

Abstract

Perception of the Health Surveillance Users on the Health Electronic Surveillance Network (HESN) of Saudi Ministry of Health

Zayid Al Mayahi; F Alswaidi; A Alzahrani

Corresponding Author:

Zayid Al Mayahi

Abstract

Background: Ministry of health in Saudi Arabia implemented a pioneer electronic health surveillance network in 2012. This advanced system is hoped to play an important role in the prevention and control for possible serious health events and facilitate other public health programs.

Objective: To evaluate the perception of active HESN users on its performance as a surveillance system, identify its weaknesses and suggest practical recommendations for improvement.

Methods: A complete list of 11324 HESN users was identified. Active user was defined as a user with minimum use of one single time for either immunization or investigation purposes and has a valid email contact. Out of 1535 active users, 700 participants were selected randomly, and a cross sectional study conducted. A pre-designed electronic questionnaire was sent via emails to all the participants. The response rate was (87%), of which the completed forms were 493 (81%).

Results: Mean age was 36.89 ± 9.11 (24-66 years), 57.8% were males, and 44.6% participants were Saudis. Riyadh and eastern province represented the highest two regions of participation; 93 (18.9%) and 70 (14.2%) respectively. about half of participants were nurses 251 (50.9%), whereas doctors composed nearly a quarter 123 (24.9%). There were (66.5%) who had experienced surveillance system and (23.9%) worked with electronic medical records. Majority (85.2%) underwent trainings and (92.2%) worked with outbreak investigation function of HESN. About (70.8%) were generally satisfied with HESN, and (41%) believed that HESN requires improvements. Those who use HESN several times a week are more satisfied (81.3%) than one-time users weekly (75.6%) ($P=0.001$). Internet speed has also a significant association with the general satisfaction level about HESN, ($P<0.001$). Users of Google chrome browser are happier (82.3%) than Firefox (78.7%) and Internet explorer users (72%). ($P<0.001$). There are (60.9%) of Arabs and (57.7%) Saudis who agree that HESN needs improvements, compared to only (42.9%) of non-Arabs ($P<0.001$).

Conclusions: There is a general reasonable satisfaction level amongst HESN users. However, to ensure achieving the real awaited public health goals of HESN and increase the satisfaction level, there have to be certain and important improvements.

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