Adherence to Venous Blood Specimen Collection Practice Guidelines Among Nursing Students and Healthcare Staff

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Akademisk avhandling

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Abstract

Background A substantial number of decisions on diagnosis, treatment, and treatment evaluation are based on the results from venous blood specimen collection. Hence, the accuracy of these tests are vitally important. University nursing students learn venous blood specimen collection on campus, and then continue to practice the task during clinical placements. Suboptimal adherence among healthcare staff has been found, however, few studies have been performed on nursing students. Therefore, the overall aim for this thesis was to explore adherence to, and factors influencing venous blood specimen collection guidelines among university nursing students and healthcare staff. Methods Study I-III had a quantitative, cross-sectional design, study IV had a qualitative approach. Study I included 164 healthcare staff from 25 primary healthcare centres. Study II included 101 nursing students in their 5th and 6th semesters, and study III included 305 nursing students in their 2nd, 4th, and 6th semesters. Data were collected using the Venous Blood Specimen Questionnaire, completed with background variables (Studies I-III) and additional instruments (Study III). Descriptive statistics, multilevel and multivariate logistic regression analyses were used to analyse the data. In study IV, five focus group interviews were conducted among 6th semester nursing students (n=26). Data were analysed using qualitative content analysis. Results Workplace affiliation was found to explain variances in reported adherence between different primary healthcare centres. Furthermore, associations between reported venous blood specimen collection practices and individual as well as workplace factors were found. Nursing students increasingly deviated from guideline adherence with every completed semester. Research use at clinical practice was associated with higher levels of adherence, as were higher capability beliefs regarding evidence-based practice and academic ability. Analyses from focus group interviews were summarised in the overall theme ‘Striving to blend in and simultaneously follow guidelines’. Conclusion Findings indicate that both healthcare staff and students are subjected to socialisation processes which may result in decreasing levels of adherence. In order to improve practice and thereby patient safety, actions by both education and healthcare representatives must be taken that target factors influencing guideline adherence.

Keywords

Adherence, Clinical practice guidelines, Experiences, Nursing student, Patient safety, Pre-analytical errors, Primary healthcare, Questionnaires, Venous blood specimen collection

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