



## Teaching Family Medicine Online: the Experience in Cyprus

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## The island of Cyprus



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## Presentation Outline

- ▼ The Country of Cyprus
- ▼ The University of Nicosia Medical School
- ▼ The MSc in Family Medicine Programme
- ▼ The Experience
- ▼ The Future

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## Cyprus 1974

Cyprus: an island divided



Refugee camps in Cyprus, 1974-1975. Photo: UNHCR.

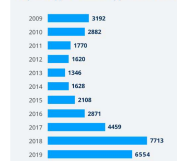
## Cyprus 2019

Refugee crisis in Cyprus close to tipping point

Cyprus desperately needs the EU's assistance to deal with the influx of migrants. Those already there are facing stressful conditions while they wait for their applications to be processed.



Asylum applications in Cyprus 2009-2019



Source: UNHCR. Data until June 2019. ©2019



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**World Health Organization**

Health Topics Countries Newsroom Emergencies About Us

**Cyprus**

**Statistics**

Total population (2016)	1,110,000
Gross national income per capita (PPP International \$, 2015)	20,000
Life expectancy at birth (all years, 2016)	76.60
Probability of dying within the year (1000 live births, 2015)	9
Probability of dying between 15 and 60 years (1000 population, 2015)	7.00
Total expenditure on health per capita (US\$, 2016)	2,000
Total expenditure on health as % of GDP (2016)	7.4

This map is an approximation of actual country borders. Latest data available from the Global Health Observatory

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### The University of Nicosia Medical School

- ▼ The first Medical School in Cyprus – established 2011
- ▼ +800 Students from all around the world
- ▼ Partnership with St George's University of London
- ▼ **Delivering 6 accredited programs**
  - ▼ Bachelor of Medicine and Bachelor of Surgery of St George's
  - ▼ Doctor of Medicine (MD)
  - ▼ Master of Science in Family Medicine
  - ▼ Master in Public Health/ MSc Health Services Administration
  - ▼ PhD Programme




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### Cyprus National Healthcare System

- Universal Coverage
- 1<sup>st</sup> Phase June 2019: Primary Care and Specialist Services
- 2<sup>nd</sup> phase June 2020: Secondary Care and Allied Health Care Professionals



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### Medical School Faculty & Staff



- ▼ Full-time Faculty & Staff: **135+**
- ▼ Part-time Faculty: **440+**
- ▼ Other affiliated Health Sciences Faculty: **15+**

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### Partner Hospitals - Cyprus



Nicosia General Hospital, Aretaeio, Neurology & Genetics, Limassol General Hospital, Apollonio, Oncology centre, Makarios Hospital, Ygeia, American Medical Centre

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### Partner hospitals - International



Swedish Covenant, Chicago



University of Maryland,  
Baltimore



Sheba, Tel Aviv, Israel

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### MSc in Family Medicine – meeting the demand

- ▼ Primary Care Underdeveloped in Cyprus, Middle East but also other areas of the world such as Africa, Asia
- ▼ Increasing demand by doctors who practise as family physicians to receive structured postgraduate training
- ▼ In Cyprus – plans to launch a National Health Care System with focus on the development of primary care

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### University of Nicosia Primary Care Centre



- Launched in June 2019
- 5 primary care physicians
- 2 paediatricians
- 3 nurses
- 3 administrators
- Pharmacy and medical lab facilities

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### Overview of MSc/PgDip in Family Medicine Programme

- ▼ **A structured Continuing Professional Development programme for doctors**
- Family Doctors/ General practitioners in training
- Secondary care Specialists (e.g. internal medicine)/ untrained doctors working in primary care as family/personal doctors

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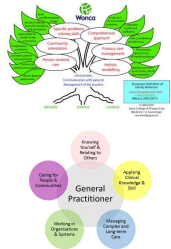
### Overview of MSc/PgDip in Family Medicine Programme

- ▼ **The programme aims to:**
- Enhance knowledge and advance clinical skills towards the management of patients in primary care
- Develop a comprehensive, holistic and evidence based approach to medical practice
- Apply the principles of patient-centred care and problem solving skills in the context of general practice
- Develop and apply research skills in FM

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### The Curriculum of the MSc in FM Programme

- ▼ The Curriculum has been mapped against the core competences of a Family Medicine practitioner as defined by international organisations
- ▼ Aim of raising standards and furthering patient involvement
- ▼ Challenges due to differing disease patterns, resources, health systems, and traditions of consultation across the regions.



