted of 'PubMed', 'Cochrane Library' and 'Google Scholar' for papers that (a) were published between 2009-2019, (b) were written in English, and (c) documented integration in countries with similar (i.e., two-tiered) healthcare systems to Ireland (e.g., EU countries, Canada, Australia).

Results:

Twenty-two studies were included. These (a) reported research from various countries (most commonly UK, Australia, the Netherlands), (b) adopted a range of methodologies (most commonly randomised / non-randomised controlled trials, case studies, qualitative studies) and (c) studied patients with numerous chronic conditions (most commonly diabetes, COPD, Parkinson's disease). No studies reported on interventions addressing the needs of whole populations. Interventions to enhance integration included multidisciplinary teams, education of healthcare professionals, and e-health interventions. Reported intervention benefits included swifter transitions between primary and secondary care, the maintenance of patient-centred integration philosophies, improved patient quality of life/self-care ability, and positive relationships between healthcare professionals. Mixed findings were reported regarding interventions' impact on patients' clinical outcomes and cost-effectiveness.

Conclusions:

Interventions to enhance integration between primary and secondary care in chronic disease management are promising. Future research is needed to examine how such approaches may improve outcomes for wider populations rather than patients with specific chronic disease conditions only.

Points for discussion:

Ireland's integrated care strategy for chronic disease management.

The study findings' implications for chronic disease management programmes.

Directions for future research.

Poster / Finished study**Lack of glycemic control measures, a new risk factor for the development of cardiovascular disease in patients with type 2 diabetes**

Fernando Alvarez-Guisasola, Elena Caride-Miana, Ismael Fernández-Antón, Escarlata Angullo-Martínez, Domingo Orozco-Beltrán

Diabetes Working Group. Spanish Society of Family and Community Medicine, 24197 ROBLEDO DE TORÍO, Spain. E-mail: F.A.GUISASOLA@GMAIL.COM

Keywords: Type 2 diabetes mellitus. Hemoglobin A1c. Cardiovascular disease.

Background:

Several studies focused on the relationship between glycated hemoglobin (A1C) levels and type 2 diabetes mellitus (T2D) complications. Many studies rate patients according to their A1c levels and complications and/or mortality. However, there isn't a clear categorization and neither an individualized study of those patients who don't have registered glycemic controls in their follow up.

Research questions:

Is it possible that T2D patients with lack of glycemic controls in their follow up, are those with higher cardiovascular risk?

The aim is to analyze whether the lack of glycemic controls in the diabetic patient implies a greater risk of cardiovascular events and mortality.

Method:

Observational analytical cohort study using a database of 25,895 patients with T2D, older than 30 years included in electronic medical records, with a maximum follow-up of 5 years (January 1, 2008 to December 31, 2012). Data were collected and checked with other registries. The main variable was the A1c value or its absence. The characteristics of patients and concomitant diseases were also analyzed.

Results:

Mean age 63.5 years (range 30-94), men 55.7%, follow-up 4.45 years, BMI 30.6, DBP and DSP 79.4 and 139.8 mmHg respectively, HDL-c and LDL-c 48.8 and 119.2 mg/dl, total cholesterol and triglycerides 199.2 and 157.9. Associated pathologies: atrial fibrillation 1%, hypertension 79.4%, dyslipidemia 77.6%, heart failure 6.4%, PAD 6.3%. Total events 2839 (12.9%). A Kaplan Meier curve was performed. Patients without an A1c assessment have a longer survival at the beginning of the period and a lower survival at the end of it. The whole period was divided into three time windows to which was applied the Cox multivariate regression model. Showing the longer period (> 4.25 years), HR 2,581 (95% CI 1,676-3,935), overcoming the rest of the groups.

Conclusions:

T2D Patients who don't perform glycemic controls, are at higher cardiovascular risk, overcoming patients with poor glycemic control.

Points for discussion:

Lack of clinical follow up linked with poor metabolic control

Lack of clinical follow up linked with increased cardiovascular disease

Lack of clinical follow up linked with increased mortality

Poster / Finished study**Randomized controlled trials on prevention, diagnosis, and treatment of diabetes in African countries - a systematic review**

Angelika Sandholzer-Yilmaz, Susanne Unverzagt, Thomas Frese, Eric Kroeber

MARTIN-LUTHER-UNIVERSITY HALLE-WITTENBERG, 06112 Halle, Germany. E-mail: angelika.sandholzer@med.uni-goettingen.de

Keywords: Diabetes mellitus, Africa, systematic review, randomized-controlled trial

Background:

The epidemiological transition from infectious to chronic diseases leads to novel challenges in African health systems. The prevalence of diabetes mellitus (DM) is increasing dramatically. Undiagnosed and undertreated DM leads to numerous complications including end-organ damage and death.

Research questions:

Our objectives were to collect the best locally generated evidence on DM interventions, identify knowledge gaps, and determine underexplored research areas.

Method:

Design: A systematic review and meta-analysis of randomized controlled trials (RCTs).

Participants and setting: African patients in primary, secondary and tertiary prevention, diagnosis and treatment DM type 1 (DM1), type 2 (DM2) and gestational DM (GDM).

Outcome: All-cause mortality, glycemic control, complications, quality of life, hospital admission, treatment adherence and costs.

Data sources: Articles published in MEDLINE Ovid, CENTRAL, CINAHL, African Journals Online and African Index Medicus and the International Clinical Trials Registry Platform in English language until October 2020.

Results:

Out of 3584 identified publications, we included 60 eligible studies conducted in 15 countries 75% were conducted in urban health care settings, including 10,112 participants. We included eight studies on DM1, six on GDM, two on pre-DM, 37 on mainly DM2 including seven on DM related complications. The design of the studied interventions was heterogeneous with a focus on educational strategies. The other studies investigated the efficacy of nutritional strategies including food supplementations, pharmacological strategies and strategies to enhance physical activities. Seven studies included interventions on DM-related complications.

Conclusions:

Research activities increased in recent years. Available evidence is still not representative for all African countries and rural areas. We detected a lack of evidence in primary health care and locally implemented pharmacological interventions. The identified studies offer a variety of effective approaches as a basis for local guidelines in DM care adjusted to regional circumstances.

Points for discussion:

Implication for further locally feasible research

Implications for improving diabetes control in Africa

Poster / Ongoing study with preliminary results**Identifying the obstacles to colonoscopic screening of first-degree relatives with a family history of colorectal cancer. Where do GPs stand?**

Clara Blanchard, Nicolas Paliarne, Isabelle Ingrand

University of Poitiers, 86000 POITIERS, France. E-mail: cla.blanchard@gmail.com

Keywords: colorectal cancer; screening; general practice; compliance

Background:

Colonoscopic screening allows early detection of colorectal cancer and adenomatous polyps. Screening family members around an index case is essential to reduce morbidity and mortality of this cancer which is the third most common cause of cancer mortality worldwide. General practitioners have an important role to play in this strategy.

Research questions:

What are the obstacles to implementing colonoscopic screening in first-degree family members? What do GPs feel is their role in this screening strategy? What could help GPs inform their patients of their high risk and the importance of screening?

