



ORIGINAL ARTICLE

## Trial of labour and vaginal birth after caesarian section: Do myths and misconceptions overshadow medical evidence in guiding patient's decisions.

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**ABSTRACT... Objective:** To analyse the prevalence of myths related to trial of labour after caesarian section (tolac) and vaginal birth after caesarian section (VBAC). **Study Design:** Cross-sectional Knowledge, Attitude and Practice study. **Setting:** PNS Shifa Hospital Karachi; A Tertiary Care Centre. **Period:** January 2020 to June 2020. **Material & Methods:** A questionnaire was designed including demographic details; age, education level, socioeconomic status and whether or not patient has received counselling about (VBAC) from obstetrician and answers to fifteen close ended questions related to prevalence of myths concerning trial of labour after c section (TOLAC) and vaginal birth after c section (VBAC). Every question had three possible answers: Yes (myth), No (correct answer) and don't know (unsure). SPSS 22 was used for data analysis. **Results:** Of the 1000 forms, 850 were completed and returned. The mean age of study population was 34.22±11.63 years. 480 participants (56.48 %) gave more than 50% yes answers and 370 participants (43.52%) gave more than 50 % no answers. There was significant inversely proportional impact of education ( $p < 0.001$ ) and socioeconomic class ( $p < 0.002$ ) and attendance of antenatal counselling on VBAC by obstetrician on prevalence of myths ( $p < 0.001$ ). The effect of age on the prevalence of myths was not significant ( $p < 0.017$ ). **Conclusion:** Our study delineated the fact that while considering vaginal birth after c section, myths and misconceptions overshadowed medical evidence in guiding patient's decisions.

**Key words:** Caesarean Section, Pregnancy, Previous Scar of Caesarean Section, Vaginal Birth After C-Section.

### INTRODUCTION

No society can ignore the impact of health and disease related beliefs and practices on its members.<sup>1</sup> Women are the pivot not only of her home but also of the whole society and hence women health has always been the focus of many researchers.<sup>2</sup> Unfortunately globally females have been found to be lacking in precise and accurate knowledge about health and have a predilection for myths and malpractices<sup>3,4</sup> due to the interplay of educational, socio-cultural and religious influences. Women beliefs about child birth are also overshadowed by all these influences.<sup>5</sup>

In modern obstetrics caesarian section is considered a safe mode of delivery where vaginal birth is not possible or entails unacceptable hazard to the life and well being of mother and

baby.<sup>6</sup> Today the obstetrician regionally as well as globally are facing an escalation in c section rates and many researchers are struggling to find out ways to promote natural birth due to its undoubtedly greater safety for both mother and the baby.<sup>7</sup> Whereas WHO has recommended c section rate to be around 15% of all births, globally the figures are alarmingly high in most countries due to a variety of reasons like patients perception that's its safer compared to vaginal birth, greater birth weight of babies and hence protracted labour, lack of universal availability of pain less labour, older maternal age and better socioeconomic status as well as obstetrician fear of litigation from malpractice and trend towards doctrine of Once A C section, Always A C section.<sup>8</sup> The resulting unprecedented surge in C section has become a public health concern

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due to the inherent rise in maternal mortality and morbidity of this procedure as well as substantial economic burden due to higher cost and expertise and longer hospital stay.<sup>9</sup> Whereas globally obstetricians are struggling to bring down the rate of primary C section, its equally essential to encourage trial of labour after C section (TOLAC) and vaginal birth after C section (VBAC) to decrease the incidence of placenta previa, sepsis, venous thromboembolism, bladder and bowel injury and neonatal respiratory and breast feeding problems.<sup>10</sup>

With this background, a research was undertaken into patient beliefs about TOLAC and vbac as a first step to control the escalating C section rate in our hospital. Moreover lot of research is available on outcomes of TOLAC in different local and international settings, few researchers have paid attention to patients knowledge and attitudes which eventually guides their decision to have TOLAC or proceed for elective repeat C section (ERCS).

## MATERIAL & METHODS

This KAP cross sectional study was conducted in PNS Shifa hospital Karachi from Jan 2020 to June 2020. Approval was acquired from hospital ethical review board. A self designed questionnaire was used as a study instrument. The reliability of the questionnaire was confirmed by test retest process by asking the same questions under same conditions which yielded identical results. The questionnaire encompassed Demographic details of patients including age, education and socioeconomic class, whether or not patient received counselling about VBAC by obstetrician and 15 closed ended questions related to patients beliefs about vbac and tolac. Each question had three possible answers yes (myth), no (correct reply) and Do not know (unsure). A qualitative variable was created as total answers given as yes (myth), subcategorised as less than 50% or more than 50% which was considered as the main outcome measure and was cross tabulated via chi square test with demographic variables like age, level of education, and socioeconomic status of the participants and whether participants have received counselling from obstetrician regarding

TOLAC. Data was analysed using SPSS 22. Quantitative variables like age was expressed as frequencies and percentages while qualitative data as mean  $\pm$  standard deviation . $p < 0.05$  was considered significant.

