Innovative Approach to Childbirth Decision Making

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About 25% of women give birth by cesarean section

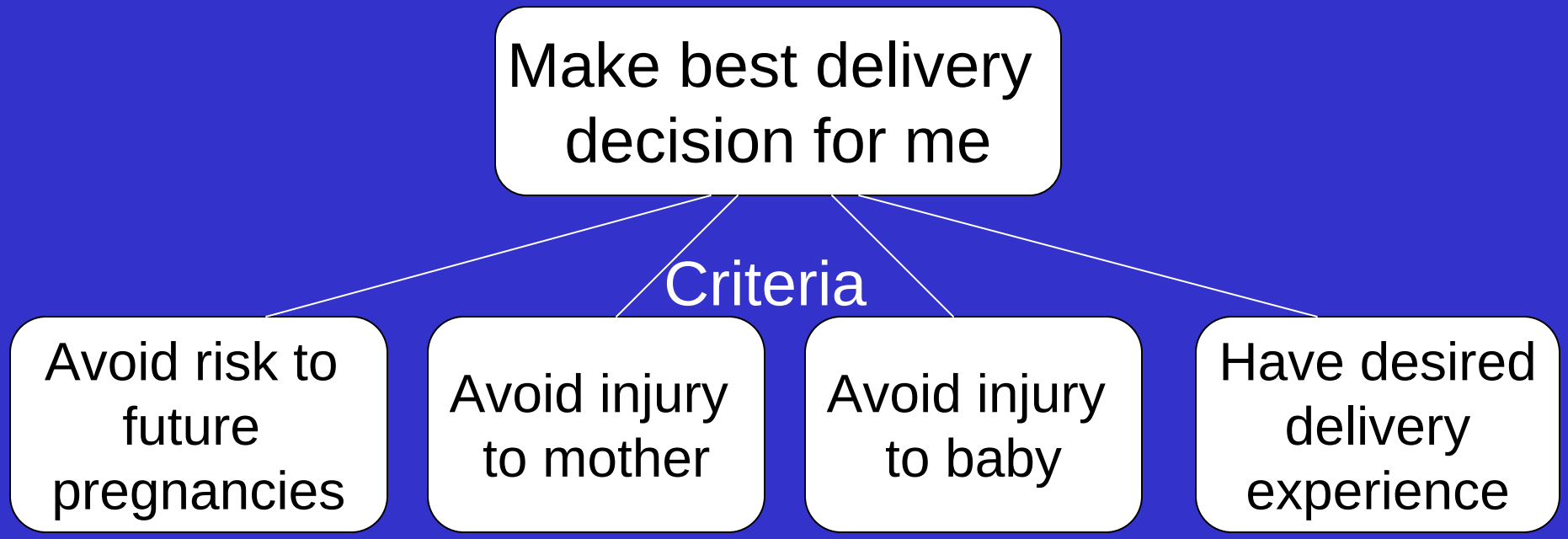
- Australia, 21%
- Canada, 19%
- Denmark, 18%
- Brazil, 35%
- United States, 29%

- Women with a prior cesarean face a difficult decision for their next childbirth as there are risks with either repeat cesarean or a vaginal birth after cesarean.

The study aims were to:

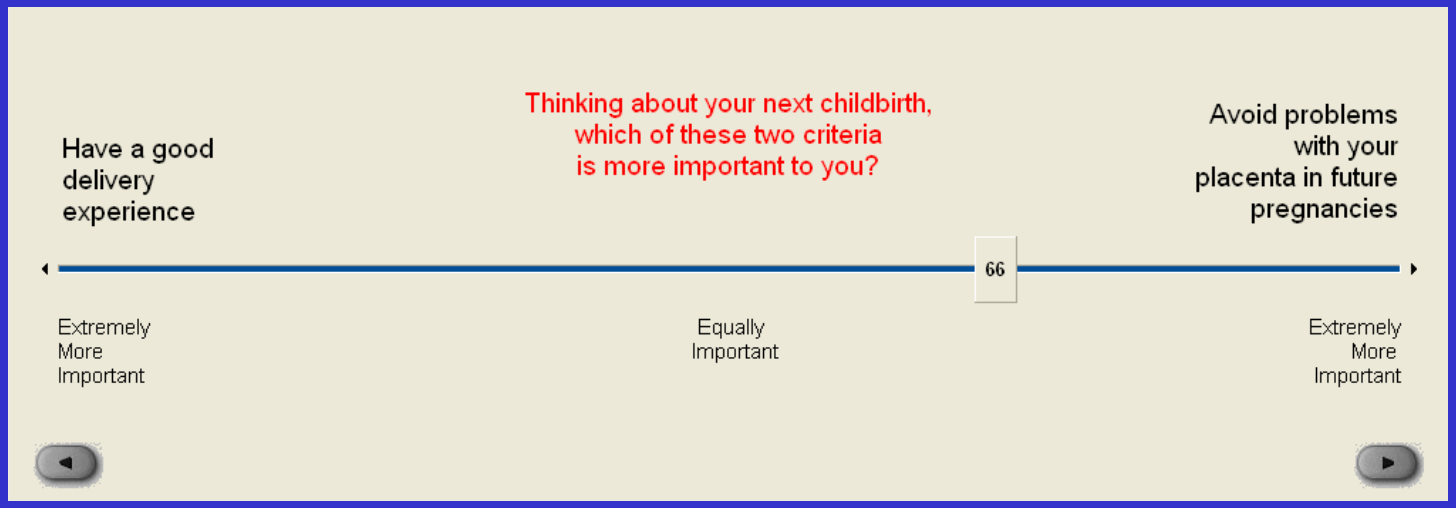
- Create a decision model for childbirth based on medical evidence.
- Create a computerized decision aid based on this model and evaluate its effect on decision making processes in a randomized trial.
- Compare two versions of the decision aid for measuring the patient's inconsistency in assessing preferences: a graphic-numeric scale versus a text-anchored scale.

Decision Model (Top Tier Only)