Method:

As part of the COLOR3 research program in Poitou-Charente, France, GPs of first-degree relatives were sent a leaflet informing them of their patients family history and the importance of discussing colonoscopic screening with them. The GPs were then contacted by a sociologist who anonymously evaluated their knowledge of the screening strategy, their motivation to implement it, their capability of doing so and their appreciation of their role.

Results:

Few GPs expressed ease at implementing colonoscopic screening for first-degree relatives. They described a lack of communication between relatives, between specialists and the referent GP and a lack of time to update family history at each visit, as being the main brakes to discuss this screening with patients. Some also argued that it was not their place to convince patients to participate in screening strategies.

Conclusions:

Referent GPs are not well equipped to discuss familial screening for CRC around an index case. This study shows that information does not flow well from the initial diagnosis down to the relatives and their care-givers. This study also shows that sending an information leaflet alone is not sufficient to help the referent GP.

Points for discussion:

How important is the taboo around CRC? Making it harder to discuss than other screening programs.

What role should GPs have in the screening strategy?

Poster / Finished study**Implementation of the Health Balanced Scorecard in the Health Center of Vari, Greece. Measuring clinical indicators for gynecology cancer.**

Michael Dandoulakis, Popi Gialadaki, Paolo Sklavounos, George Barsamis, Kiriaki Dandoulaki, Dimitrios Drosos, Dimitra Iosifina Papageorgiou

HEALTH CENTER OF VARI, 16672 VARI-ATTIKIS, Greece. E-mail: midand2012@gmail.com

Keywords: quality improvement, health balanced scorecard, cervical cancer, breast cancer.

Background:

Evaluation is key to quality improvement. The adoption of tools, such as the Health Balanced Scorecard (HBSC), can help in the monitoring of the performance of a healthcare system or unit. HBSC is adjustable to the needs of every health unit and assists clinicians in goal setting, strategy implementation and outcomes assessment. Certain clinical indicators (CI) are chosen for the evaluation.

Research questions:

Is cervical and breast cancer prevention effective in Vari Health Center (VHC), Greece?

Method:

Data were collected from all women of the list of a family doctor (F.D). Performance index (PI) was measured for all these women. The number of women on the list of an F.D. of VHC, who should have undertaken the pap test and mammography, was set as a denominator. For the determination of the numerator the data were obtained from the electronic personal health record (EPHP) with the written consent of patients. These 2 P.I. are included in HBSC of VHC. Data were processed with SPSS 21.

Results:

Data were obtained from 146 women of the list of a family F.D. of VHC, which should have done past test and mammography. 10 of them had done mammography and none of them had done pap test.

Conclusions:

The HBSC assists clinicians in assessing the quality of gynecology cancer (G.C.) prevention. G.C. prevention is very poor in VHC. There will be an effort for personal invitation for all the women of the F.D. list.

Points for discussion:

IMPLEMENTATION OF CANCER SCREENING GUIDELINES IN CLINICAL PRACTICE

Presentation on 30/04/2021 07:15 in "Poster Session 3 - Cancer and screening:" by Michael Dandoulakis.

Poster / Finished study**Clinical presentation of Bulgarian patient with possible COVID-19**

Lyubomir Kirov

National association of GPs in Bulgaria. Faculty of medicine, Sofia university "St. Kl. Ohridski", 1407 sofia, Bulgaria. E-mail: kirov.lyubomir@gmail.com

Keywords: COVID-19, primary care; symptoms, presentation

Background:

After its emergence SARS-CoV-2 has infected > 93 million people and lead to > 2 million deaths worldwide (WHO, January 2021). There is currently no definitive treatment, the effect of the vaccines is still not quite well established, and it seems that herd immunity will not be achieved in a year. Early detection and isolation of the infected together with the personal prevention are still in action. On this background there is still not enough research results about symptoms of COVID in primary care, compared to hospital care.

Research questions:

What is the expert opinion of GPs and specialists in the outpatient care about the initial manifestations of COVID, the most common symptoms, complications and how they evolve with time?

Method:

Web-based questionnaire with several answers suggested and option for free text comment, 10 days duration (23 November - 02 December 2020), completed by 703 physicians, 94% (n=661) GPs, who present 16% of Bulgarian GPs, providing care to approximately 1 million people.

Results:

The most common manifestations according to the proportion of the physicians who voted are: fever (91%); weakness/malaise (80.7%); headache (78%); loss of taste and/or sense of smell (71.6%); myalgia (66.7%); cough, mostly dry (56.9%); sore throat (51.8%).

Diarrhea, nausea and vomiting, difficulty breathing, or shortness of breath are significantly rarer, indicated by 24.9-16.1-11.1% of participants, respectively. Ageusia/anosmia are quite specific for COVID, usually occur after day 3 of the onset of complaints vote 59.5% of participants, on 2-3 day (37%) or day 1 (3.6%). As the only first symptom are pointed fever, weakness, headache, ageusia/anosmia by 74.4-64.1-50.8 and 46.1%, respectively. 56.1% claim that fever duration is 5-10 days and 29.2%-3-5 days usually 37.5-38.0°C (72.4%). Worsening may happen after 8 (46.5%) or 5 days (46.1%) of onset.

Conclusions:

Ageusia/anosmia and prolonged fever may strongly support the presence of uncomplicated COVID in primary care.

Poster / Ongoing study no results yet**COVID-19 as a case study of the tension between politics and science, evidence and practice, healthcare and economics.**

Jean Karl Soler

MIPC, RBT2418 Rabat, Malta. E-mail: info@thefamilypractice.com.mt

Keywords: COVID-19, EBM, politics, economics, healthcare

Background:

In 2019, a novel coronavirus and the threat of a global pandemic was met by unprecedented measures recommended by public health organisations, but influenced by major political pressures. The social, economic, political and healthcare policy impacts of such measures was not always in line with prior healthcare policy and the available scientific literature. A review of the assumptions which drove such policy decisions, and the empirical evidence on the effectiveness of such measures is both timely and essential.

Research questions:

1. To review available literature on the effectiveness of public health measures to control the COVID-19 pandemic
2. To review empirical evidence of the effect of such measures on mortality and morbidity during 2020 and beyond
3. To reflect on the interaction between politics and science, evidence and practice, healthcare and economics

Method:

A review and presentation of the highest level evidence available on the effects of public health interventions, and especially lockdowns and vaccination programmes, and their benefits and harms.

Results:

A review of the evidence available and a discussion of the interaction between evidence and practice in a broad context.

Conclusions:

The critical review and discussion of available and emerging evidence on the effectiveness of such unprecedented measures undertaken in an exceptional pandemic will throw light on how evidence, science and healthcare may and did interact with politics, policy, social factors and economics, thus informing future decisions in such situations.

Points for discussion:

1. Discussion of the evidence for and against lockdown measures,
2. Discussion of the effects, harms, benefits and costs of lockdown measures,
3. Discussion on the optimal interaction between science, politics and economics.