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### Structure of Semester 3 leading to MSc in FM

#### ▼ 2 Core modules in Semesters 3 (Research skills)

- Research Methodology in Family Medicine (7.5 ECTS)
- Primary Care Research Project (14.5 ECTS)

#### ▼ 2 Elective Modules in Semester 3 (4 ECTS each)

- Learning and Teaching in Healthcare
- Prevention and Health Promotion
- Implementing Change in Primary Care
- Informatics for Primary and Community Health Care
- Medical Leadership & Innovation in Healthcare

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### The Structure of MSc Programme in FM

- ▼ Delivered over 3 semesters - Minimum full time duration of the MSc in FM is 18 months with a flexible part-time option of up to 4 academic years
- ▼ The first 2 semesters consist of 8 core clinically focussed modules
- ▼ Semester 3 is primarily research oriented giving the opportunity to students to develop their research skills
- ▼ Exit Award: Diploma in Family Medicine following the successful completion of the first 2 semesters

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### Lessons: Online learning format

- ▼ The curriculum is delivered using technology assisted learning methods (Moodle platform, Webex)
- ▼ One week per semester of onsite teaching at the premises of the University of Nicosia (optional)
- ▼ Why online?
  - Convenient for adult learners- reduces time spent in classroom, commuting, expenses
  - Allows students to learn in their own time, at their own pace (multiple times)
  - Control over learning sequence
  - Learn how to learn – self directed learning appeals more to adult learners
  - Geographical barriers are removed allowing participation of students from diverse backgrounds
  - Face to Face teaching time spent more effectively and efficiently

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### The Structure of PgDip/MSc in FM

#### ▼ Eight core modules in Semesters 1&2

Code	Course Title	ECTS	Type
FMED-511	Communication and Consultation Skills in Primary Care	7.5	Core
FMED-521	Evidence-based Practice in Family Medicine	7.5	Core
FMED-535	Managing adults common diseases and Multimorbidity in Primary Care	7.5	Core
FMED-514	Acute Serious Illnesses and Traumatic Conditions in Primary Care	7.5	Core
FMED-533	Common Musculoskeletal Conditions in Primary Care	7.5	Core
FMED-534	Mental Health in Primary Care	7.5	Core
FMED-532	Paediatrics and Child Health Surveillance	7.5	Core
FMED-531	Women's Health	7.5	Core

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### Online Technology Assisted Learning

#### ▼ Flexible technology assisted learning platform used to deliver material (Moodle)

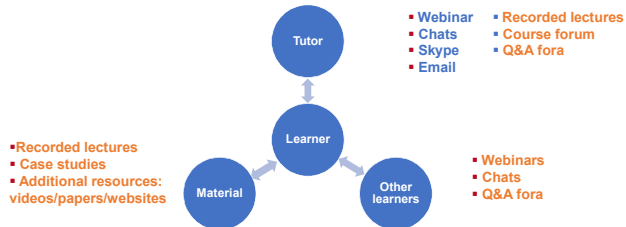
- Pre-recorded Video presentations (lectures) and lecture notes
- Clinical skills videos
- Question and Answer fora on clinical scenarios
- Quizzes
- Online chats
- Additional reading material

#### ▼ Web-seminar (Webex ): Interactive session at the end of the learning weeks/study weeks

- E.g. consultations with simulated patients with feedback, case discussions form practise

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## Online Teaching Methods: Synchronous and Asynchronous



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## Interactive lectures

The first screenshot shows a slide titled '25 year - old woman painless swelling of eyelid visible externally (not shown here and internally on everted lid)'. It includes buttons for 'Diagnosis?', 'Cause?', 'Treatment?', and 'Refer?'. The second screenshot shows a similar slide with a 'This is a chatbox' bubble and a 'Refer?' button. Both slides feature an image of a human eye.

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## Optional Onsite Support Sessions

### Face-to-face teaching, one week per semester at the premises of University of Nicosia

- Patient assessment workshops based on case scenarios
- Examination and procedural skills practice
- Consultations skills practice using simulated patients
- Patient management workshops
- Appraisal of scientific evidence workshops
- Research design, conduction, analysis and writing skills workshops

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## Quizzes

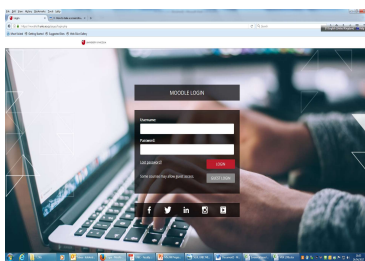
FMED 532 Paediatrics and Child Health Surveillance (BD)

Bedroom / Course / FMED532-01-2019 / Week 1 (24 June - 28 June 2019) / Dermatology / Practice

The screenshot shows a quiz question: 'A 10-year-old boy presents with erythematous, excoriated papules with crusting crust in the antecubital fossa (see photo). He showers daily and is using a petroleum-based emollient twice a day. What is the most appropriate next step in management?'. The photo shows a close-up of the antecubital fossa with crusting papules. The question is followed by four multiple-choice options: 'A. Decrease frequency of showers', 'B. Increase frequency of emollient application', 'C. Prescribe hydrocortisone ointment, topical, twice a day', and 'D. Prescribe hydrocortisone 1% cream, topical, twice a day'.