A minimum sample of 385 participants was calculated by setting Confidence level at 95%, margin of error 5% and response rate 50% to represent 7.5 million female population of the cosmopolitan city of Karachi.

## Inclusion Criteria

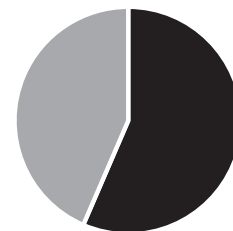
Random sampling technique was used to select women participating in the study after explaining the objective of study and soliciting informed consent. Patients who needed assistance in filling the question form were helped out. This included women between the age of 21 and 49 years with atleast one previous LSCS and sound mental health and average intellect.

## Exclusion Criteria

Unmarried and nulliparous, women, clients who had vaginal deliveries in all pregnancies, less than 20 years old or more than 50, those with diagnosed mental or psychological disorders and those having severe language barriers and known learning disabilities were excluded from study.

## RESULTS

Of the 1000 forms, 850 were completed and returned. The mean age of study population was  $34.22 \pm 11.63$  years .480 participants i.e. 56.48 % gave more than 50% yes answers and 370 participants i.e. 43.52% gave more than 50 % no answers. Figure-1



■ More than 50% Yes    ■ More than 50% No

**Figure-1. % age of more than 50% Yes and No Answers**

The three commonest yes answers (myths) were TOLAC is as safe as spontaneous vertex delivery answered by 603 (70.1%) of participants followed by obstetricians or midwives do not allow or encourage TOLAC answered by 592 i.e. 69.6% of and the third commonest myth was believed by 566 i.e. 66.59% participants was that TOLAC is not possible if previous LSCS was due to failed progress of labour. Figure-2.

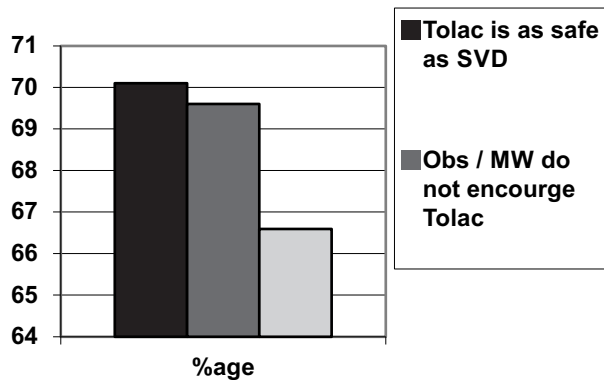


Figure-2. Commonest myths (Yes Ans)

The commonest correct belief (no answer) given by the participants were: TOLAC is only possible in developed countries 493(58%), TOLAC is only possible in epidural anaesthesia 480(56.4%) and tolac always results in emergency LSCS 466(54.82%). Figure-3.

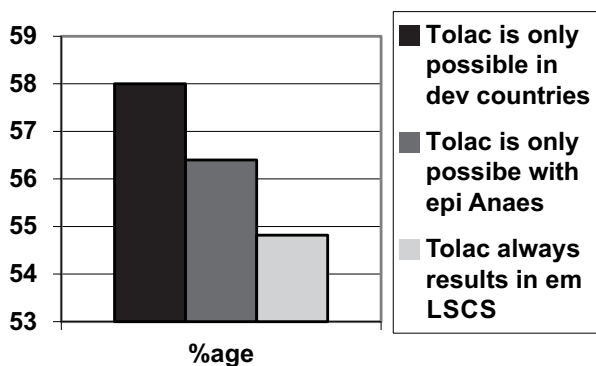


Figure-3. Commonest correct beliefs (No Ans)

The three commonest questions about whose answers participants were unsure (do not know) were multivitamins increase the chance of TOLAC 272(32%): TOLAC is more painful than SVD260 (30.6 %) and babies born by TOLAC have delayed mile stones or poor mental development 255 (30 %).