Poster / Finished study**COVID-19's impact on primary care and related mitigation strategies: A scoping review.**

John Broughan, Jayleigh Lim, Des Crowley, Brendan O' Kelly, Ronan Fawsitt, Mary-Carmel Burke, Geoff Mccombe, John S Lambert, Walter Cullen

University College Dublin, D07 E820 Dublin, Ireland. E-mail: john.broughan@ucd.ie

Keywords: COVID-19, pandemic, primary care, telemedicine, public health

Background:

There is limited evidence documenting COVID-19's impact on primary care. This is concerning because primary care is where most patients with COVID-19 infection and/or concerns are likely to be treated, and where the pandemic's long-term consequences will be managed.

Research questions:

How has COVID-19 impacted primary care and what strategies mitigate these impacts?

Method:

This study used a six-stage scoping review framework developed by Arksey and O'Malley (2005). The search process was guided by the Joanna Briggs Institute three-step search strategy and involved searching the PubMed, Embase, Scopus, CINAHL Plus, and Cochrane library databases. The review is reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review. A thematic analysis approach proposed by Braun and Clarke was used to interpret the findings.

Results:

Thirty-two studies from 18 countries and six continents were included, 13 reported original research, three were reviews, and 16 were case reports reporting healthcare systems' experiences of dealing with the pandemic. Themes concerned (a) the COVID-19 pandemic's impact on primary care service provision (reduced capacity of/access to care, quality of care) and patients (poorer outcomes in comorbid patients, poorer mental health outcomes), (b) the impact of the rapid transition to telemedicine due to COVID-19 on primary care (ensuring care continuity, reduced healthcare opportunities), and (c) strategies to mitigate the impact of COVID-19 on primary care (infection prevention and control measures, alternatives/modifications to traditional service delivery or workflow, government policy responses, and education).

Conclusions:

The COVID-19 pandemic has considerably impacted on primary care and various strategies to mitigate this impact have been described. Future research examining the pandemic's ongoing impacts on primary care, as well as strategies to mitigate these impacts, is a priority.

Points for discussion:

Primary care's role during the COVID-19 pandemic.

The themes that emerged.

The COVID-19 pandemic's evolution and the need for ongoing investigation of its impact on primary care.

Poster / Ongoing study with preliminary results**Experiences of individuals affected by Covid-19: A qualitative study among patients from German family practice settings**

Leonard Kierer, Sandra Parisi, Prof. Dr. Ildikó Gágyor

Department of General Practice, Universitätsklinikum Würzburg, Würzburg, Germany, Würzburg, Germany. E-mail: leonard.kierer@stud-mail.uni-wuerzburg.de

Keywords: Covid-19, ambulant, GP, family practice, holistic, experience, qualitative study

Background:

General Practitioners accompany a wide range of patients affected by Covid-19. The experience of these patients can contribute to a holistic understanding of what Covid-19 means to affected individuals and to identifying possibilities to improve patient-centred prevention, treatment, care and follow-up.

Research questions:

The study aimed at investigating the course of disease and its consequences, individual disease perceptions, barriers to diagnosis and treatment as well as patients' behaviour, wishes and expectations.

Method:

This study was part of a country-wide mixed-methods study, consisting of anonymous quantitative surveys and qualitative interviews conducted by phone. Survey recruitment was organized through General Practitioners. Adults patients that had gone through symptomatic Covid-19 were eligible to participate. Patients interested in qualitative interviews then directly contacted the study team. Content analysis aligned to Kuckartz was performed on interview transcripts.

Results:

24 interviews were conducted among (14/24) women and (10/24) men across all age-groups. Disease onset ranged from March to December 2020 and disease severity from mild to critical. Participants came from rural, semi-urban and urban areas.

Participants described challenges during the diagnostic process and insecurities about test results. Distress was associated with living alone, fear inducing media reports and exaggerated media consumption, stigma and quarantine-related access barriers to clinical monitoring and hospital admission. Family support, access to a garden, a positive mindset and creative individual solutions were perceived facilitators. Constant contact persons within the health care system were perceived beneficial. Emerging themes related to doubts on long term complications and follow up, immunity, managing guilt of having infected others, as well as to discrepancies between perceived and objective disease severity.

Conclusions:

Our study identified several barriers and facilitators experienced by Covid-19-patients that should be taken into account when designing measures for patient-centred care and follow-up.

Points for discussion:

perceived severity

quarantine-related access barriers

post-disease checkup possibilities & limitations

Poster / Finished study**Impact of COVID-19 in coronary heart disease follow-up in primary care**

Ileana Gefaell, Sara Ares Blanco, Marta Pérez-Álvarez, Marina Guisado-Clavero, Cristina Muñoz, Marta Castelo-Jurado

Centro de Salud Federica Montseny, SERMAS., n/a Madrid, Spain. E-mail: ileanagefaell@gmail.com

Keywords: Coronary Disease, COVID-19, Follow-Up Studies, Sex

Background:

The monitoring of coronary heart disease (CHD) is carried out mainly by Primary Care. During the COVID-19 pandemic, the normal follow-up was delayed.

Research questions:

Has the COVID-19 pandemic affected the cardiovascular monitoring of CHD in men and women?

Method:

Observational follow-up study of an ambispective cohort in Madrid. Participants: Patients with CHD prior to 2020, > 45 years (n:151). Time period: from 28/02/2020 to 12/1/2020. Variables: data from BT (HbA1c%, total cholesterol, LDL-c, HDL-c), BMI and blood pressure (BP), in two time periods. First cut: data before 03/13/2020. Second cut: first available data after 03/13/2020. Data collection: electronic medical record. Analysis: STATA 16

Results:

151 patients were enrolled (aged: 72.2 ± 13.2 , 65.6% male), 72.2% had hypertension, 66.2% had BMI >26 Kg/m², 64.9% had dyslipidemia and 41.1% were diabetic. There were no differences in comorbidities between sexes except for hypertension, predominantly in women (83%, $p=0.037$).

The median HbA1c% was 6.5% (IQR 5.9-7.6), mean total cholesterol (TC) was 146 mg/dl, HDL-c 46.4mg/dl, LDL-c 74.5, mean BP was 129.4 / 72.3mmHg before lockdown. We found differences between women and men in TC 154.4 vs 141.6 mg/dl ($p=0.024$) and HDL-c 53.2 vs 42.8mg/dl ($p<0.001$)

In the second cut: mean TC 140.2mg/dl, HDL-c 46.5mg/dl, LDL-c 71.6mg/dl. SBP was 130.7/ 70mmHg. The same differences in women vs men were observed: TC 153 vs 133mg/dl ($p=0.036$) and HDL-c 51.5 vs 43.7 ($p=0.02$)

Conclusions:

Patients kept similar cardiovascular monitoring despite the pandemic during the first 9 months. Women had higher TC and HDL than men.

