**Background**

The Food and Drug Administration (FDA) recently published The Content and Format of Labeling for Human Proscription Drug and Biological Products: Requirements for Pregnancy and Lactation Labeling, referred to as the “Pregnancy and Lactation Labeling Rule” (PLLIR). In 1979, the FDA categorized the risks of a drug or biological product during pregnancy under a five-letter system (A, B, C, D, and X), often misinterpreted as a grading system. Drugs in category A are deemed as well studied and safe in pregnancy; in comparison to drugs in category X, that are teratogenic and contraindicated in pregnancy. Drugs in category B, C, and D warrant the healthcare provider to weigh the risks and benefits of prescribing. With this pregnancy labeling update, drug manufacturers are required to provide specific details pertaining to its use in pregnancy, lactation, and reproductive risks associated with the drug's use. The labeling directs women to pregnancy registries that have been established for specific drugs, with changes to their labeling, and includes information about the need for pregnancy testing, contraception recommendations, and information about infertility as it relates to the drug. The purpose of our study was to better gauge pharmacists' awareness and understanding of the impact and use with regards to the pregnancy labeling update.

**Objective**

To identify the knowledge gap among pharmacists, as well as, their understanding of the changes that may arise from the new pregnancy labeling updates.

**Method**

To assess the impact of the pregnancy labeling update, an electronic survey was be delivered via email to professionals who currently serve as community pharmacists and clinical/staff pharmacists in the EMISOPP experiential program. This comprehensive survey will be used to collect information on the specific challenges pharmacists are facing (i.e. lack of knowledge, greater volume of patient inquiries, increased communication with HCPR). This study was approved by the Rutgers eIRB.

**Results**

Upon review of the data collected from the distribution of our survey, a total of 119 responses were received from pharmacists who currently work in community and clinical settings in New Jersey. These were submitted and analyzed for results. Of the 119 surveys analyzed, 74 stated they are aware of the updated pregnancy labeling updates. In comparison of those surveyed, 14 individuals reported that their physicians are aware of the updates through daily interdisciplinary interactions (Figure 1).

Of those surveyed, 26% reported that they are extremely comfortable and 58% stated that they are comfortably identifying any potential contraindications or interactions when dispensing medications to pregnant patients (Figure 2). Based on responses collaborated, there is an identified educational gap in patients' awareness and understanding of the effects of exposure of prescription medications before and during pregnancy. Pharmacist can have a significant and positive impact on patient care and therapeutic outcomes through effective counseling. By providing the necessary education to patients when dispensing prescription medications, pharmacists have an opportunity to identify any potential medication errors. Our results demonstrated that the pregnancy label updates have resulted in an increase in counseling in 41% patients of reproductive potential, both male and female (Figure 3).

**Conclusions**

After an assessment of the updated pregnancy labeling rule and its impact on the pharmacists studied here, it can be concluded there is an educational gap with a need to increase healthcare professionals' interdisciplinary comprehension of the new labeling rule. With appropriate and up to date counseling, pharmacists can have a significant and positive impact on patient care and therapeutic outcomes through effective counseling. By providing the necessary education to patients when dispensing prescription medications, pharmacists have an opportunity to identify any potential medication errors. Our results demonstrated that the pregnancy label updates have resulted in an increase in counseling in 41% patients of reproductive potential, both male and female.

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