ABSTRACT

The spread of the Covid-19 virus can be transmitted through the nose and mouth of an infected person who emits particles when they talk, cough, or breathe hard. These virus particles can be large (droplets) or very small (aerosols). The pregnancy rate in Indonesia is quite high with 2.8 for every Indonesian woman. Women who exposed to the Covid-19 virus can cause premature pregnancies in babies. The group of pregnant women is also a group that is vulnerable to exposure to the Covid-19 virus. In Indonesia itself, especially in big cities, many people still choose a hospital or a puskesmas as a place of delivery. Meanwhile, the hospital occupancy rate in big cities is around 70-80%. Not a few people entrust childbirth to be carried out at the nearest health center, but the equipment at the puskesmas is not as complete as the equipment in the hospital, such as the availability of infectious rooms. Therefore, a solution is needed to reduce exposure to the Covid-19 virus, both from other people to pregnant women, and vice versa. The Delivery Bed Chamber is a product in the form of a device that isolates the room so that the possibility of exposure to Covid-19 virus droplets can be reduced. To get a good Delivery Bed Chamber product design concept, a systematic and directed approach is needed. By using the French's Design Process method and the help of the Simple Additive Weighting Method, the Delivery Bed Chamber design is obtained that is in accordance with customer needs both technically and economically. For the measurement of product ergonomics factors, RULA (Rapid Upper Limb Assessment) calculations are used using CATIAV5R21 which simulates movements that may occur in the use of the Delivery Bed Chamber, RULA values are obtained with levels 2-4. With the results of the RULA value obtained, the final design concept can be selected both in terms of ergonomics.

Keywords: *Research, Designing design concept, French's Method, RULA, COVID-19.*