Points for discussion:

New hypothesis around the results

Methodology

Possible explanations

Poster / Ongoing study with preliminary results**Primary care for patients with coronary heart disease during the COVID-19 pandemic in Germany**

Anne Schrimpf, Nathalie Mähl, Stefan Lippmann, Tobias Deutsch, Markus Bleckwenn

Selbstständige Abteilung für Allgemeinmedizin, Universität Leipzig, 04103 Leipzig, Germany. E-mail: anne.schrimpf@medizin.uni-leipzig.de

Background:

To reduce the risk of infection with COVID-19 in high-risk populations, interventions in the disease management program (DMP) for coronary heart disease (CHD) could have been suspended. Clinical data showed a decrease of acute myocardial infarction (AMI) cases since March 2020 but an increase of severe AMI cases, indicating that symptomatic patients might have suspended/delayed a hospital visit during the pandemic. Data on the extent and impact of delayed primary care for DMP-CHD-patients is absent.

Research questions:

We investigate if the coronavirus pandemic affect primary care for DMP-CHD patients.

Method:

The data were collected in Germany between 10/2020 - 01/2021. In total, 20 GPs agreed on participation and completed a questionnaire. 1295 DMP-CHD patients have been recruited and received a patient questionnaire. 745 patients returned the questionnaire to date. The patient questionnaire assessed demographics, health behavior, medical history, dealing with risk of infection, consultation of medical services and CHD-symptoms during the epidemic, and psychological well-being.

Results:

427 questionnaires were analyzed (mean age: 74,1 years; 29 % female). GPs reported no reduction in DMP-CHD appointments in the 1. and 2. quarter of 2020 compared to 2019. Patients that suspended DMP-CHD appointments reported fear of getting infected with COVID-19 as a main reason. Since March 2020, 11,2 % of the patients reported CHD-related symptoms. These patients exhibited higher state depression scores compared to patients without symptoms. Importantly, of patients with CHD-related symptoms, 31,3 % did not consult a medical specialist. They reported being more concerned about the coronavirus than patients that consulted a medical specialist.

Conclusions:

The study is ongoing. Our results obtained to date suggest that sufficient medical care for patients with CHD has been provided during the COVID-19 pandemic. The fear of infection with COVID-19 might facilitate the CHD-patients' decision not to consult a medical doctor. A correlation between depressive and CHD-related symptoms was observed.

Points for discussion:

How can we use the results of the study to improve primary care for high-risk populations with chronic diseases in the second year of the pandemic?

Compared to previous years, is there any evidence/available data that CHD-related symptoms increased in 2020?

Since the outbreak of the pandemic, did you observe an increasing percentage of patients who did not visit a specialist despite having CHD-related symptoms?

Poster / Ongoing study with preliminary results**Analysis of COVID-19 complicated vascular cases from General Practice perspective**

Lyubima Despotova-Toleva, Bogomila Cheshmedzhieva

Bulgarian Long term and Palliative Care Society, 4000 Plovdiv, Bulgaria. E-mail: desptol@abv.bg

Keywords: COVID-19, COVID-19 associated coagulopathy, thrombophlebitis, embolism and arterial thrombosis, psychosis

Background:

To date, sufficient evidence has been accumulated on the link between COVID-19 and a vast spectrum of vascular pathology, incl. vascular inflammation and the development of coagulopathies, which can lead to thrombocytopenia, hypercoagulation and thrombosis, as well as bleeding. These pathological changes themselves can not only lead to respiratory and oxygenation disorders, further aggravate the patient's respiratory status, but also to a number of other complications (neurological, psychosis etc.). In the early recognition of these conditions GPs could play a very important role.

Research questions:

In what extent analyzing complicated cases contributes to better understanding by GPs of the complex pathology and timely referral of COVID-19 patients for specialized treatment?

Method:

Ongoing study on COVID-19 patients with combined COVID-19 infection (incl. typical pulmonary involvement) and vascular pathology; analysis of cases; teaching GPs with cases

Results:

Several cases of patients with COVID-19 and thrombophlebitis, arterial embolism and arterial thrombosis, incl. consequent emergency situations and operations are analyzed from General practice perspectives. Among them: (1) 66 years old patient with multimorbidity, after COVID-19 pneumonia with embolism and thrombosis of a.iliaca. (2) 71 years old patient with COVID-19, atrial fibrillation, diabetes mellitus type 1, essential hypertension, embolism and thrombosis of upper limbs arteriae. (3) 51 year old patient with COVID-19 pneumonia, essential hypertension, phlebitis and thrombophlebitis (DVT) of lower extremities and psychosis, developed during the course of the disease.

Conclusions:

Collecting and analyzing such type of complicated cases of patients with multimorbidity and COVID-19 contributes to: (1) better understanding the varieties of combinations of symptoms in COVID-19 patients especially focusing on severe vascular pathology early recognition in General practice setting in order to send such patients timely for hospitalization. (2) raising awareness of GPs regarding some COVID-19 condition as psychosis.

Points for discussion:

1. The role of some clinical tests incl. d-dimer for early detection of COVID-related vascular events
2. Psychosis in COVID-19 patients with CAC and vascular pathology
3. Short-term and long-term observation of COVID-19 patients in General practice during and after recovery

Poster / Ongoing study with preliminary results**Doctor –patient consultations in C-19: rapid development and deployment of a virtual patient to support providers breaking bad news**

Teresa Pawlikowska, Caroline Delaney, Barry Harnedy, Declan Dagger, Connor Gafney

RCSI University of Medicine and Health Sciences, D01 RR25 Dublin, Ireland. E-mail: teresa.pawlikowska@gmail.com

Keywords: C-19 Consultations Virtual patient Breaking Bad News

Background:

The C-19 pandemic has affected vast numbers of patients, relatives, carers and health care workers, and added complexity to communication between these groups, many need to adapt fast.

Challenges:

No personal continuity with patients

Loved-one/Carer can be remote from hospital

Verbals & non-verbals affected by PPE

IT - remote connection via phone, tablet, etc.

Often news of transfer to ITU, sudden deterioration

Doctors and front line staff can be stressed by breaking bad news

Research questions:

Can a virtual patient which allows practice and feedback assist doctors in breaking bad news in this context?

Method:

The intention was to rapidly upskill staff. This virtual patient was device agnostic, so anytime, anywhere interaction was possible.

It is developed on a game platform, the participant plays the doctor role and is given their own feedback.

It is confidential, with real time feedback and coaching.

It is based on the Cambridge Calgary Guide (Silverman 2013) and the SPIKES protocol for Breaking Bad News (Baile 2000)

So it presents a best practice, Patient centred approach

For the doctor or staff member it presents them with an opportunity for active learning, role play and feedback.

Results:

So far it has been used by a wide variety of postgraduate front line staff and evaluation shows that:

94% felt that content was engaging

91% reported that it was realistic.

It was highly recommended and further evaluation is ongoing and will be reported.

Conclusions:

A virtual patient developed on a game based platform for breaking bad news remotely in the C-19 pandemic has been evaluated as useful for upskilling frontline staff.

Points for discussion:

Can you feedback on any improvements you would find useful?

Can you see other uses of this?

