Introduction
Every experienced obstetrician can admit that exact prediction of labor process and eventually outcome, antenatally is not possible. Many factors come into play in determining the mode of delivery at term. The anatomical and functional integrity of the levator ani muscles play a fundamental role in pelvic organ support and could cause soft tissue dystocia during labor.

Objective
This prospective observational study attempts to determine the association between levator hiatal dimensions measured by 3 and 4 dimensional (3D/4D) transperineal ultrasound, and the subsequent mode of delivery in primigravid at term.

Method
All subjects, 71 term primigravid patients, underwent 3D/4D transperineal ultrasound measuring the AP diameter, transverse and hiatal area during rest, on valsalva maneuver and pelvic floor contraction. Measurements were recorded and mode of delivery of each patient was followed up.

Results
On analysis of collected data, there is no significant correlation between mode of delivery and the AP and transverse diameter during rest, valsalva and pelvic contraction. However, the hiatal area at rest showed significant correlation with the mode of delivery. A baseline hiatal dimension area at rest of 17.34 cm² is predictive of the possibility of a normal spontaneous delivery amongst primigravid Filipino patients. Finally, we stratified our outcome categories according to the mode of delivery and the indication for intervention.

Conclusion
In conclusion, our findings imply that levator hiatal area dimension at rest has a notable part in the prediction of the mode of delivery of term primigravids.