



**Cyprus Committee
on Environment
and Children's Health**

**NAM III
- PITU**



CAMPAIGN

“WE ARE REDUCING THE DIRECT AND PASSIVE EXPOSURE TO NON-IONISING RADIATION EMITTED FROM CELL-PHONES AND Wi-Fi AT THE ARCHBISHOP MAKARIOS III HOSPITAL – WE ARE PROTECTING THE CHILDREN”

PART A Concept and Rationale

**Cyprus Committee
on Environment
and Children's Health**

NAM III - ΜΕΘΝ

*Our
goal is
to save
lives.*

Protect the ones you love

**Switch off your cell phones
and tablets**

**ENVIRONMENTAL
HEALTH TRUST**
www.ehtrust.org

www.paidi.com.cy

Nicosia, March 2019

The Campaign is a cooperation between the Archbishop Makarios III Hospital (NAM III) and the Cyprus National Committee on Environment and Children's Health (CNCECH).

With the active support of the Executive Director of the *Archbishop Makarios III Hospital*, Dr. A. Neophytou, the Director of the Pediatrics Department, Dr. A. Elia, and with the collaboration of the intensivists Dr. Andreas Sergis and Dr. Antonis Kleanthous, and the nursing staff of the Pediatric Intensive Therapy Unit (PITU).

OUR AIM: The highest possible degree of protection from radiation and the enhancement of Children's Health

FINAL OBJECTIVE: "THE PROTECTION OF CHILDREN AND THE PROMOTION OF THE ARCHBISHOP MAKARIOS III Hospital as a MODEL/PIONEER HOSPITAL THAT APPLIES THE PRECAUTIONARY PRINCIPLE, REDUCING THE EXPOSURE OF CHILDREN TO THE RADIATION EMITTED BY WIRELESS COMMUNICATION"

Avoiding unnecessary exposure to Wi-Fi, tablets, mobiles, mobile internet (data) is possible and necessary with the utilization of wired internet (Ethernet) and the avoidance of mobile phones within the children's chambers, waiting areas and preferably within the whole units.



PHASE A, PILOT

1ST ACTION - Awareness raising of patients & families

1. Broadcasting of the 4 VIDEOS of the *CNCECH* that were funded by the Ministry of Health in waiting areas of the NAMIII (Video links: [2015 for Children](#), [2016 for Pregnant Women and the Foetus](#), [2017 for Teenagers](#), [2020 the Makarios Hospital Campaign](#), [2020 the Makarios Hospital Campaign \(Short spot\)](#), and all the Committee's EMF videos)
2. Placement of 10 Posters that indicate the 16 Rules for the safe use of wireless connections (from the [Common Positions paper of 2017](#))
3. Distribution of related leaflet to pregnant women and induction of the subject in their briefing
4. Displaying posters with relevant messages during the campaign

2ND ACTION – Pilot Application in the Pediatric Intensive Therapy Unit (PITU)

1. Informing the Medical and Nursing Staff of the Unit - Training on "Good practices for the reduction of direct and passive exposure"

2. Informing the children and parents by distributing related material
3. Providing wired internet connection through Ethernet and/or power lines in the whole Unit
4. Deactivation of the Wi-Fi
5. The purchase of 2 laptops of special specifications
6. Prohibition of the use of cell-phones and cellular data **within the chambers**. Gradually, the measure is **to be extended as far as possible throughout the unit** with the possible exception of offices, if necessary.
7. Measurements of radiation levels before and after intervention, taken by Dr. Theodore Metsis.
8. Evaluation was based mainly on EUROPAEM Guidelines 2016 ([\(20\) \(PDF\) EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses \(researchgate.net\)](#))

The cost of technical equipment for wired connections and computers (3 & 5) will be covered through a donation by Dr. Stella Canna Michaelidou in the memory of her husband, Dr. Polys Michaelides.

3RD ACTION - Publicity

- Publicity Campaign at National and International Levels in collaboration with the Press and Information Office, preparation of videos, printed material, and publicity through radio and television
- A Press Conference at a date deemed appropriate by the Hospital's Directorate with the intended participation of the Minister of Health, Mr. Constantinos Ioannou.