Poster / Finished study**How COVID-19 has affected general practice consultations and income – General Practitioner cross sectional population survey evidence from Ireland**

Robyn Homeniuk, Claire Collins

Irish College of General Practitioners, Dublin, Ireland. E-mail: robyn.homeniuk@icgp.ie

Keywords: general practice, consultation method, COVID-19**Background:**

General practice is at the forefront of Ireland's COVID-19 response, as it is in many European countries. With rapid changes to the delivery of primary care, this study sought to add evidence to the gap in knowledge on how the pandemic is affecting general practice.

Research questions:

The primary objective was to understand the changes to consultations in general practice in Ireland.

Method:

This study employed a cross-sectional online survey instrument to obtain consultation rates and mode of delivery within general practice in Ireland. The survey was sent to the members of the Irish College of General Practitioners before the pandemic hit in February 2020 and again during the initial response in June 2020. The anonymous responses from each survey were collated and analysed using SPSS V25. We used descriptive statistics, t-tests to compare means and chi-square tests for categorical variables where appropriate.

Results:

In the survey before the arrival of COVID-19 in Ireland, 526 practices responded (32% of all practices in Ireland). In the second survey, during the initial COVID-19 response, 538 practices responded (33% of all practices in Ireland). For GPs, consultations via telemedicine (including telephone and video) increased from 10% to 57% of daily consultations whilst face-to-face consultations dropped from 87% to 41%. Overall, 80% of practices reported a reduced profit after the onset of the COVID-19 pandemic and 77% reported decreased attendance from patients with chronic conditions.

Conclusions:

The way general practice is delivered in Ireland has dramatically changed since the onset of the COVID-19 pandemic. Practice profits have decreased along with non-COVID related patient attendance. More research as the pandemic progresses is needed to understand the long-term impact of COVID-19 on general practice and how to prepare for future outbreaks.

Points for discussion:

Is this what we expected in terms of reduced attendance from specific groups?

Will telemedicine remain king as infection control measures ease?

What has happened in your country?

Poster / Finished study**Primary Healthcare Professionals' Preparedness during the first wave of the COVID-19 pandemic in Greece**

Smyrnakis Emmanouil, Gavana Magda, Dimitra Iosifina Papageorgiou, Haidich Anna-Bettina, Andreou Martha, Michael Dandoulakis, Avgerinou Christina, Theodoropoulos Elias, Roka Violeta, Birtsou Charis, Yakimova-Polyzou Vesela, Kokkali Stamatia, Kotsani Marina, Manolaki Chrysanthi, Zeibekis Doukas, Paganas Aristofanis, Talimitzi Persefoni, Stachteas Panagiotis, Pagkozidis Ilias, Vlachopoulos Nickolaos, Giakoumis Anastasios

Aristotle University of Thessaloniki, School of Medicine, 54453 Thessaloniki, Greece. E-mail: smyrnak@auth.gr

Keywords: COVID-19, pandemic, preparedness, primary care

Background:

It is commonly suggested that Primary Healthcare Professionals (PHPs) face difficulty in applying research evidence into practice and that their clinical practice is not up-to-date. The gap between theory and practice could be detrimental especially in the case of pandemics.

Research questions:

This study investigates the level of preparedness knowledge of public PHPs, during the first wave of the COVID-19 pandemic in Greece.

Method:

A mixed methodology study was conducted by the Aristotle University of Thessaloniki Primary Health Care Research Network (AUTH.PHC.RN). PHPs participating in the quantitative cross-sectional during the first wave of the COVID-19, filled in a web-based 18 item questionnaire. Knowledge level was assessed by the use of scenarios and data were grouped for the development of a scoring system. Associations with demographic data were analyzed. The qualitative study, based on semi-structured interviews, was conducted after the first wave of the pandemic with a different group of PHPs. Interview transcripts were analyzed by thematic analysis.

Results:

The response rate was 68.3% (444 out of 650 invited participants, representing 6.18% of public PHPs). Participants having more working experience, have less preparedness knowledge ($p:0.046$) and participants in a high-risk group, have less knowledge ($p:0.022$). 1st line physicians have more knowledge than other 1st and 2nd line PHPs ($p<0.001$). Females have less knowledge compared to males ($p:0.015$). Interviewed PHPs ($n=33$) reported that during the pandemic, they familiarised themselves with hygiene and safety protocols and gained clarity on infection prevention strategies and invaluable experience in practicing their profession under special circumstances.

Conclusions:

During the first wave of COVID-19 in Greece, PHPs working at first line were more flexible in promptly implementing new guidelines and protocols in their practice. Training in the use of new protocols in primary care could improve the thorough and faster implementation of new evidence in daily practice.

Points for discussion:

The way Primary Care could rapidly respond to new situations.

The way Primary Care can put into practice new emergency protocols and safety guidelines.

Poster / Finished study**Integrating Hepatitis C Care for opioid substitution treatment patients: Feasibility, Clinical and Cost Effectiveness**

Geoff McCombe, Davina Swan, John S Lambert, Eileen O'connor, Zoe Ward, Peter Vickerman, Gordana Avramovic, Des Crowley, Willard Tinago, Nyashadzaishe Mafikureva, Walter Cullen

University College Dublin, ROI Dublin, Ireland. E-mail: geoff.mccombe@ucd.ie

Keywords: primary health care; hepatitis C; integrated HCV care; people who inject drugs

Background:

Hepatitis C is a common infection, often not diagnosed or treated and therefore associated with potentially preventable chronic liver disease. As many people who inject drugs (PWID) are unaware of their infection, new strategies to reach such individuals are necessary, including testing strategies to increase the number diagnosed and improved care pathways to ensure those diagnosed are successfully linked to HCV evaluation and treatment.

Research questions:

The aim of this study was to examine feasibility, acceptability, clinical and cost effectiveness of an integrated model of HCV care for opioid substitution treatment (OST) patients in general practice.

Method:

A pre-and-post intervention design with an embedded economic analysis was used to establish the feasibility, acceptability, clinical and cost effectiveness of a complex intervention to optimise HCV identification and linkage to HCV treatment among patients prescribed methadone in primary care. The 'complex intervention' comprised General Practitioner (GP) / practice staff education, nurse-led clinical support, and enhanced community-based HCV assessment of patients. General practices in North Dublin were recruited from the professional networks of the research team and from GPs who attended educational sessions.

Results:

Fourteen practices, 135 patients participated. Follow-up data was collected six-months post-intervention from the clinical records of 131(97.0%) patients. With regards to clinical effectiveness, among HCV antibody-positive patients, there was a significant increase in the proportions of patients who had a liver fibroscan 17/101(16.8%) vs 52/100(52.0%); $p < 0.001$), had attended hepatology/infectious diseases services 51/101(50.5%) vs 61/100(61.0%); $p = 0.002$), and initiated treatment 20/101(19.8%) vs 30/100 (30.0%); $p = 0.004$). The mean incremental cost-effectiveness ratio of the intervention was €13,255 per quality adjusted life year gained at current full drug list price (€39,729 per course), which would be cost saving if these costs are reduced by 88%.

Conclusions:

The complex intervention has the potential to impact on patient care, improving access to assessment and treatment in a cost effective manner.