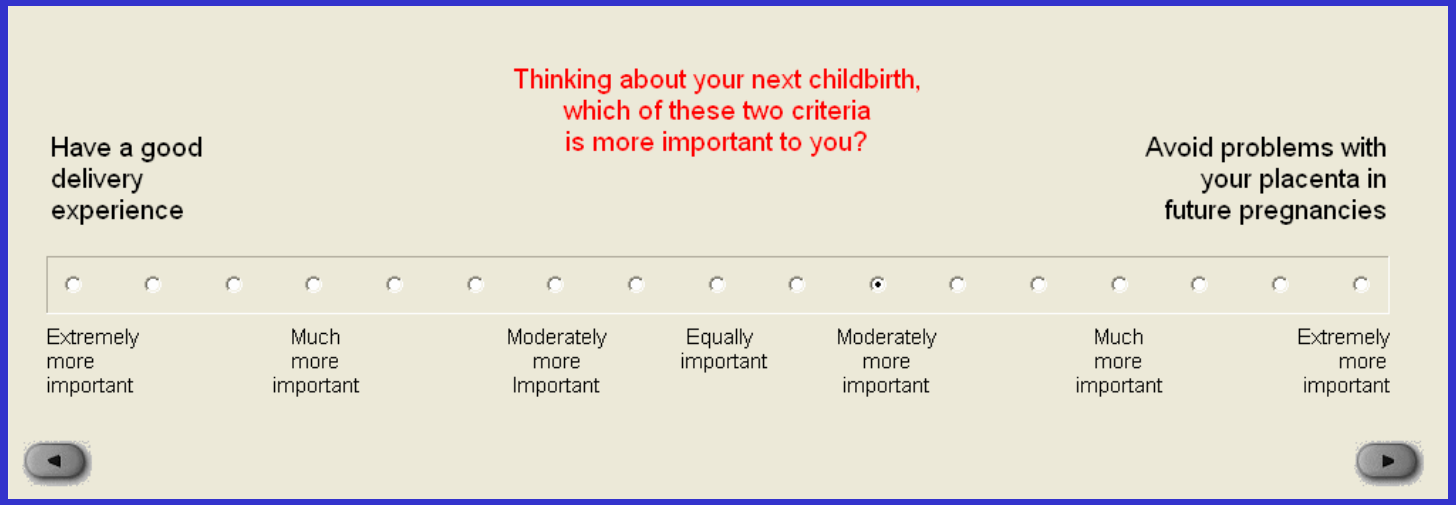


The women made pair-wise comparisons among the criteria to assess their childbirth priorities (or preference weights) in the decision.

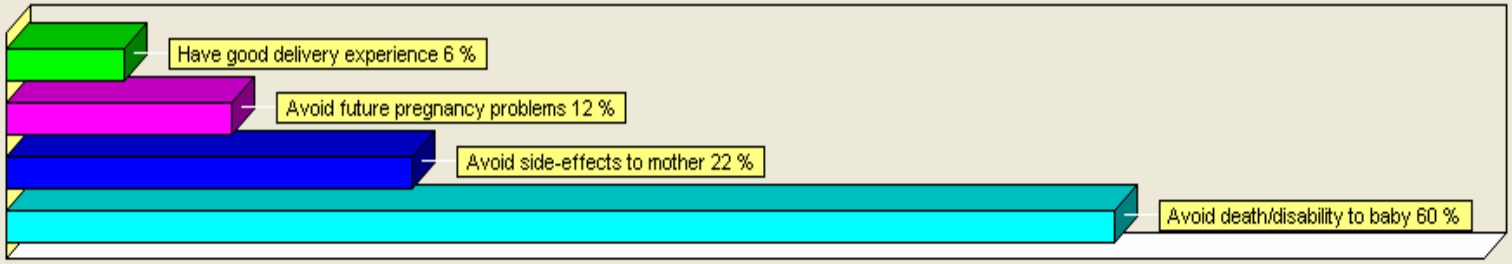
The women were randomized to use one of two formats for assessing childbirth priorities:



OR



Feedback on Childbirth Preferences



Based on your selections so far, it appears that you consider avoiding death or disability to your baby most important.