PHASE B : EXPANSION

Graduate expansion of the measures to other units e.g. of gynaecology and paediatric, clinics: This will depend on the success, experiences and results of PHASE A', and will be designed accordingly.

INDICATIVE Timetable in 2019:

Action 1: Immediate Implementation

Action 2: February Pre-Work, March-May Implementation of 1-6

Action 3: Mainly in May-June

RATIONALE

Exposure to EMF/RF is a serious and complex Public Health issue of great importance, because the risks are serious and can affect all children, the younger generation and the population as a whole. The potential effects of non-ionizing radiation of electromagnetic fields (EMF/RF) in the 30KHz-300 GHz frequency range, include carcinogenicity (possibly carcinogenic 2B IARC 2011, while recent studies, i.e. Hardell 2014-2017, NPT/USA 2016, Ramazzini 2018 (1), indicate the need to upgrade the classification at least to potentially carcinogenic category 2A or carcinogenic of the category 1), neurodevelopmental toxicity,

effects on DNA, fertility, electronic hypersensitivity (EHS) and other serious effects that are well documented by peer reviewed research and studies.

EMF/RF can increase oxidative stress in cells, lead to an increase in pre-inflammatory cytokines, and reduce the ability to repair breaks of single and double-stranded DNA strands. Cognitive dysfunction, learning and memory disorders have also been recorded. These impacts may occur at levels well below the existing limits of ICNIRP, EC Recom. 1999/519. Embryos and children have vulnerable development systems that will determine the development of human life. Their exposure to EMF/RF at early stages of their development is of particular concern, due to - among others - greater radiation absorption and deeper penetration (twice as much as the adult in the brain tissues and 10 times higher in the brain bone marrow (IARC 2011)), potential effects on the development of the developing brain, the nervous system and their reproductive system, the onset of cancers, cognitive disorders, etc. Sick children, especially those who have neurological problems, or are immunocompromised, have cancer, or other health conditions are particularly vulnerable (*“Radiofrequency exposure in young and old: different sensitivities in light of age-relevant natural differences.” Reviews Redmayne M, and O. Johansson. in Environmental Health, vol. 30, no. 4, 2015, pp. 323-35).*

Exposure to the EMF/RF within the hospital, especially in the premature babies units, is inevitable due to the use of equipment necessary for their survival. Therefore, it is imperative that any additional and unnecessary exposure from Wi-Fi routers, tablets, mobile phones, and cellular data is avoided. And this is feasible.

1. Based on the Nicosia Declaration of 2017 http://paidi.com.cy/wp-content/uploads/2019/05/Com-Pos-EN_-F.pdf and review of international studies http://paidi.com.cy/wp-content/uploads/2021/02/REF_Com-Position-Feb21-FINAL.pdf. One comprehensive summary of the effects is the review paper of Martin Pall, USA, 2018 «Eight(8) well documented effects of EMF with 12-34 reviews”, <http://peaceinspace.blogs.com/files/5g-emf-hazards-dr-martin-l.-pall-eu-emf2018-6-11>». This paper also refers to 13 reviews on Therapeutic effects of EMF.
2. Neurological/neuropsychiatric effects, № of REVIEWS: 25
3. Wide spread endocrine effects, № of REVIEWS: 12
4. Produce oxidative stress and free radical damage, № of REVIEWS: 19
5. Attack the DNA, producing single strand and double strand breaks in cellular DNA and oxidized bases in cellular DNA, № of REVIEWS: 21
6. Produce elevated levels of apoptosis events especially important in causing both neurodegenerative diseases and infertility, № of REVIEWS: 13
7. Lower male and female fertility, lower sex hormones, lower libido and increased levels of spontaneous abortion and, attack the DNA in sperm cells, № of REVIEWS: 18
8. Produce excessive intracellular calcium $[Ca^{2+}]_i$ and excessive calcium signalling, № of REVIEWS: 15
9. Cancer causation: Attack the cells to cause cancer. Such attacks are thought to act via 15 different mechanisms during cancer causation, № of REVIEWS: 35

Dr. Stella Canna Michaelidou



President of the Cyprus National Committee on Environment and Children's Health
6/2/2019 & 17/3/2018