

DURATION OF LABOUR – IS IT INFLUENCED BY ETHNICITY?

University of Queensland¹, Royal Brisbane and Women's Hospital, Queensland, Australia^{1,2}

Brielle Andreatidis¹, Thangewaran Rudra^{1,2}



Introduction

Ethnic differences in the duration of labour had been reported in few studies conducted in USA and Asian countries. Australia is well recognised as one of the most ethnically diverse countries in the world and greater than one third of mothers birthing in Australia, were born overseas¹. There aren't any studies addressing this issue in Australia.

Aims

The objective of this study is to begin examining the sociodemographic factors influencing duration of labour by first investigating the impact of ethnicity.

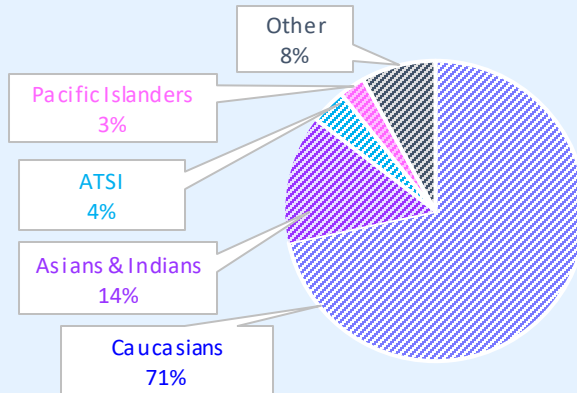
Methodology

A retrospective cohort study of women who delivered at the Royal Brisbane and Women's Hospital between 2010 to 2019, was conducted. All women with singleton pregnancies who had a vaginal delivery were included, whilst those who had caesarean sections or preterm births were excluded. The primary outcome measures included the duration of first and second stage of labour.

Results

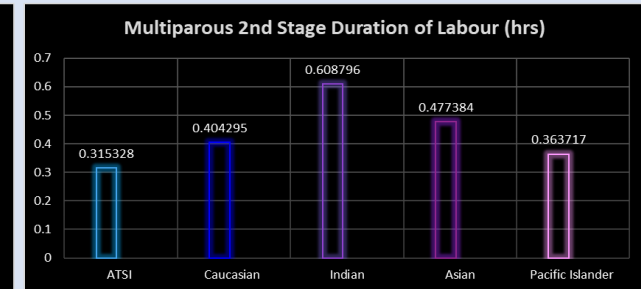
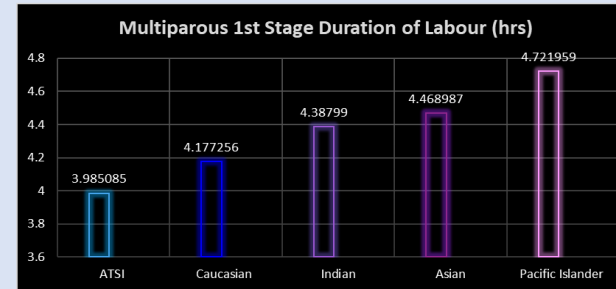
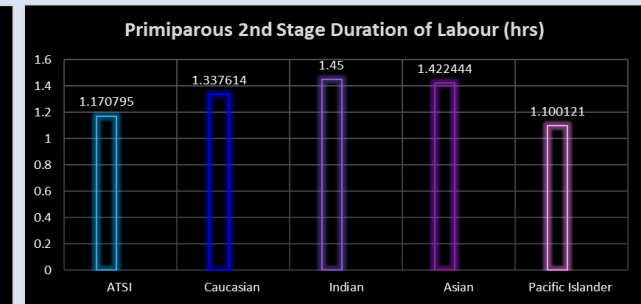
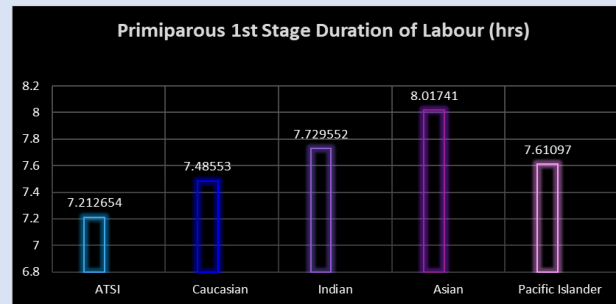
Study Population

Of the 29 375 women included in the study 49.25% were primiparous, whilst 50.75% were multiparous and the ethnic populations were sized as follows:



Preliminary Data

Among the Primiparas, first stage was prolonged in 14.7%, 18.1% and 14.1% of Caucasians, Asians and ATSI respectively. Similarly, 7.4% of Caucasians, 7.7% of Asians and 5.1% of ATSI had a prolonged second stage. Among the multiparas first stage was prolonged in 10.4%, 11.9% and 9.2% of Caucasians, Asians and ATSI respectively. Similarly, second stage was prolonged in 10.6%, 15.8% and 7.9% of Caucasians, Asians and ATSI respectively. Finally, Asians had on average, 18-30 minutes longer 1st stage and 6-10 minutes longer 2nd stage, compared to Caucasians. In contrast to ATSI and Pacific Islander populations who had shorter first and second stage durations.



Discussion

Our study revealed that there is significant variation among different ethnic groups in the duration of first and second stage among Australian population. Though our study was the first one and had large number of patients, the drawback was a retrospective observational study. We should consider these findings when these women are managed in delivery suite.