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Reply to delayed versus immediate pushing in the second stage of labor in women with neuraxial analgesia: a systematic review and meta-analysis of randomized controlled trials

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We thank Dr Cusimano and her colleagues for their interest and their thoughtful comments on our study.[1] Improving the health of women going through labor and their babies is the main goal of every obstetrician and obstetric provider. We agree with Dr Cusimano et al. that labor and delivery management should be guided by evidence-based, high-quality data, mostly coming from randomized controlled trials (RCTs), systematic review and meta-analyses of RCTs. Systematic reviews and meta-analyses have increasingly spread in all fields of medicine, as they provide the best guidance for our daily clinical practice, and therefore it is mandatory to follow a thorough and rigorous protocol, due to their impact on health care. The conclusions of a meta-analysis depend strongly on the quality of the studies identified to estimate the pooled effect, as well as on the quality of the meta-analysis its self.

When performing meta-analyses of RCTs, Cochrane Collaboration guidelines, defining a priori methods for collecting, extracting and analyzing data should be followed,[2] as we did in our review.[1] It is also important that the review should be systematic. A review is defined as systematic when two electronic databases are searched at minimum. In our meta-analysis, the search was conducted using MEDLINE, EMBASE, Web of Sciences, Scopus, ClinicalTrial.gov, OVID and Cochrane Library as electronic databases. We agree with Dr Cusimano et al that when searching the entire combination of words together (i.e. : “immediate pushing” OR “delayed pushing” AND “second stage” OR “labor” AND “delivery”), the results of the research are much higher, even when filtering results by publication type, such as “randomized controlled trial” (i.e. 2,321 results on PubMed), but when searching for the same words without AND/OR the number of items found is significantly lower (i.e. 9 results on PubMed), and this justifies the small number of records - n=12 - identified through database searching that we reported in the Results of our meta-analysis (after complete literature search, checking references, etc) , although we acknowledge that this might make the search strategy generally too narrow. Moreover, we do urge all future meta-analyses to publish the complete detailed search, including MeSH terms etc, with a specific date, so it can also be replicated. Nonetheless, to our knowledge, our meta-analysis of delayed pushing in the second

stage of labor included all RCTs published so far on the topic and no prior meta-analysis on the timing of pushing in the second stage of labor is as up-to-date or comprehensive.

In conclusion, we agree with Dr Cusimano et al. that meta-analyses should be conducted with a rigorous, evidence focused literature review. Every suggestion to improve systematic reviews in the field of maternal fetal medicine is more than welcome and will always find our complete interest and enthusiasm.

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