Epigenetic age measures are often used as accurate indicators of biological age. Nonetheless, individuals age at varied rates and times between person-to-person, causing a difference between this biological age and the chronological age of an individual. This difference, known as epigenetic age acceleration, has been illustrated to predict a vast range of health outcomes [1].

In the context of pregnancies, older chronological maternal age is correlated with increased rates of adverse birth outcomes, including decreased birth weight, length, head circumference, and body fat [2]. Furthermore, there are studies that indicate prenatal maternal telomere length, a marker of cellular age, to be associated with an increased likelihood of adverse birth outcomes [3, 4]. There is, however, minimal study in a large, socioeconomically diverse population that tests the relationship between prenatal maternal epigenetic age acceleration and birth outcomes.

The purpose of this paper is to conduct an analysis of maternal epigenetic age acceleration measured during pregnancies and birth outcomes in collaboration with the Cebu Longitudinal Health and Nutrition Survey (CLHNS), a cohort following a large, diverse sample of women and their offspring in Cebu, Philippines for over 35 years [5]. In particular, the analysis was conducted on the pregnancies of index female young adults and their children between 2009 and 2011. **\*add sentences later about results?\***

This is a very good start. I think what is needed most here is a setup of the actual problem a bit more first. We need to think about why are we interested in the effect of maternal epigenetic age on fetal outcomes? We can either start with maternal age as the focus, or start with fetal outcomes as the focus, and move out from there. Something along these lines might work:

P1. Developmental milestones in early life are associated with both short and long-term health consequences. For example, shorter gestational age is associated with x, while low birth weights and lengths are associated with y. Understanding the factors that contribute to early life developmental trajectories and predicting fetal outcomes is therefore a pressing medical concern

P2. One factor known to contribute to fetal outcomes is maternal chronological age. Examples. These findings suggest that maternal aging process may shape fetal outcomes, and therefore life long health and mortality risks in subsequent generations.

P3. While chronological aging provides one measure of the aging process, individuals differ in their pace of age-related decline and risk of mortality. This distinction, referred to as biological age, is a combination of both genetic and environmental factors, and may better capture the effect of aging process on fetal outcomes better than chronological age alone.

P4. Several studies suggest that maternal biological age may affect the early developmental outcomes of subsequent generation. Telomere length, a marker of cellular biological aging based on (describe telomere length briefly) has been linked to xyz in offspring. Nevertheless, the role of biological aging on offspring developmental outcomes has not been widely-explored.

P5. More recently, several measures of biological aging based on changes to the epigenome have emerged. These measures, referred to as epigenetic clocks are created using changes to DNA methylation etc. etc. These are strong predictors of xyz, and may provide powerful tools for studying the inter-generational effects of biological aging even among chronologically young mothers.

P6. Recently, Ross et al. showed xyz. These findings suggest that biological age using epigenetic clocks may be predictive of fetal outcomes. However, it is unclear whether or not these findings generalize to more diverse populations with greater rates of adverse fetal outcomes. Here, we attempt to replicate these findings in a large, non-western sample of young women. We examined if x clocks associate with fetal outcomes among n women (20-22 years old). We hypothesized that xyz.

Something like this.

Chronological age is one of the best predictors of health decline and mortality (refs). For example....

However, chronological age may not only affect there is also evidence that chronological age may also impact the subsequent generation. Maternal chronological age is associated with numerous xyz fetal outcomes.

These outcomes are themselves linked to xzy diseases. Examples. This suggests that maternal chronological age has have long-lasting consequences on offspring fetal development and adult health. However, it is not known if biological age in mothers has similar effects on fetal growth outcomes. One study examined this.

* Examples. Both genetic and environmental factors contribute to the aging process, and not all individuals age at the same rate. This gives rise to the concept of biological age, which should be a better predictor of health and mortality than chronological age alone.

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