There was significant inversely proportional impact of education ( $p < 0.001$ ) and socioeconomic class ( $p < 0.002$ ) and attendance of antenatal counselling on VBAC by obstetrician on prevalence of myths ( $p < 0.001$ ). The effect of age on the prevalence of myths was not significant ( $p < 0.017$ ). Table-II

Mean Age of study Population	34.22 ± 11.63 years	
>50% yes answers	480 participants	56.48%
>50% no answers	370 participants	43.52%

Table-I. Summary of results

Education status	$p < 0.001$
Socioeconomic class	$p < 0.002$
Antenatal counselling session	$p < 0.001$
Effect of Age	$p < 0.17$

Table-II. Effect of demographic variables on prevalence of myths

### DISCUSSION

Knowledge, attitude and practices relating to health have a paramount influence in defining the strength of a society. No culture is completely free of myths and misconceptions pertaining to health and disease.<sup>11,12</sup> This study delineates the high prevalence of myths and misbeliefs with increased frequency among less educated and belonging to lower and middle class as compared to upper class and among patients who did not have antenatal counselling by obstetrician. Our results are consistent with those of Khaula et al who also elaborated the greater prevalence of myths relating to female reproductive health issues among subjects who were older, less-educated and belonged to socioeconomically under-privileged class.<sup>5</sup> We did not find a strong correlation between harbouring myths about VBAC to maternal age whereas generally literature reveals that older women harbour more myths.<sup>11</sup> We found a greater prevalence of myths in women with less education as generally one can infer that Education should unambiguously lead to preclusion of myths, but researcher have delineated that even educated ladies believe myths, due to influence of socio-cultural and religious beliefs and economic factors over scientific knowledge.<sup>13,14</sup> These myths and misconceptions are passed on from generation

to generation.<sup>15</sup> Our study reinforced the general philosophy that antenatal counselling regarding VBAC would result in less adherence to myths and clarification of patients misconceptions regarding the outcomes of TOLAC. Research conducted in Turkey on the beliefs of obstetricians and midwives about VBAC also supports this finding whereby most of them believed that antenatal childbirth preparatory courses and counselling will promote VBAC and decrease C section rates.<sup>9</sup> A Canadian study advocates a different perspective and negates the positive influence of prenatal counselling and showed that many pregnant ladies could not make a decision about mode of birth on their own despite counselling. Another study also depicted contrasting results where obstetrician believed that informing women about the pros and cons of VBAC was time consuming and did not result in more women consenting for VBAC.<sup>16,17,18</sup>

Research has been conducted around the globe on VBAC and factors promoting it due to higher incidence of placenta previa and morbidly adherent placenta, massive obstetrical hemorrhage, multiple blood transfusions and obstetrical hysterectomies arising as a result of escalating c section rates. Most of these are descriptive cross sectional studies on outcomes of successful VBAC.<sup>19,20</sup> Our study was centred on women's beliefs which shaped their decision regarding mode of birth and affect of sociocultural influences on these beliefs.

Despite local and international literature showing a rate of successful VBAC to be 60% many women believed its only possible in first world countries and would always result in grave consequences like uterine rupture and death and respiratory problems in new born.<sup>21</sup>

Shakeri et al studied the impact of motivational interviewing on women's knowledge, attitude and intention to choose VBAC in Iran found that women who received three sixty to ninety min sessions of group counselling every other week had significant difference in knowledge and attitude ( $p,0.05$ ) between the two groups but no significant difference in intention of VBAC<sup>22</sup> was

noted.

## LIMITATIONS

The study was conducted in only one hospital so generalizability of results remains questionable. Patients harbour many other misconceptions about TOLAC which could not be all be addressed. Due to scarcity of research on the topic, more recent similar studies were not available for comparison.

## CONCLUSIONS

To conclude our study delineated the fact that while considering vaginal birth after C section, myths and misconceptions overshadow medical evidence in guiding patients decisions.

## RECOMMENDATIONS

Educating the masses and adequate counselling by health care professionals can mitigate the influence of fallacious beliefs on patients decisions. Patient awareness programmes and counselling by maternity team can make patients more aware of evidence based facts about TOLAC and VBAC and clarify their misconceptions.

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



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**AUTHORSHIP AND CONTRIBUTION DECLARATION**

No.	Author(s) Full Name	Contribution to the paper	Author(s) Signature
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2	Amera Tariq	Literature review.	
3	Javaria Nosheen	Statistical analysis.	
4	Pareese Humayun	Literature review.	
5	Bushra Iftikhar	Manuscript writing.	
6	Sobia Mehreen	Statiscal analysis.	