Adverse Events Following Immunization (AEFI) After First Dose Of Covid-19 Vaccination

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Introduction:

In the fight against the COVID 19 pandemic, there has been a global effort to develop and distribute an effective vaccine for this disease. Vaccination is known to be one of the most effective ways to limit a disease spread and severity. The aim is to achieve herd immunity, which broadens immunological protection against covid-19 and to protect the most vulnerable people depending on their biological and environmental factors¹. However, a small minority of persons vaccinated may experience reactions to the vaccine, most of which are mild and time-limited but can also, in rare cases, have a significant impact on health². Due to the possibility of Adverse Events Following Immunization (AEFI), there is growing fear and distrust about immunization³. Hence, safety surveillance of vaccinated persons is important to mitigate unwanted incidents, and it includes assessing the background of the patient, risk factors, observation post-vaccination and proper disposition planning⁴.

Case Report:

The case report was done using data collected from March 8th to March 12th, 2021, during the first dose of vaccine, which was provided to all eligible employees of Selayang Hospital. During this period, an Emergency Response Team (ERT), which was set up by the Emergency Department consisting of emergency physicians and all levels of emergency department staff were stationed at the vaccination centre, recorded 53 cases of AEFI.

Definition of operational terms used in this AEFI case report: Mild: Treatment not required and discharged on-site Moderate: Treatment is required in the Emergency department Severe: Treatment involving the airway and hemodynamic support

Results:

Data were collected for five days duration and interpreted as such based on AEFI case severity: **Total number of Vaccination: 3007** Total number of cases attended by ERT: 53



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Discussion:

Any adverse medical event that occurs after immunization, with or without a causal relationship to vaccine usage, is referred to as an AEFI⁵. In this case report, the signs and symptoms of AEFI were mild, ranging from nausea, vomiting, giddiness, headache, palpitation, tingling feelings, and light-headedness. Few limitations were encountered, in this case report which includes the lack of standardized definition due to low resource context, limited diagnostic capability and high patient load⁶. Other limitations also include patients with AEFI who present to different healthcare facilities or beyond the immunization period may not be included in this data collection. Anaphylaxis post-vaccination is uncommon however has been reported in a few occurrences and should be kept in mind when dealing with cases of AEFI.

Conclusion:

Vaccination is a relatively safe method of combating COVID 19, and it should be advocated. Only small numbers of AEFI were reported among the staff who received the first dose of vaccination in this data, and the majority of these cases were mild. The key to managing and preventing symptoms worsening is early recognition of these events.

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