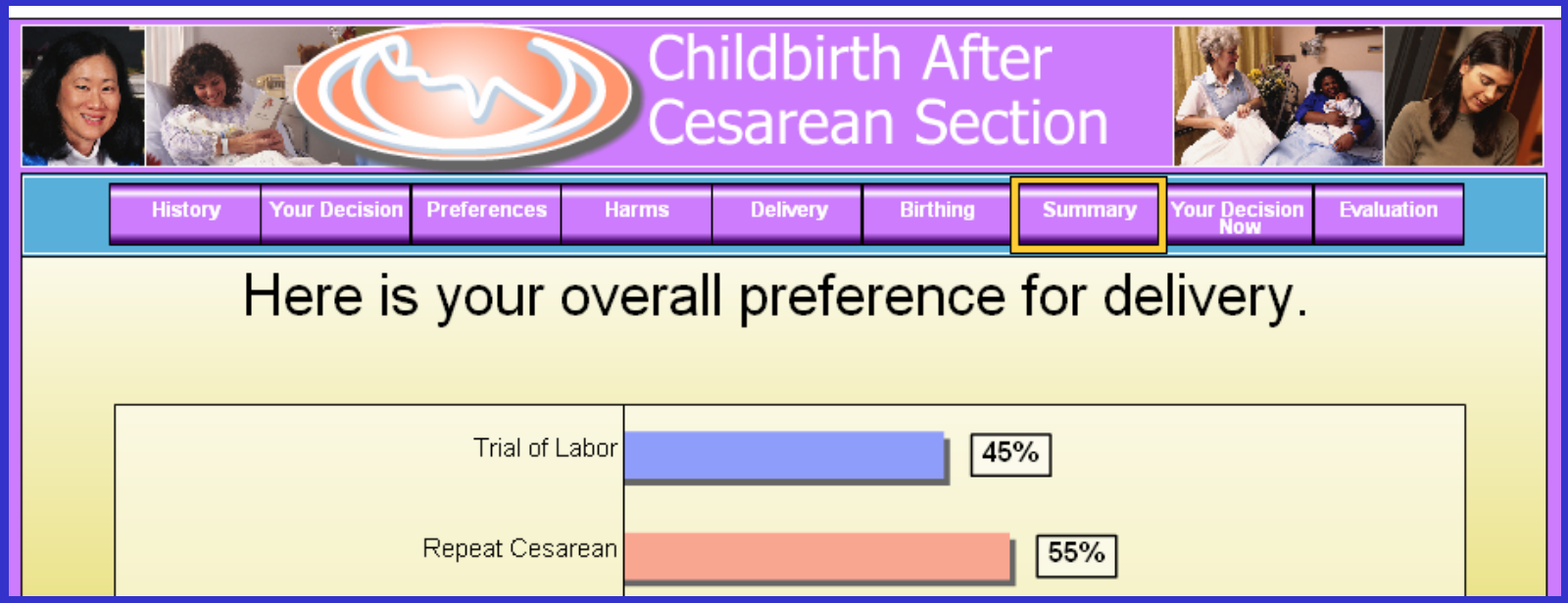
So far you have compared criteria based on your personal feelings. The table below lists the actual chances of some of these criteria. Do you want to adjust your choices now that you have reviewed the actual chances of these events occuring to you or your baby?

Baby	1 to 5 of 1000 babies may die; 2 of 1000 babies may be disabled from delivery.
Future Pregnancies	30 to 60 of 1000 women may have problems with their placentas in future pregnancies.
Side-Effects	70 to 140 of 1000 women may experience numbness by their incision; 2 of 1000 women may need a
	hysterectomy right after delivery; About 500 of 1000 women will leak urine by middle age.