Poster / Finished study**Intra-articular and soft tissue corticosteroids injections and risk of infections**

Galia Zacay, Anthony Heymann

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

Keywords: corticosteroids, infections, intra-articular injection**Background:**

Intra-articular injection of corticosteroids was first reported in 1951. Since then, this treatment has become a common office-performed procedure for the treatment of articular and peri-articular inflammatory conditions and for pain control. There are reports of few systemic adverse events mainly hypothalamic-pituitary-adrenal axis suppression and transient elevation in blood glucose level in patients with diabetes. There are no reports regarding infection as a possible adverse event.

Research questions:

To assess the risk of infection after intra-articular or soft tissue steroid injections.

Method:

An historical prospective cohort study.

Participants: 7,088 individuals that met the inclusion criteria entered the study.

Intervention: The participants were self-matched and we analyzed the incidence of infection for three periods. We defined the exposure period as the 90 days that followed the injection, and two 90 days control periods.

Primary outcome: occurrence of the following infections; cellulitis, herpes zoster, influenza, osteomyelitis, pneumonia, septic arthritis, sinusitis, and urinary tract infection using the visit diagnosis field in the patient's electronic medical record.

Results:

Self-matching analysis using conditional logistic regression showed significantly increased odds for the combined incidence of cellulitis, pneumonia, herpes zoster or urinary tract infection in the post exposure period compared with the control periods: OR 1.21, CI 1.05 to 1.32. For patients treated with betamethasone as opposed to methylprednisolone the odds ratio for infection were OR 1.4 CI 1.16 to 1.68, and OR 0.99 CI 0.65 to 1.49 respectively. The increased rate of infection appeared twenty days after the exposure date and peaked between 21-30 days.

Conclusions:

Intra-articular and soft tissue injections of betamethasone are associated with increased rates of infection that occur from three weeks after exposure. Further research should assess if methylprednisolone infections are safer.

Poster / Finished study**Patients' Satisfaction and Perception about Quality of Health Care in an Urban Primary Health Center of Athens, Greece**

Maria Bakola, Eleni Avramidi, Konstantina Soultana Kitsou, Georgios Charalambous, Eleni Jelastopulu

Department of Public Health, Medical School, University of Patras, Greece/Postgraduate Program Health Management, Frederick University of Nicosia, Cyprus, , Greece. E-mail: maria.bkl@gmail.com

Keywords: Patient satisfaction, Urban Primary Health Center, Primary healthcare services, patient waiting time

Background:

Measuring patient satisfaction of healthcare service quality represents an essential parameter in the overall assessment of a healthcare system and its performance.

Research questions:

The aim of this study was to investigate patient's perceptions and satisfaction for services provided by an Urban Primary Health Center (UPHC) in Athens, Greece.

Method:

A questionnaire-based cross-sectional study was performed among 400 patients visiting the UPHC during November and December 2019 to assess the utilization and the satisfaction of services.

Results:

A total of 400 patients answered the questionnaire, 59.8% were female, 47.3% aged >60 years, 70% were inhabitants of the municipality where the UPHC belongs, 31.4% were employed and 40.5% were retired. The reason for visiting the UPHC was in 33% drug prescription, in 26.5% chronic disease monitoring and prescription, in 19.5% emergency care, in 8.8% follow-up examination and in 8.5% preventive care. Visiting the UPHC without making an appointment beforehand stated 65% of the patients. An overall good satisfaction with the primary care services stated 94.3% of the patients. Higher satisfaction is observed regarding the services provided by the medical (4.45/5) and nursing personnel (4.42/5), whereas lower satisfaction was observed with the waiting time for consultation (2.3/5).

Conclusions:

The study revealed an overall high satisfaction in patients receiving primary care services at the UPHC. However, there are areas that need improvement, such as waiting time for consultation. This study helped us to identify the problems and formulate strategies to improve the waiting time and the queuing system for walk-in patients.

Points for discussion:

Have other members carried out such a study in order to analyze and improve if needed the quality of primary care services in an urban primary health center?

Poster / Finished study**Priorities in integrated care: A scoping review.**

Corey Burke, John Broughan, Geoff McCombe, Áine Carroll, Ronan Fawsitt, Walter Cullen

University College Dublin, D07 E820 Dublin, Ireland. E-mail: john.broughan@ucd.ie

Keywords: care coordination, Integrated healthcare systems, integration model, priorities, review

Background:

Fragmentation is a feature of many healthcare systems and can lead to adverse effects on the quality of care and health outcomes. Further, as evidenced during the COVID-19 pandemic, these issues are amplified when populations and their healthcare demands increase. It is commonly believed that an integrated care approach may solve many of the problems associated with fragmented healthcare systems. However, despite integrated care's growing popularity, its priorities are unclear.

Research questions:

What are the priority areas when developing and implementing integrated care models?

Method:

A scoping review was conducted using Arksey and O'Malley's 2005 six-stage framework. Twenty-one papers were selected for review. The studies spanned numerous geographical locations, encompassing several study designs, and a range of populations and sample sizes. Integrated care priorities were identified qualitatively using a thematic analysis approach.

Results:

Overall, the findings show that while no one integrated care model fits all health systems, four priority areas should be considered when designing and implementing policy and care models. These areas are (i) communication, (ii) coordination, collaboration, and cooperation, (iii) responsibility and accountability, and (iv) a population approach. Multiple elements were also identified within these themes, all of which are required to ensure successful and sustained integration. These elements included education, efficiency, patient-centredness, safety, trust, and time.

Conclusions:

The identified priority areas should guide policymakers when planning and implementing future integrated care models. Meanwhile, future research should evaluate the implementation of these priorities in integrated healthcare settings.

Points for discussion:

Challenges facing integrated healthcare systems.

Solutions to overcome these challenges.

Future directions for research, policy, and clinical practice

Poster / Finished study**Use of Epinephrine Autoinjectors in patient with Hymenoptera venom allergy and food anaphylaxis among 8 Italian GPs**

Francesco Del Zotti, Claudia Negri, Giulio Rigon, Gianenrico Senna

General practice Verona, 37122 Verona, Italy. E-mail: delzotti@libero.it

Keywords: anaphylaxis; urgency; empowerment

Background:

Anaphylactic crisis caused by an allergy to hymenoptera venom or foods is hard to prevent, but can be treated by the patient, if he is equipped with certain drugs and in particular the epinephrine autoinjectors with specific training.

Research questions:

- A) Evaluate the prevalence of food-related and hymenoptera venom anaphylaxis in patients
- B) Evaluate the frequency of request for appropriate tests and drugs; and the prescription of epinephrine and the corresponding training for the use of the autoinjector.

Method:

8 GPs from the Italian Netaudit group (www.netaudit.org) extracted ECRs with ICD9 codes of anaphylactic shock by hymenoptera venom and food allergies from their records.

For the patients extracted we evaluated whether the diagnosis corresponded to the criteria of a Consensus article and checked presence of the tests, drugs and prescriptions of epinephrine, according to the guidelines.

