Development of an Infographic to Support the Education and Recruitment of Unrelated Donors for Hematopoietic Stem Cell Transplantation

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Introduction

- Unrelated stem cell donors are recruited either online or at stem cell drives, where recruiters guide registrants to provide informed consent and a tissue sample for HLA-typing.
- Stem Cell Club is a federal nonprofit organization that runs stem cell donor drives across Canada to improve the quality and quantity of membership on Canada’s stem cell donor database.
- Donors that should be preferentially recruited at stem cell drives include (a) younger males, as these donors are associated with improved outcomes in transplant recipients2,3, and (b) individuals from diverse ethnic backgrounds, as patients are more likely to find a match for transplant in their own ethnic group.
- A needs assessment survey conducted in 02/2017 with 76 donor recruiters across Canada identified the need for infographics to support the education and recruitment of unrelated donors:
  - 62% of respondents agree
  - 20% of respondents neither agree nor disagree
  - 18% of respondents disagree

Objective

- To design a shareable infographic that can be used by stem cell donor recruiters across Canada to (a) inform and educate about stem cell donation and transplantation, and (b) recruit donors from the most-needed demographics.

Methods

Resource aims and design

- Infographics are often used to convey medical information, as previous studies have shown that infographics can increase readers’ attention, comprehension, recall, and adherence.
- We set out to design a comprehensive infographic outlining:
  1. the purpose of stem cell transplantation;
  2. the patients who need a stem cell transplant;
  3. the difficulty of finding a match;
  4. the need for male and ethnically-diverse donors; and
  5. the steps to register as a stem cell donor.
- We designed our infographic according to the seven GRAPHIC guidelines for Public Health Infographic Design.
- The infographic was made by the authors using Photoshop software.
- Content accuracy was reviewed by transplantation experts.
- The infographic was published to http://stemcellclub.ca/promo.html on 11/2017.

Results

- The purpose of stem cell transplantation
- The patients who need a stem cell transplant
- The difficulty of finding a match
- The need for male and ethnically-diverse donors
- The steps to register as a donor

Resource evaluation

- In 02/2019, a needs assessment survey was conducted including 35 donor recruiters from 7 provinces and with a median of 2.5 years of experience. Participants were asked to rate their agreement with statements pertaining to the use and perceived effectiveness of the infographic. Results are shown below:

Written comments from recruiters

- 24 donor recruiters provided written feedback on the infographic. A summary of recruiters’ feedback on its utility and a need for ethnically diverse donors and success stories in stem cell donation

Conclusion

- We developed an infographic to support the education and recruitment of stem cell donors, and demonstrated its utility from the recruiter perspective.
- Recruiter feedback will guide development of future infographics on topics such as the need for ethnically-diverse donors and success stories in stem cell donation.
- Future work will also evaluate the impact of the infographic on knowledge transfer to potential donors from the most-needed demographics, as well as changes to their beliefs and attitudes towards donation.

References & Acknowledgements


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