Yes, let me adjust my answers | No, let's proceed

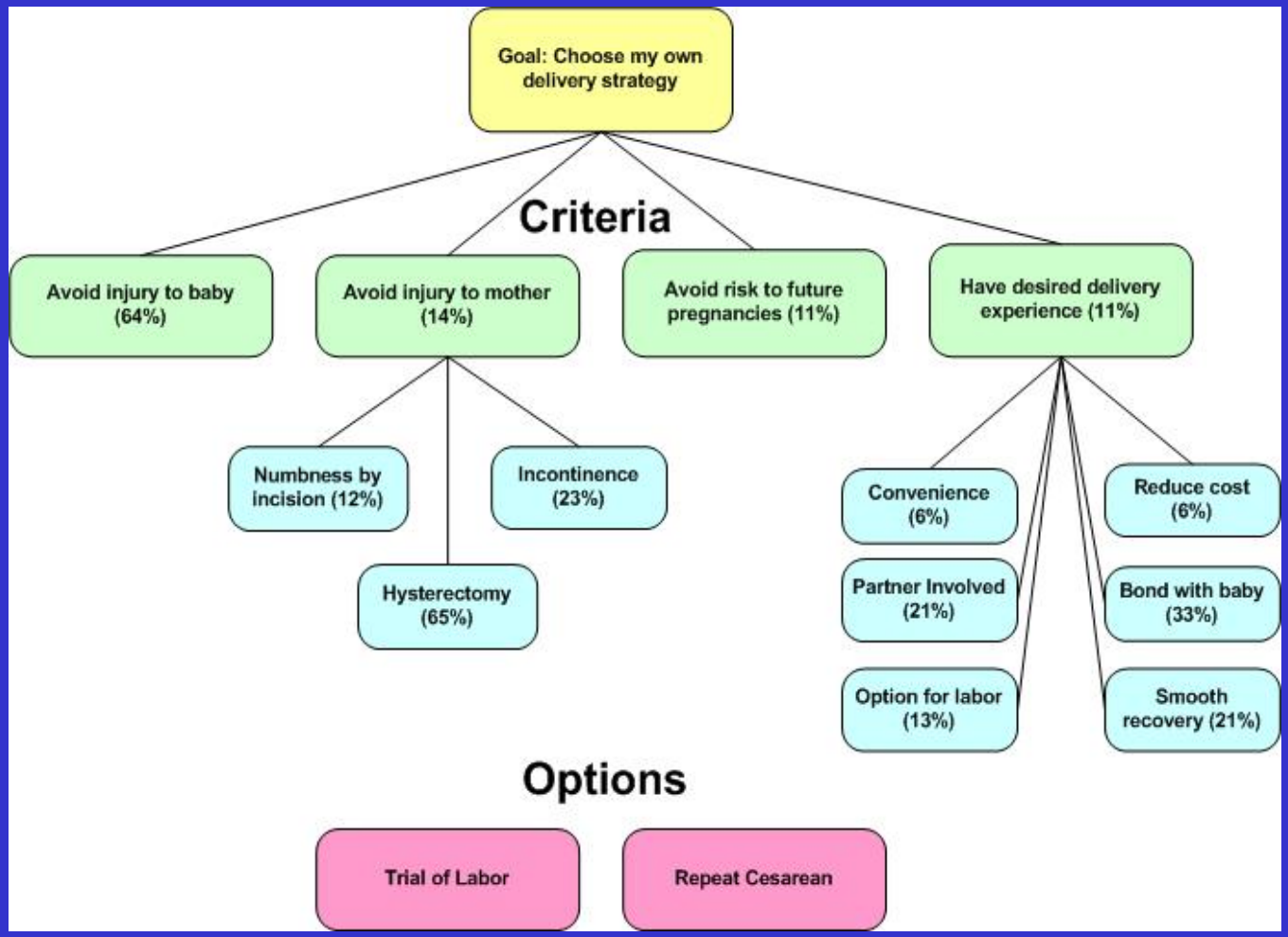
In this case, the woman placed the most importance on avoiding death or disability to her baby (60%) followed by avoiding side-effects to herself (22%).

Summary Feedback



The delivery option with the highest score is most closely matched to your specific childbirth preference weights.

Full Childbirth Decision Model with Average Preference Weights (n=96)



Impact on Decision Making Processes

	Baseline Mean	After Decision Aid Mean	P
Certainty about decision	33.9	33.9	.97
Felt informed about options	33.9	24.2	.00
Had clarity about preferences	31.9	21.6	.00
Felt supported in the decision	33.0	28.3	.00
Overall Decisional Conflict Score	33.1	27.0	.00

*From the Decisional Conflict scale (O'Connor, 1999). Uses five-point Likert scales scored with values ranging from 0.0 (best) to 100.0 (worst). Scores for Overall Decisional Conflict lower than 25 are associated with making decisions; scores exceeding 38 are associated with delaying decisions or feeling unsure.

Patients improved their decision making processes to the same extent regardless of format (graphic-numeric or text-anchored).

Observations of Patients Using Decision aid

- The patients found the decision aid easy to use and to understand.
- The decision aid allowed for “safe” decision making.
- The patients were forced to make trade-offs of factors they may have been “avoiding”.

Conclusions

- Several decision making processes were improved with the decision aid regardless of format.
  - Improved knowledge
  - Improved clarity of preferences
  - Improved support
  - Reduced decisional conflict
- Patients were more consistent in evaluating childbirth preferences when using the graphic-numeric format.
- The decision aid was well received by patients.

References:

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