Global Health

Poorly Designed PPE a Global Problem for Women Health Workers

Women health care workers around the globe report that ill-fitting personal protective equipment (PPE) hinders their work and leaves them feeling "expendable," according to results of a survey of about 900 women health care workers from 59 countries.

About three-quarters of the women surveyed by the nonprofit organization Women in Global Health reported challenges with PPE fit and only 14% said they exclusively wore fit-tested PPE. Even in countries like the United Kingdom where PPE fit testing is routine, respondents reported that masks failed to properly fit many women, particularly those who were not White, according to a report summarizing the survey results and interviews with women health workers. Women who wore head scarves or larger hair styles also reported difficulty finding masks that fit.

The report's authors note that most PPE was designed to fit average European or US men despite women making up around 90% of the frontline health care workforce during the COVID-19 pandemic. As a result, gowns may not be cut to accommodate women's sizes, breasts, hips, or pregnancies. Women reported that masks, goggles, and gowns were often too large, resulting in gaps in protection, tripping hazards, impaired movement, and gaping necklines exposing cleavage. Poorly fitting masks caused cuts or sores. Women working in hot climates, particularly in Asia and Africa, reported that PPE caused overheating, fainting, or dehydration. Only 11% of the respondents said they could always use the toilet when they needed to. Women cited poor PPE design and limited supplies as barriers to using the toilet or changing menstrual supplies when needed.

New COVID-19 Vaccine Aims to Increase Global Vaccine Access

A COVID-19 vaccine designed to be inexpensive and easy to mass produce globally has received emergency use authorization from India's government, according to a statement from the vaccine's manufacturer, Biological E. Limited.

The CORBEVAX vaccine is the ninth COVID-19 vaccine to receive emergency use authorization in India, which has administered at least 1 shot to about 66% of its population. Authorization was based on phase 3 trials that enrolled more than 3000 adults aged 18 to 80 years at 33 sites in India. The vaccine was more than 90% effective at preventing symptomatic infections with the original Wuhan strain of SARS-CoV-2 in the trials and more than 80% effective against symptomatic infection with the Delta variant based on published studies, according to a statement from Texas Children's Hospital Center for Vaccine Development and Baylor College of Medicine, which developed the vaccine.

The recombinant protein subunit vaccine is composed of the SARS-CoV-2 spike protein receptor binding domain and an adjuvant. Hyderabad-based Biological E. Limited said it plans to produce more than 100 million doses per month starting this February, deliver 300 million doses to India's government, and distribute 1 billion doses globally.

"Protein-based vaccines have been widely used to prevent many other diseases, have proven safety records, and use economies of scale to achieve low-cost scalability across the world," Maria Elena Bottazzi, PhD, codirector of the Texas Children's Hospital Center for Vaccine Development, said in the statement. Bottazzi said she hoped the vaccine "will fill the access gap created by the more expensive, newer vaccine technologies and that today are still not able to be quickly scaled for global production."

COVID-19 Vaccines Safe, Effective in Rheumatic Diseases

Vaccination against SARS-CoV-2 provides people with inflammatory or noninflammatory rheumatic and musculoskeletal disease similar levels of protection with a similar adverse event profile as the general public, according to data from a registry of 5121 patients from 30 countries.

Patients with inflammatory rheumatic and musculoskeletal diseases (RMDs) were excluded from COVID-19 vaccine trials,



Women health care workers worldwide said in a survey that poorly fitting personal protective equipment leaves them feeling "expendable." iStock.com/Juanmonino

leaving unanswered questions about safety and effectiveness in this population. To fill this gap, the European Alliance of Associations for Rheumatology Coronavirus Vaccine registry between February 2021 and July 2021 collected voluntary postvaccination reports from rheumatology clinicians.

Seventy percent of the patients included in the registry received the BNT162b2 (Pfizer-BioNTech) vaccine, 17% received the ChAdOx1 nCoV-19 (Oxford/AstraZeneca) vaccine, and 8% received the mRNA-1273 (Moderna) vaccine. About 1% experienced a breakthrough infection after full vaccination. Thirty-seven percent experienced possible or probable vaccine-associated adverse events, with injection-site pain, fatigue, muscle pain, and fever being the most common. Only 0.5% of the patients experienced a severe adverse event.

About 4% of patients with an inflammatory RMD experienced a disease flare, on average 6 days after their most recent vaccine dose. The most common flare symptoms were arthritis, multiple joint pain, and fatigue. Most flares were mild or moderate and only 1.5% of patients required a new medication or an increased medication dose to treat them. – **Bridget M. Kuehn, MSJ**

Note: Source references are available through embedded hyperlinks in the article text online.