E3-6: A Qualitative Study of Phlebotomy Device Selection

Author List:
Presenting Author: Jennifer Downing
Additional Author: Deborah Castro, Linda H. Yoder, Kenn M. Kirksey

Presenting Author: Jennifer Downing
Address: 2625 Gate Ridge Drive
Austin, Texas 78748
United States
Ph: 512-297-5209
Fax:
Email: jadowning@seton.org
Institution: Seton Family of Hospitals

Additional Author: Deborah Castro
Address: 5800 Sedgefield Dr.
Austin, Texas 78746
United States
Ph: 512-635-9591
Fax:
Email: dlcastro@seton.org
Institution: Seton Family of Hospitals

Additional Author: Linda H Yoder
Address: 1700 Red River
Austin, Texas 78701-1499
United States
Ph: 512-471-7938
Fax:
Email: lyoder@mail.nur.utexas.edu
Institution: The University of Texas at Austin

Additional Author: Kenn M Kirksey
Address: 1400 North IH 35 C3.104
Austin, Texas 78701
United States
Ph: 512-324-8988
Fax:
Email: kmkirksey@seton.org
Institution: Seton Family of Hospitals
Abstract:

Introduction: There has been much debate over the efficacy of vacutainer versus butterfly devices in phlebotomy. A limited number of studies exist that directly compare these two devices. To date there have been no published studies examining the decision process that hospital staff employ when selecting a vacutainer or a butterfly to collect blood. Therefore, the purpose of this study was to examine the decision process that nurses and clinical assistants use when choosing a device to collect blood. More specifically, the research question was: What factors influence staff decisions to use a butterfly versus a traditional vacutainer needle device for phlebotomy collection?

Method(s): Qualitative descriptive design employing purposive sampling was used. Informants were interviewed at a large metropolitan hospital until data saturation was achieved (n=25). Content analysis was used to determine emerging themes; interviews and analytical memos outlining the decision process for coding were maintained. Member checking was conducted to ensure trustworthiness and themes were validated. A limitation of this study is that data were collected from nursing staff members within only one multi-hospital system.

Results: The demographic characteristics of the sample were: Mean Age: 35.84 years (SD 10.17; 20-55 years); white, non-Hispanic (72%, n=18), Female (80%, n=20), BSN or higher (40%, n=10), mean length of practice: 7.16 (SD 8.37, 1-31 years). Several themes emerged from the interviews: 1) preference for the mechanical features of the butterfly including the push button, extension tubing, and wings; 2) patient vein quality; and 3) ease of manually manipulating the butterfly when performing phlebotomy.

Discussion & Conclusions: Staff most often considered vein quality and patient co-morbidity when choosing a device. The butterfly was preferred by most of the staff, who voiced a lack of knowledge regarding use of the vacutainer. Findings also suggested a gap between correct uses of phlebotomy devices and reported nursing practice. The findings from this study can be used to create educational programs regarding phlebotomy, inform hospital policies, enhance employee safety, and improve patient outcomes.

Abstract History: This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

Financial Disclosure: No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.
FDA Disclosure:
I will not be describing any pharmaceutical and/or medical device.

Non-Exclusive License:

Submitted by:
jadowning@seton.org