

Easybreath Decathlon Mask: An Efficient Personal Protective Equipment (PPE) against COVID-19 in Africa

Rachid Ait Addi ^{1,2*}, Abdelhafid Benksim ³, Mohamed Cherkaoui ¹

¹ Laboratory of Human Ecology, Semlalia School of Sciences, Cadi Ayyad University, Marrakesh, Morocco

² Al Amal Dental Clinic, Marrakesh, Morocco

³ High Institute of Nursing, Marrakesh, Morocco

ABSTRACT

Coronavirus disease 2019 caused by a novel coronavirus was first identified in Wuhan, China and rapidly spread across the world. With the COVID-19 outbreak, a penury of PPE was seen all over the world and especially in FFP2 masks, which is due to high demand and the closure of almost all factories especially in China. Faced with this shortage, health workers had to find ways to protect themselves while waiting for the arrival of standard means. The idea started in some European hospitals and then medical offices whom begin to use Easybreath Decathlon mask which is characterized by its high sealing as a mean of personal protective equipment to substitute at the same time to FFP2 masks and face shield. It could be fundamental and may save many health workers to distribute Easybreath Decathlon mask to all African hospitals whom are fighting COVID-19 infection.

Keywords: Easybreath Decathlon mask, COVID-19, Africa

Correspondence:

Rachid Ait Addi

Address: Laboratory of Human Ecology, Semlalia School of Sciences, Cadi Ayyad University, Marrakesh, Morocco

Email: dr.rachid.aitaddi@gmail.com

Coronavirus disease 2019 caused by a novel coronavirus was first identified in Wuhan, China and rapidly spread across the world [1,2].

Health workers found themselves at the front lines of the pandemic with high risk of contamination. Indeed, additional precautions are required by health care workers to protect themselves and prevent transmission in the healthcare setting. Health care workers must adopt precautions as using of Personal Protective Equipment (PPE), by proper selection of PPE and knowing how to put, remove and dispose of it [3].

PPE comprises gloves, medical masks, goggles or a face shield, and gowns, as well as for specific procedures, respirator masks (i.e. N95 or FFP2 standard or equivalent) and aprons [3].

With the COVID-19 outbreak, a penury of PPE was seen all over the world and especially in FFP2 masks, which is due to high demand and the closure of almost all factories especially in China [4].

Faced with this shortage, health workers had to find ways to protect themselves while waiting for the arrival of standard means.

The idea started in some European hospitals and then medical offices whom begin to use Easybreath Decathlon mask; which is designed to submarine diving and characterized by its high sealing; like a mean of personal protective equipment to substitute at the same time to FFP2 masks and face shield (**Figures 1-3**).

The major advantages of this mask is that it covers the entire face, also it is easily cleaned, disinfected and serializable. Also, because of its low cost, durability (not disposable), it maybe an ultimate alternative of PPE in Africa due to lack of financial resources. It could be fundamental and may save many health workers to distribute Easybreath decathlon mask to all African hospitals whom are fighting COVID-19 infection.

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Figure 1. Easybreath Decathlon mask [5]



Figure 2. Easybreath Decathlon mask with a filter adapted to the top of the mask (Dr. Benedicte Geniets, anesthesiologist in Antwerp, Belgium) [6]



Figure 3. Easybreath Decathlon mask with use of an FFP2 mask as a filter in the top of the mask (Dr Paul Amas; a french dentist in a video explaining the method of use) [7]

Author's Contributions

Literature search, manuscript preparation and editing were done by R.A.A, manuscript review was carried out by A.B. The supervision was done by M.C and the whole manuscript was read and approved by all the author.

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