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## Activities on Moodle



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## Q&A – Case discussions

FMED 532 Paediatrics and Child Health Surveillance (BD)

Bedroom / Course / FMED532-01-2019 / Week 1 (24 June - 28 June 2019) / Dermatology / Practice



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## Assessment PgDip/MSc in FM

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### The course assessment for the FIRST 2 SEMESTERS

- ❖ a written Applied Knowledge Test (AKT)
- ❖ a Workplace-Based Place Assessment portfolio (WBPA)

### The course assessment for the SEMESTER 3

- ❖ Research Proposal, Research paper and Conference Poster
- ❖ One essay assignments for each elective module

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## Timeline of MSc Programme in FM

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graph LR; S1[Semester 1  
Online Delivery 4 Core Modules  
Optional Onsite Teaching - Formative exams] --> PDA[Postgraduate Diploma in Family Medicine Awards]; S2[Semester 2  
Online delivery of 4 Core modules  
Optional Onsite Teaching  
Final Summative exams (Applied Knowledge test/ WPBA)] --> MSA[Master of Science in FM Award];
```

**Semester 1**  
Online Delivery 4 Core Modules  
Optional Onsite Teaching - Formative exams

**Semester 2**  
Online delivery of 4 Core modules  
Optional Onsite Teaching  
Final Summative exams (Applied Knowledge test/ WPBA)

**Semester 3**  
Research skills modules (core)  
2 Elective Modules

Postgraduate Diploma in Family Medicine Awards

Master of Science in FM Award

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## Assessment of MSc Programme in FM - AKT

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- ▼ Assessment mapped onto Curriculum Learning LOBs
- ▼ Single Best Answer (SBA) question:
  - a Multiple Choice Type of question
  - typically based on a clinical scenario
  - you are asked to **select ONE option only**
  - this option is the so-called **Single Best Answer**
- ▼ Formative Exam: 100 items (End of Semester 1)
- ▼ Summative Exam: 200 items (End of Semester 2)

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### Assessment of MSc Programme in FM - AKT

An 18-year-old woman with asthma has become increasingly wheezy over the past two days. Her hay fever symptoms are also worse than usual. After a salbutamol nebuliser, her peak flow rate increases from 250 to 450 L/minute and she feels much better.

Which is the **SINGLE MOST** appropriate **NEXT** management step?  
Select **ONE** option only.

- A Continue usual maintenance inhaler regime
- B Nebulised salbutamol as required
- C Oral amoxicillin
- D Oral chlorphenamine
- E Oral prednisolone

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### Cyprus MRCGP INT exam

Leading to International Member of the UK Royal College of General Practitioners

#### Eligibility Criteria to take the exam:

- Have 5 years of clinical practice in Primary Care, or
- Have completed a structured specialty training scheme of at least 3 years before sitting the exam

#### Exam Components:

- AKT and WPBA (shares with PgDip/MSc in FM)
- Simulated Surgery Exam (Clinical examination)

#### Students Successfully completing all 3 exam components:

**International Membership of the RCGP UK**



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### Assessment of MSc Programme in FM - WPBA

#### Comprises of 4 Elements:

- ▼ Consultation skills video with reflective analysis
- ▼ Case Based Discussions
- ▼ Clinical Examination and Procedural Skills
- ▼ Audit Project

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### MSc Programme in FM and Parallel MRCGP INT

#### Semester 1 and Semester 2

Online Delivery 8 Core Modules

Applied Knowledge Test  
WPBA

Postgraduate Diploma in Family  
Medicine Awards

Simulated Surgery  
Examination

Cyprus MRCGP INT

Semester 3

Master of Science in FM Award

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### Assessment of MSc Programme in FM – Research Skills/ Elective Modules

#### Research Skills

- Research Proposal
- Research Project
  - a research paper in format similar to journal article
  - a research poster in format of conference presentation



#### Elective Modules

- subject specific

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### Accreditation of the MSc/PgDip in FM Program

- ▼ Accredited by the **Cyprus Ministry of Education & Culture**
- ▼ Received Educational Accreditation of Curriculum by the **RCGP UK**
- ▼ Assessment based on internationally recognised methods and accredited by the **UK Royal College of General Practitioners**



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## Faculty Training and Development

- Training on Teaching methods – Principles of adult education and online learning
- Professional development in Medical education – curriculum design and assessment



## Challenges faced with development and the delivery of MSc in FM programme

- Cultural diversity of students - variation in practises, resources and health care systems
- Unfamiliarity of students with teaching methods and assessments
- No control on clinical experience
- Great variability between students of background knowledge but more importantly clinical skills and attitudes
- Language on instruction is English – excludes a large number of potential candidates from entering the programme

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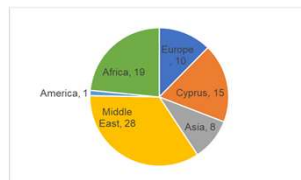
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## MSc in Family Medicine

- Launched in 2014 – online in 2016
- 14 graduates
- 69 students on the programme
- From 27 different countries
- Most of them working as GPs but with no previous structured training
- Great variability in knowledge and skills



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## The Future

- Work with other institutions and governments in introducing this tool in residency training and to update skills of existing GPs – especially in rural and remote areas
- Develop a residency programme for Cyprus in collaboration with the Ministry of Health of the Republic of Cyprus

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