Results:

8 GPs participated with a total of 11162 in office.

21 Patients / 11162 (prevalence 0.19%) are positive for the chosen criteria; 6 females and 15 males, with variability in the number of cases per GP (minimum 1; maximum 7; median: 2).

Of these 21 cases: 10 have food allergies; 8 to the hymenoptera venom; 3 to both

The allergology consultation was requested in 16 out of 21 cases; The tryptase test (useful for excluding mastocytosis in allergies to hymenoptera) in 3 cases

Corticosteroid and antihistamines were administered in the majority of cases.

The prescription of epinephrine autoinjector is present in 7 of 21 cases. The information-education (intra-hospital or from the GP) on the use of autoinjector was present in 7 of the 21 ECR

Conclusions:

The prevalence of findings seems lower than that of the literature. There is a great work for improvement both in the variability of the recording of cases in the record, and in the role of GPs' management for the avoidable consequences of anaphylaxis

Points for discussion:

- a) How much coding system different from the ICD9 can help in the classification of these anaphylaxis?
- b) How does the reimbursement of fast adrenaline vary in the European Countries?
- c) How to improve collaboration between GPs, emergency rooms and allergologists?

Author Index

Abadín Carcedo, Helena	50	Castelo-Jurado, Marta	79
Aerts, Naomi	37	Castro Segad, Manuel	50
Aguilar-Latorre, Alejandra	33	Cavero Redondo, Iván	33
Akin, Cetin	62	Celotto, Stefano	54
Almeda, Jesus	59	Cerar, Miriam	36
Álvarez Bueno, Celia	33	Cernota, Monique	38
Alvarez-Guisasola, Fernando	71	Česnulevičienė, Aiste	44
Amarell, Nicola	17, 45	Charalambous, Georgios	87
Anastasios, Giakoumis	84	Charis, Birtsou	84
Angelov, Martin	21	Chenot, Jean-Francois	24
Angelow, Aniela	24	Cheshmedzhieva, Bogomila	81
Angullo-Martínez, Escarlata	71	Christina, Avgerinou	84
Anna-Bettina, Haidich	84	Chrysanthi, Manolaki	84
Anthierens, Sibyl	37	Clavería Fontán, Ana	28, 50
Apaydin Kaya, Cigdem	23, 56	Çölgeçen, Ayşe	61
Ares Blanco, Sara	69, 79	Collins, Claire	83
Arias, Olga Lucia	59	Comaneshter, Doron	68
Aristofanis, Paganas	84	Coşkun, Özlem	53
Arman, İkbâl Hümay	23	Costa, David	52
Arman, Yusuf	23	Costa, Marine	52
Asensio-Martínez, Ángela	33	Cotter, Aoife	58
Astruc, Alexis	16	Couso Viana, Sabela	28, 29
Avramidi, Eleni	87	Crowley, Des	58, 77, 85
Avramovic, Gordana	58, 85	Cullen, Walter	58, 70, 77, 85, 88
Ay, Pınar	56	Cunillera, Oriol	59
Bakola, Maria	60, 87	Dagger, Declan	82
Ballve, Josep Lluís	59	Dandoulaki, Kiriaki	74
Balzer, Katrin	17	Dandoulakis, Michael	74, 84
Barais, Marie	52	Danhieux, Katrien	27
Barsamis, George	74	Danieluk, Aleksandra	43
Bastiaens, Hilde	37	De Baets, Stijn	27
Batsiura, Hanna	46	De Sutter, An	25
Bauer, Alexander	66	De Vriendt, Patricia	25
Bayen, Sabine	41	Defebvre, Luc	41
Berezniakov, Vladyslav	46	Del Cura González, Isabel	69
Bethge, Nicole	51	Del Zotti, Francesco	89
Blanchard, Clara	73	Delaney, Brendan	42
Bleckwenn, Markus	30, 66, 67, 80	Delaney, Caroline	82
Boeckxstaens, Pauline	25	Demeke, Tamiru	38
Boeykens, Dagje	25	Demurtas, Jacopo	54
Bombezin--Domino, Alexis	16	Dennehy, Thomas	70
Bornitz, Florian	49	Despotova-Toleva, Lyubima	65, 81
Botaya, Magallon	28, 29, 33	Deutsch, Tobias	30, 66, 67, 80
Bourtzinakou, Antonia Aikaterini	47	Devos, David	41
Brachitta, Luigi	54	Dios Quiroga, Fátima	28
Bräsigg, Annett	66	Doukas, Zeibekis	84
Broughan, John	58, 70, 77, 88	Downey, Cheyenne	58
Budakoğlu, Işıl İrem	53	Downey, Joanne	58
Buono, Nicola	42	Drosos, Dimitrios	74
Burke, Corey	88	Dunlea, Shane	22
Burke, Mary-Carmel	77	Eggers, Daniela	17
Cadier, Sébastien	52	Elias, Theodoropoulos	84
Calero, Sebastià	59	Elliott, Phillip	55
Camiño Redondo, Concepción	50	Emmanouil, Smyrnakis	84
Canedo Coteló, Diego	50	Enjo Rey, Minia	50
Caride-Miana, Elena	71	Epicovid, Grupo Colaborativo	39
Carroll, Áine	70, 88	Erdem, Özgür	53
Casey, Mary	70	Erridge, Simon	34
		Evripidou, Kleo	47

