

Preferences and satisfaction of pregnant patients and ob nurses regarding monoclonal antibody infusions for the treatment of COVID-19 pneumonia

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Abstract

INTRODUCTION: The implications of infection with the Coronavirus (SARS- CoV-2) in 2019 led to innovative and investigative therapies to manage the disease, especially with the exacerbation of patient morbidity. Monoclonal antibodies (MAB) emerged as an effective treatment for specific populations and conditions - one being mild Covid pneumonia. For pregnant women, the increased risk of the infection manifested in severe morbidity and mortality from Covid-19 pneumonia. As such, the emergency drug authorization by the FDA for MAB administration for Covid pneumonia included the pregnant patients.

Being a new modality for management of this disease, several logistical concerns arose regarding the administration of the infusions. Literature suggests that large hospital systems sought efficient ways to distribute MAB to enhance access to care by patient. Nursing staff from various units have been integrated in the MAB infusion sites with primary focus on COVID. At times, staff may have limited training in some patient conditions such as pregnancy, which in turn plays a role in job satisfaction and security. For example, pregnant patient monitoring involves more than just the patient herself with all the variations that occur throughout all trimesters, but also involves the fetus (or embryo) whose monitoring may requires specialized training.

PURPOSE: Our study aimed to evaluate the preferences and satisfaction rates of pregnant patients and obstetric nursing staff when COVID was managed by infusion in obstetric-dedicated and staffed MAB infusion centers across one health system.

METHODS: This cross-sectional study was IRB approved and performed in two stages. One stage involved contacting patients and eliciting their satisfaction and outcomes through six close-ended questions while being managed in an obstetric MAB infusion site. The patients were selected based on a retrospective chart review where subjects had been pregnant, diagnosed with mild COVID-19 pneumonia, and received MAB infusions. The second stage of the study involved nursing staff with prior obstetric training who were assessed for comfort with patient care and preferences while engaging the pregnant patients during the infusions.

RESULTS: The total participant count was 163 with a response rate of 50% for patients (97 responses, 194 contacted) and 53% for nursing staff (66 responses, 125 surveys emailed). Up to 99% of patients felt safer and 94% reported reduced stress while being treated in the OB infusion centers compared to medical/ surgical floors or the Emergency Rooms. Similarly, 96% reporting increased comfort with specifically having nursing staff with obstetrical training taking care of them. From an efficiency and convenience standpoint, 94% felt that their care and service were more timely in the OB infusion unit.

Unanimously, nurses felt that pregnant patient safety was better assured when monitored in an OB infusion center compared to a traditional emergency room or other floors, with up to 70% believing that the quality of care was concurrently maximized. Optimization of satisfaction by patients and providers was felt by the nursing staff in up to 64% and 62% of cases cared for respectively.

When asked about participating in OB MAB infusion services, 55% of nurses reported both satisfaction with the current setup and potential for recommending a colleague to join the OB MAB infusion nursing pool. Up to 64% of nurses attributed this to scheduling enhancements and 58% to more efficient patient care. However, 60% also requested improvement in nursing procedures, order sets, and protocols with 63% identifying supplementary training for medication and reaction management as necessary.

CONCLUSIONS: Our study suggests that patients and nursing staff felt safer, less stressed, and more comfortable when engaged in OB MAB infusion services as opposed to those of a traditional ER. Developing such services may be a way to meet an increased demand for MAB while improving the value of care, patient satisfaction, and potentiating staff retention.