

# COMPARISON OF CLIENT'S SATISFACTION, PROCESS AND LABOUR OUTCOME AMONG PRIMIGRAVIDA RECEIVING STRUCTURED CARE PROGRAMME AND EPIDURAL



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PROCESS AND LABOUR OUTCOME AMONG  
PRIMIGRAVIDA RECEIVING STRUCTURED  
CARE PROGRAMME AND EPIDURAL**

By

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# Outline of presentation

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- Methodology
- Results
- Discussions
- Acknowledge
- References/Bibliography

# Background

- The birth process results in emotional disturbances caused by fear, pain and experience in childbirth - affecting the level of patient satisfaction.
- Two methods - use of epidural or alternative treatments can help patients go through the birth process, especially to reduce pain.

(Jones et al. 2012)

- WHO estimates 70% to 80% of patients have no risk and can deliver through the natural way (without epidural) during labour process.

(Alber 2007)

- Alternative treatments are pain control through massage, movement, breathing techniques and so on that can be practised during the birth process.

# Problem statement

- In Malaysia epidural use has increased (<20%)
- Putrajaya Hospital (Statistic APS) shows epidural usage in 2014 increased by 30%.

## Effects:

- Involve a lot of cost (an increase of RM 300 - RM 500 per patient)
- Lack of staff (Anaesthesiologist & skilled nurse)
- Long waiting period
- Epidural can reduce pain completely but there is no difference in satisfaction and birth results.

(Chaillet et al. 2014)

- Thus structured care programme (alternative) can be implemented for the patient in labour.

# Objectives

- To evaluate the level of client satisfaction, processes and outcome of delivery among patients receiving structured care programs (alternative) and patients receiving epidural during labour.
  - To evaluate periods of stage 1 and stage 2 intervals between patients receiving structured care programme and epidural
  - To identify the differences in satisfaction levels among patients receiving structured care programme and epidural
  - To study the relationship between demographic factors, and satisfaction of birth methods among patients receiving structured care programme and epidural

# METHODOLOGY

**Study design**

Quantitative study - quasi experimental

**Location**

Labour room Hospital Putrajaya

**Population**

Prime gravida who delivered in Hospital Putrajaya

**Study population**

Patients who received Epidural & Structured care program (Alternatives)

**Sampling technique**

Simple Sample random

**Sample size**

154 of the patients were divided into 2 groups (77 each group)-Using Program PS Software.

# METHODOLOGY

## Inclusion criteria

- Prime gravida.
- POG > 37.
- Opening of Cervix < 5 cm.
- Normal Baseline *CTG*

## Exclusion criteria

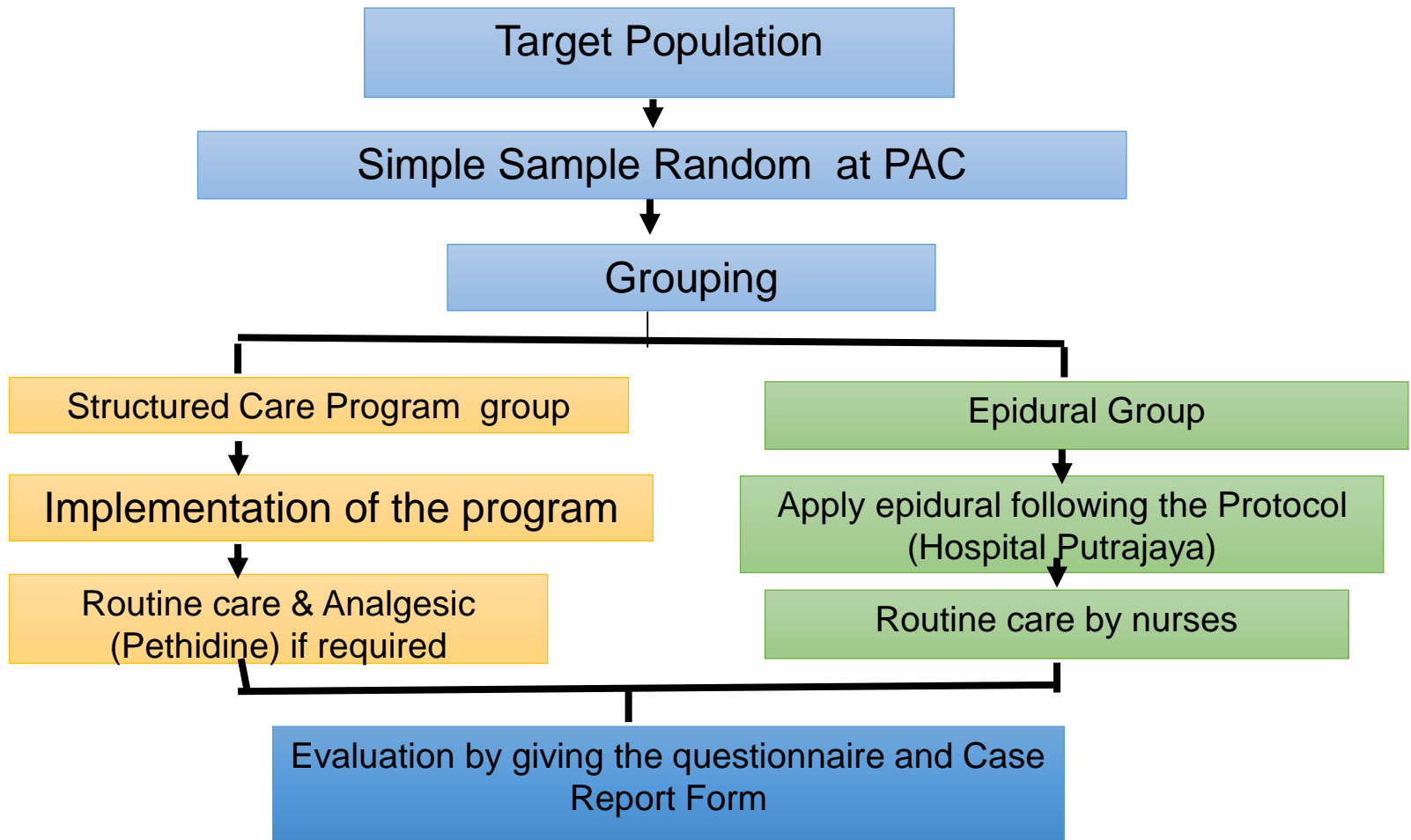
- Body weight > 90 kg
- Mental problem patient
- STD/ Retrovirus
- Abnormal pregnancy
- Comorbidity
- Patient for elective LSCS