Ezelskienė, Juratė	44	Kiel, Simone	24
Fawsitt, Ronan	58, 70, 77, 88	Kierer, Leonard	78
Febbo, Giuseppe	54	Kirkovski, Aleksandar	21
Fehl, Marina	30	Kirov, Lyubomir	75
Fernández-Antón, Ismael	71	Kitsou, Konstantina Soultana	60, 87
Freire López, Sara	50	Kiyak, Yavuz Selim	53
Frerk, Timm	49	Klemenc-Ketiš, Zalika	36
Frese, Thomas	38, 42, 66, 67, 72	Klinge, Kay	30, 67
Gafney, Connor	82	Kolesnyk, Pavlo	46
Gágyor, Prof. Dr. Ildikó	78	Koskela, Tuomas	31
Gärtner, Linda	17	Kounalakis, Dimitris	42
Gavana, Magda	47	Kramarchuk, Volodymyr	46
Gavrilis, Panagiotis Rafail	47	Kröber, Eric	38, 66
Gedminas, Laimutis	44	Kroeber, Eric	72
Gefaell, Ileana	69, 79	Kronsteiner, Dorothea	49
Gehres, Vera	30	Kugai, Simon	17
Geier, Anne-Kathrin	30	Kurotschka, Peter Konstantin	54
Gerlach, Ferdinand	55	Lago Fernández, María Del Rosario	50
Getachew, Sefonias	38	Lahousse, Lies	25
Gialedaki, Popi	74	Lambert, John S	58, 77, 85
Gokdemir, Ozden	62	Lautamatti, Emmi	20
Gomara Villabona, Sonia María	50	Lim, Jayleigh	77
González Álvarez, Beatriz	28	Limnili, Gizem	40
González De Oliveira, Fabiola	50	Lingner, Heidrun	42, 66
González-Lama, Jesús	39	Lionis, Christos	42
Graidis, Spyridon	47	Lippmann, Stefan	80
Guethlin, Corina	55	Liseckienė, Ida	44
Guisado-Clavero, Marina	79	Liu, Ville	31
Halioua, Bruno	16	Lois López, Víctor Manuel	50
Harnedy, Barry	82	Luppi, Davide	54
Harrizi, Meryem	16	Lustmen, Alex	68
Harrold, Áine	70	Mafikureva, Nyashadzaishe	85
Hart, Nigel	18	Magda, Gavana	84
Hauswaldt, Johannes	26, 64	Mähl, Nathalie	80
Heinz, Leonor	51	Malliora, Anastasia	47
Herget, Sabine	67	Marina, Kotsani	84
Heron, Neil	18	Martha, Andreou	84
Heutte, Jean	41	Mattila, Kari	20
Heymann, Anthony	86	Mayne, Richard	18
Himmel, Wolfgang	64	Mccombe, Geoff	58, 70, 77, 85, 88
Homeniuk, Robyn	83	Mchugh, Tina	58
Hülsmann, Julia	19	Meier, Rahel	63
Iacob, Mihai	32	Meis, Jan	49
Ilias, Pagkozidis	84	Mereu, Alessandro	54
Ingrand, Isabelle	73	Messaadi, Nassir	41
Ioannidou, Alexandra	47	Messaadi, Wassil	41
İşcan, Gökçe	57	Meyer, Elisabeth	24
Ismaili, Bekim	21	Meyer, Fritz	24
Ivanova, Nevena	15	Mihevc, Matic	35
Jelastopulu, Eleni	60, 87	Miró Palacios, Belén	29
Jiménez García, Celia	39	Montalvo, Camille	52
Jovanovski, Nikica	21	Moreau, Caroline	41
Jungo, Katharina Tabea	63	Mori Lukančič, Majda	36
Kaila, Minna	31	Mortsiefer, Achim	19
Kantelhardt, Eva Johanna	38	Müller, Angelina	17, 55
Karagiannaki, Anastasia	47	Müller, Beate	17, 55
Karagianni, Myriam	47	Mundt, Thomas	30
Kasotakis, Nikolaos	47	Muñoz, Cristina	79
Kersting, Christine	19	Murtagh, Sara	70

Nafziger, Melanie	67	Romero Rodríguez, Esperanza	39
Negri, Claudia	89	Rossiello, Ilaria	54
Nickolaos, Vlachopoulos	84	Rubatto, Elena	54
Nohl-Deryk, Pascal	17, 55	Sánchez Montero, Rosa	39
O'connor, Eileen	85	Sánchez Perruca, Luis	69
O' Kelly, Brendan	77	Sandholzer-Yilmaz, Angelika	72
O'connor, Eileen	58	Santos Novas, Carmen	50
Oliván Blázquez, Bárbara	28, 29, 33	Sauer, Stephanie	67
Orozco-Beltrán, Domingo	71	Savvidou, Evangelia	47
Ortega López, Yolanda	39	Saykan Balataci, Ece	40
Otero Gondar, María Adela	50	Schmalstieg, Katharina	64
Özçakar, Nilgün	40	Schmidt, Manuela	17
Öztaş, Dilek	53	Schneider, Claudio	63
Pajares Conde, Diego	39	Schonmann, Yochai	68
Palierno, Nicolas	73	Schrimpf, Anne	80
Panagiotis, Stachteas	84	Schulz-Rothe, Sylvia	55
Papageorgiou, Dimitra Iosifina	74, 84	Schwab, Nathalie	63
Pappi, Eleni	47	Schwenkglenks, Matthias	63
Pardo Planas, Irene	50	Senna, Gianenrico	89
Parente, Nuno	48	Serafini, Alice	54
Parisi, Sandra	78	Serrano González, Mar	50
Párraga Martínez, Ignacio	39	Sessa, Giorgio	54
Pawlikowska, Teresa	82	Shani, Michal	68
Pecora, Nicola	54	Sklavounos, Paolo	74
Peguero, Eva	59	Smyrnakis, Emmanouil	47
Pereira Da Costa Carvalho, Marta	50	Soler, Jean Karl	42, 76
Pereira, Bruno	52	Spruit, Marco	63
Peremans, Lieve	37	Stamatia, Kokkali	84
Pérez-Álvarez, Marta	79	Stavrikj, Katarina	21
Perez, Jennifer Elizabeth	59	Stojnić, Nataša	36
Perig, Iuliia	46	Streit, Sven	63
Perrotta, Carla	58	Sturm, Noemi	49
Persefoni, Talimitzi	84	Sumanen, Markku	20
Pérula De Torres, Luis Ángel	39	Swan, Davina	85
Petek Šter, Marija	35	Szecsényi, Joachim	49
Polentinos-Castro, Elena	69	Temel Aslan, Kübra	23, 56
Pons Revuelta, Alba	50	Thielmann, Anika	17, 55
Poplas Susič, Antonija	36	Tinago, Willard	85
Pourtoulidou, Dimitra Foteini	47	Touriki, Aikaterini Vasiliki	47
Preuß, Rebekka	24	Tundzeva, Marta	21
Prevolnik Rupel, Valentina Katka	36	Ungan, Mehmet	42
Pype, Peter	25	Unverzagt, Susanne	38, 72
Radoszycki, Lise	16	Urbonas, Gediminas	44
Raivio, Risto	20	Vaillant Roussel, Hélène	52
Ramírez Baena, Miguel	39	Valeri, Fabio	63
Rando, Yolanda	59	Valius, Leonas	44
Rannou, Vincent	52	Van Bogaert, Peter	37
Rapalavičius, Aurimas	44	Van De Velde, Dominique	25
Reeve, Emily	63	Van Olmen, Josefien	27
Refusta Ainaga, Raquel	29	Van Royen, Kathleen	37
Regueiro Martínez, Antonio Ángel	50	Vanderbecken, Jean-Charles	41
Remmen, Roy	27	Vasiliauskienė, Olga	44
Rico Padín, Carmen	50	Vesela, Yakimova-Polyzou	84
Rider Garrido, Faustino	39	Vickerman, Peter	85
Rigon, Giulio	89	Villar, Iván	59
Risteska - Nejasmić, Valentina	21	Violeta, Roka	84
Rodondi, Nicolas	63	Virnau, Larissa	66
Rodríguez Elena, Lorena	29	Ward, Zoe	85
Rodríguez-Cabrera, Francisco	69	Watts, Christopher	34
Romero García, Ana María	50	Weckbecker, Klaus	19

Weltermann, Birgitta	17, 45
White, Gareth	27
Wild, Dorothea	45
Wouters, Edwin	27
Yildirim Bař, Funda	57
Zacay, Galia	86
Zaverukha, Natalia	46
Zavrnik, Ćrt	36
Zetlaoui, Jean	16
Zharkova, Albina	46

**Abstract Book of the 92nd EGPRN Meeting
Virtual Conference, 30 April - 1 May 2021**
ISBN: 978-90-829673-6-4

