LETTER TO THE EDITOR

EBOLA VIRUS DISEASE: TEMPERATURE CHECKS FOR TRAVELERS?

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Recently, the director of the Centers for Disease Control and Prevention (CDC) expressed confidence in screening measures being taken at the international airports in West Africa to prevent the spread of Ebola virus disease. Temperature checks for travelers in West Africa have emerged as the favoured front-line, last-minute defense for containing the spread of Ebola virus disease. In concordance, the World Health Organization (WHO) added temperature checks to the list of measures to be taken at airports, seaports and border crossings for travelers arriving from West Africa (1).

Do we really believe that temperature checks for travelers could control the spread of Ebola virus disease?

In 2009, WHO recommended temperature checks for travelers at all national and international airports during influenza A (H1N1) pandemic.

Should we apply the same preventive measure to control the spread of Ebola virus disease? No doubt, this measure could not be applied to control the spread of Ebola virus disease because of several reasons:

First, the typical incubation period for influenza is 1–4 days (average 2 days), meanwhile the incubation period for Ebola virus disease is 2 to 21 days (average 14 days). A patient may travel for weeks without fever or any other symptom during the long incubation period (up to 6 weeks in some reported cases) (2).

Second, detecting a traveler with fever will produce unnecessary alarm in the whole airport and among travelers since, according to WHO and CDC, this traveler should be isolated until having negative results for Ebola virus disease (1, 2).

Third, fever is a non-specific symptom of many infectious diseases including common cold. We expect, as usually, many cases of influenza virus infection characterized by high fever (> 38 ºC) during autumn and winter months.

Fourth, controls for body temperature at airports did not seem to be effective in preventing the influenza A (H1N1–2009) spread. In 2009, a study was done at Narita International Airport (Japan) to retrospectively assess the feasibility of detecting influenza cases upon relying solely on fever screening. The results of the study showed that the sensitivity of fever for detecting influenza A (H1N1–2009) cases upon arrival was estimated to be 22.2% among confirmed influenza A (H1N1–2009) cases (3).

Fifth, the above mentioned study reported that about 55.6% of influenza A (H1N1–2009) cases were under antipyretic medications upon arrival (3).

In conclusion, we could not apply the same preventive measures to control different infectious diseases, especially alarming ineffective measure like controls for body temperature at airports.

Conflicts of Interests
None declared

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LETTER TO THE EDITOR

THE IMPACT OF THE ECONOMIC CRISIS ON NEONATAL HEARING SCREENING IN GREECE

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The principal goal of TEOAE (transient-evoked otoacoustic emissions) based hearing screening programme is to identify hearing impairment present at birth in order to provide an appropriate intervention as early as possible (1). This is closely related to the importance of hearing in the development of speech and language skills, which, in turn, impacts educational, economic and social abilities. Taking into account the health burden incurred, neonatal hearing screening programmes seem to be a worthwhile investment for society as the benefits always outweigh the associated costs (2).

It has become an undisputed fact that neonatal hearing screening programmes should be universally applicable (3) and not restricted to at-risk neonates. However, the disappointing reality in Greece is that despite the efforts of Otolaryngological Societies, neonatal hearing screening programmes have not been made readily available in the maternity wards of Greek public hospitals, whereas such programmes have been successfully applied in private maternity hospitals since 1996 (4), albeit with a fee-for-service not covered by public Insurance Funds.

The recent economic crisis in Greece has resulted in a significant decline in childbirths, which reached 14.9% for the time-period between 2009 and 2012 (5, 6). The potential impact of the experienced crisis on a de facto paid service, such as a TEOAE-based hearing screening programme of a private hospital which had pioneered neonatal hearing screening nationwide, was deemed extremely important for the Paediatric Otolaryngologists who have been conducting it.

In 2009, there were 12,859 live births in the Maternity Department of our hospital, representing 10.9% of births nationwide. 6,155 babies were examined in the context of the neonatal hearing screening programme, reaching an enrollment rate of 47.86%. Follow-ups (n = 108) have not been included in the present analysis to avoid double-counting of cases. Among the screened babies, 4,214 (68.46%) were examined in the wards, whereas 1,941 (31.54%) were neonatal intensive care unit (NICU) graduates. The number of births in the hospital in 2012 was 7,400 representing 7.37% of births nationwide. The total number of screened babies was 2,918 reaching an enrollment rate of 39.43%. Follow-ups (n = 106) were again excluded to avoid double-counting of cases. A significant decline of 8.43% in the participation to the programme was noted. 1,730 (59.28%) of the newborns were examined in the wards, whereas 1,188 (40.72%) were NICU graduates.

Hence, it appears that the observed decline in the time-period under study involved the general newborn population, as the participation rate among NICU graduates has improved, albeit not universally applied to them. Although the aforementioned decline (9.18%) was lower than the respective decline in childbirths nationwide (14.9%), it suggests that the experienced economic crisis negatively affects a de facto paid service, such as a privately conducted neonatal hearing screening programme, which, in turn, may bear public health consequences, whose extent cannot be fully appreciated yet.

Indeed, if we assess a tangible aspect of hearing, i.e. the rate of vocabulary growth, a typical five year-old child possesses a range of 2,000 to 10,000 words (7). In contrast, Di Carlo estimated that a typical five-year-old deaf child has approximately 25 words (8). By diving in deeper waters and examining the psychosocial health-related quality of life in children with hearing impairment who do not have access to early identification, as opposed to children with normal hearing, the two groups also seem to differ significantly (9). While it may be difficult to assign monetary value to the aforementioned aspects of deafness, there can be little doubt that there may be significant costs when children with hearing loss go un- or under-served early in life.

Despite the relatively high incidence of moderate and profound congenital sensorineural hearing loss in Central European and Western countries (5 to 7 in every 1,000 newborns) (10, 11), universal hearing screening programmes have not been widely applied, and most countries have only established screening programmes for high-risk infants. By contrast, metabolic diseases such as phenylketonuria, with an incidence of approximately 1 in 15,000 births, are routinely detected through newborn screening. The observed negative impact of the economic crisis on non-financially endorsed privately-based neonatal hearing screening programmes provides an additional incentive for incorporating neonatal hearing into the routine universal newborn screening.

Conflicts of Interest
None declared

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