Evaluating Patient and Healthcare Provider Response to an Online Cord Blood Patient Education Program

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Background:

In 2005, the Institute of Medicine (IOM) recommended that all pregnant women should be educated on the value of cord blood early in pregnancy to make an informed decision on their banking options.[1] Today 20 states, representing 68% of all US births, have passed laws that align with the guidance of the IOM to promote broader cord blood education. Healthcare providers are faced with challenges such as time constraints, increased staff demands, and rapidly evolving medical practice guidelines that can make it difficult to provide patients with the most up-to- date information. Computer-based patient education has been shown to be effective in improving knowledge and has the advantage of easily providing current information 24 hours a day, seven days a week.[2,3] An online education program could serve as an effective tool to assist obstetric providers and staff with educating expecting patients on the medical value of their newborns' stem cells and help facilitate compliance with legislation.

Objective:

To evaluate the response of obstetric healthcare staff and their expecting patients to an online cord blood stem cell patient education program.

Methods:

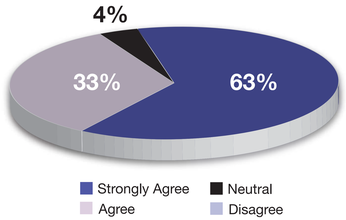
An online patient education program including the opportunity to speak with an educational specialist was developed by a family cord blood bank. Access to the program was provided to expecting patients and obstetric healthcare providers and staff at US facilities. Participants were asked to complete a questionnaire designed for expecting patients following the online program. The obstetric providers and staff were asked to complete a healthcare provider staff survey questionnaire.

References:

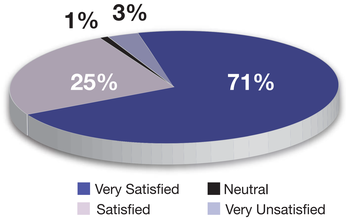
1. Institute of Medicine. *Establishing a National Hematopoietic Stem Cell Bank Program.* Washington, DC: National Academy of Sciences; 2005.
2. Lewis D. Computers in patient education. *Comput Inform Nurs.* 2003;21(2):88-96.
3. Anderson AS, Klemm P. The Internet: friend or foe when providing patient education? *Clin J Oncol Nurs*. 2008;12(1):55-63.

Expecting Patient Survey Responses

After viewing the online program, did you feel more knowledgeable about cord blood banking?

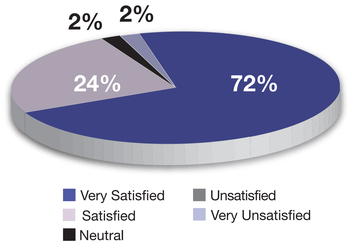


How satisfied were you with your online program experience?

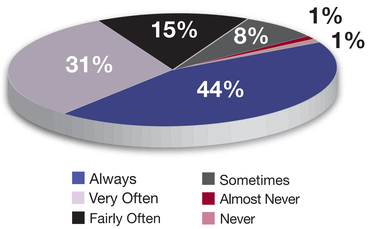


Healthcare Provider Survey Responses

How satisfied are you that the online program provides expecting parents with sufficient information to make an informed decision?



How often will you direct expecting parents to the online program for information on cord blood stem cells?



Results:

From 11/01/09 through 4/08/10, 673 participants responded to the expecting patient survey and 643 participants responded to the healthcare provider staff survey.

According to the expecting patient survey, prior to the program 60% of respondents felt they knew little to nothing about cord blood banking and 73% expected to learn about cord blood banking from their obstetrician. Upon completion of the program over 95% of respondents felt more knowledgeable about cord blood banking and reported being satisfied overall with the program.

The healthcare provider staff survey showed a significant increase in the respondents' rating of their knowledge of cord blood stem cells after viewing the program (scale of 1-none to 10-expert; 5±2 to 8±1; $p<0.0001$). Over 90% of respondents reported being satisfied with the program's ability to provide patients with sufficient information to make an informed decision, and agreed that they will direct their patients to the online education program.

Conclusion:

Based on the survey results, the program was well received by expecting patients and obstetric staff. Nearly all of the survey respondents were satisfied with the online education program and believed it increased their knowledge of cord blood stem cells. The majority of obstetric staff agreed that they will direct expecting patients to the online program and felt the program provides their patients with the knowledge necessary to make an informed choice regarding their newborns' stem cells. These findings indicate that the online program is an effective educational tool to provide expecting patients with information on the medical value of their newborns' stem cells.