## Study Instrument

Questionnaire & Case Report Form



# Data collection



# RESULT

## Differences in duration time of 1<sup>st</sup> and 2<sup>nd</sup> stage between Epidural and Structured Care Programme (Alternative)

Duration period		Epidural	Alternative
Stage			
1 (Hours)	Mean Rank	73.03	55.65
	Significant p-value		0.007*
2 (Min)	Mean Rank	84.02	45.49
	Significant p-value		0.000*

Duration time of 1<sup>st</sup> stage and 2<sup>nd</sup> stage group Alternative is less than compared to epidural group (p-value <0.05) .

Structured care programme (Alternative) is able to reduce time for 1<sup>st</sup> and 2<sup>nd</sup> stage.

## Comparison of Satisfaction Levels during labour between Patients from Epidural and Alternative Groups

Groups	Mean Ranks	Z Score	p-value
Epidural	57.39	-3.375	0.001*
Alternative	70.11		

There was a significant difference of satisfaction levels for labour process between respondents from Epidural group and Alternative group ( $p < 0.05$ )

# The relationship between Demographic Data and Satisfaction of Birth Methods

Demographic Data	Mean Ranks		Significant p-value	
	Alternative	Epidural	Alternative	Epidural
<b>Race</b>				
Malay	33.28	31.07		
Chinese	34.50	29.29	0.798*	0.776*
Indian	0	38.00		
Others	34.50	38.00		
<b>Age</b>				
17-27	33.07	31.69	0.347**	0.694**
28-38	34.50	30.38		
<b>Education Level</b>				<b>Significant</b>
Primary School	34.50	0		
Secondary School	34.50	36.45	0.362*	0.018*
Tertiary level	32.50	28.14		
<b>Mode of delivery</b>				
SVD	33.44	30.36	0.928	0.679
Vacuum	34.50	31.75		

Only the education level of respondents from the epidural group affects the level of satisfaction ( $p < 0.05$ )

# DISCUSSION

Structured Care Program can shorten the 1st and 2nd stage of labour process

- Breathing techniques during labour included in the structured care programme is good practice. Proper breathing techniques reduce pain and facilitate the birth process and thus shorten the delivery time.

(Hidaka & Callister 2012)

- Epidural will increase duration of second stage.

(Zhang dan Feng, 2012; Anim-Somuah et al. 2011)

- Epidural causes motor blocks that cause pelvic floor muscles to become weak and ultimately be less spoiled when mothers bear down

(Dresner, Brocklesby & Bamber 2006)

# DISCUSSION

Respondents from the alternative group are more satisfied with the labour process

- Patients in alternative group have been taught how to strain, do breathing techniques, positioning and correct bearing down which cause the pain to be reduced and delivery can still be controlled. However the effects of epidural cause patients to experience more difficulty during the second stage and reduce their satisfaction during labour process.

(Hawkin 2011; Bahadoran, Oreiz & Safari1 2014)

- Longer duration time of labour process causes respondents to be dissatisfied because they are haunted by pain, fear and tiredness even after the baby is born.

(Nystedt, Högberg & Lundman 2006)

# DISCUSSION

Relationship among demographic data, mode of delivery and satisfaction level during delivery process. The only patient with education level like to choose epidural although there is influence resulting in satisfaction.

- Patients with higher levels of education have more potential to choose epidural during labour process to avoid pain.  
(Michelle et al. 2011)
- Patients from high social class and education are more satisfied with the outcome of delivery compared to the process of labour.  
(Assefa & Mosse 2011)
- Increased epidural usage among highly educated mothers as they are able to cover the cost.  
(Harkins et al 2010).

# CONCLUSION

- Structured care programs during labour process which are correct breathing techniques, positioning and proper bearing down can substitute the epidural analgesia.
- Structured care programs are able to reduce the period for the first and second stage of birth, thus increasing the satisfaction rate of mothers on the delivery process they have gone through.
- The implementation of structure care enhanced nurses' skills self-confidence and through teaching, good communication between nurse and patients can be established.



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**Thank  
You**