INAUGURAL PACIFIC INFECTION PREVENTION AND CONTROL NETWORK (PICNET) MEETING,
24 – 26 May 2023, Nadi, Fiji

Agenda Item N° 1.1

THE IMPORTANCE OF HAI SURVEILLANCE IN IPC PROGRAMS
(Paper presented by Associate Professor Philip Russo, Monash University)

1.   Surveillance is the "ongoing and systematic collection, analysis and interpretation of outcome specific data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know".

2.   Surveillance of HAIs is the cornerstone of healthcare epidemiology and infection prevention programs, and has been described as the single most important factor in the prevention of HAIs. Surveillance is held in such esteem because it provides the information on which an infection prevention program is planned, and has been shown to reduce HAI rates through the influence of data on practices.

2. PROGRESS AND ACHIEVEMENTS

3.   A common error when establishing surveillance programs is to attempt to collect as much data as possible, even though its immediate purpose may not be clear. Collecting data that is not required wastes scarce resources, and the complexity of the data collected needs to be balanced between information needs and available resources.

4.   One of the major challenges when commencing surveillance activities is to clearly define the event under surveillance. The quest to find the perfect case definition, or develop methodology to maximise sensitivity and specificity may not always be achievable. It is suggested that at the sake of some misclassification, it is more important to get a surveillance program started and capitalise on interest and enthusiasm, with a view to refining the program at a later date. Once established, surveillance programs should be subject to ongoing evaluation, including a review of the sensitivity and specificity, so the extent of any misclassification will be identified.

6.   Feedback of data has been found to act as an incentive for ongoing participation. Unless the information is provided to those who can implement change when required, efforts of those involved in surveillance will be wasted.

3. CHALLENGES

7.   There are many challenges when undertaking HAI surveillance. These include appropriate training of surveillance staff, access to data sources, uniformity in applying definitions and providing feedback to hospital staff, clinician, executive and the public. Many HAI definitions require a level of interpretation by the clinician, and research has demonstrated that often two clinicians may disagree if an infection is present. Therefore, using definitions that require minimal interpretation are preferred. Another challenge is staff may be worried about any recriminations if surveillance identifies high infection rates. It is important to emphasise that surveillance programs aims to improve patient care, rather than punish hospitals or clinicians. Therefore the importance of using surveillance to identify areas of improvement is crucial to the success of infection control programs.

4. FUTURE DIRECTIONS

8.   Over the next decade it is expected that HAI surveillance will undergo major changes. Internationally there is increasing use of electronic medical records, the introduction of algorithms to identify patients at high risk of infection, and experimentation with artificial intelligence. These elements aim to reduce the burden and improve the accuracy of surveillance and will influence how HAI surveillance is done in the future.

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