

A new social role for medical physicists: the Italian Association of Medical Physics (AIFM) free web section 'Ifisicomedicorisponde' to convey clear and scientific information to public

S. Delle Canne¹, B. Italiano², L. Bianchi³,

¹Fisica Sanitaria - Ospedale S. Giovanni Calibita Fatebenefratelli-Isola Tiberina Roma, ITALY; ²Woobiweb.com, Nerja SPAIN ³Fisica Sanitaria - A.S.S.T. Valle Olona, Busto A. (VA), ITALY

INTRODUCTION

Nowadays, an **increase in patient awareness** about clinical risk leads public ask for understanding in a simple but scientific way what kind of risk is related to radiological procedures, prefiguring a need of a **new social role for medical physicists**. Likewise IAEA_Rpop, Image Wisely and Image Gently, in October 2013 the Italian Association of Medical Physics (AIFM) designed the project '**Ifisicomedicorisponde**' (**'themedicalphysicistsanswers'**) aiming at making **medical physicists' knowledge** on quality and safety in medical radiation exposure easily **available to the public**.



Figure 1. 'Ifisicomedicorisponde' section in the AIFM website

METHODS

Ifisicomedicorisponde, working in the beginning simply with an email address (ifisicomedicorisponde@gmail.com), now represents one of the main sections on the institutional AIFM website (<http://www.fisicamedica.it/>); it consists of **nine modules** developed by an editorial board of AIFM members with experience in different fields (radiology, radiotherapy, nuclear medicine, NIR, EMF, pregnancy and pediatrics, energy, HTA). By the **forum** '**#Ifisicomedicorisponde**', patients or healthcare professionals are allowed to ask questions concerning physics issues in medicine, such as exposure risk, radiation protection. The email address still exists, giving the possibility of **asking privately**.

Editorial Board coordinators and number of members

Administrators: Dr. Lorenzo Bianchi, Dr. Stefania Delle Canne;

Radiology (17 members): Dr. Paola Bregant, Dr. Andrea Nitrosi

Radiotherapy (20 members): Dr. Carlo Cavedon, Dr. Cinzia Mordacchini

Nuclear Medicine (7 members): Dr. Claudio Traino, Dr. Orazio Zoccarato

MRI (14 members): Dr. Danilo Aragno, Dr. Faustino Bonutti

Miscellaneous (US, Wi-Fi and Laser, 4 members): Dr. Francesco Frigerio

Pregnancy and Pediatrics (11 members): Dr. Vittorio Cannatà, Dr. Piero Feroldi

Electromagnetic Fields (12 members): Dr. Luigi Spiazzi, Dr. Piero Feroldi

Energy (5 members): Dr. Giuseppe Scalzo, Prof. Giancarlo Gialanella

Health Technology Assessment (2 members): Dr. Stefania Maggi, Dr. Lamberto Widesott

RESULTS and CONCLUSION

More than **130,000 web visits** (36% related to radiology, 24% to pregnancy or pediatric exposure, 11% to Wi-Fi and EMF, 9% to energy and 20% to other topics) have been recorded between December 2016 and June 2018. Moreover, for questions related to medical issues (anesthesia, justification, etc.), and environmental issues (electromagnetic fields), a **virtuous collaboration** with radiologists and environmental experts has been established.

A significant **growth of section notoriety** has been marked after the introduction of the **forum**, confirming the importance to update means of communication to **increase visibility**. In Table 1 the most visited topics are represented.

Recently the positive response of the public and mass-media has

led the association to inaugurate a **new section**, addressed to members, called '**medical physicists learn to answer**' whose aim is to provide insights and updating within the medical physicists community into topics of main interest to the population. After about 18 months since its beginning, we do believe that the AIFM web section '**Ifisicomedicorisponde**' has garnered acclaim among the **public** and even among **specialists** (pediatrician, primary care physician, dentists,...), **disseminating a scientific culture** about radiation exposure effects and other issues related to medical physics, and has potential to become a **web influencer**.

Top Ten Questions	# visits
Radiography in Pregnancy	6990
Living under High Voltage Pipelines is dangerous?	6968
Are WiFi systems used in house dangerous?	5788
Contact lenses and MR scans	5294
Thyroid protection in mammography	3706
Radiography in Pediatric	3594
Mammography in pregnancy	3473
Noise during MR scans	3384
Brain effects of MR scans	2918
What does it mean HTA?	2705

Table 1. Topics of greatest interest