Research Reviews

AFN Journal Club Research Reviews

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AFN Journal Club Research Reviews -Spring/Summer

The AFN Journal Club meets regularly to review the quality of the evidence available to support our clinical practice. This is a core requirement of professional practice.

AFN Journal Review Criteria

- Evidence tables are for the review of studies that may have implications for clinical practice.
- All articles on this table have been reviewed by the AFN Journal Club.
- Abbreviations are listed in the legend following the reviews.

Melnyk Levels of Evidence (Melnyk & Fineout-Overholt, 2015)
- **Level 1 -** Systematic review & meta-analysis of randomized controlled trials; clinical guidelines based on systematic reviews or meta-analyses
- **Level 2 -** One or more randomized controlled trials
- **Level 3 -** Controlled trial (no randomization)
- **Level 4 -** Case-control or cohort study; correlation design; examines relationships
- **Level 5 -** Systematic review of descriptive & qualitative studies
- **Level 6 -** Single descriptive or qualitative study; does not examine relationships
- **Level 7 -** Expert opinion

Legend

ALS= Alternative Light Source; AVS= Absorption Visibility Scale; BVS= Bruise Visibility Scale; CPS= Child Protective Services; ER= Emergency Room; FN=Forensic Nurse; HCP= Healthcare Provider; HT= Human Trafficking; HX= history IPV= Intimate Partner Violence; ID= Intellectual Disability; LGBTQIA= Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual; LE= Law Enforcement; MFE= Medical Forensic Exam; N/A=Not Available; NP=Nurse Practitioner; PED= Pediatric Emergency Department; POC= People of Color; P-SANE= Pediatric Sexual Assault Nurse Examiner; SA=Sexual Assault; SAK= Sexual Assault Kit; SANE= Sexual Assault Nurse Examiner; STI=Sexually Transmitted Infection; TBI= Traumatic Brain Injury

Completed Reviews

Johnson-Agbakwu, C. E., Michlig, G. J., Koukoui, S., Akinsulure-Smith, A. M., & Jacobson, D. S. (2023). Health outcomes and female genital mutilation/cutting: how much is due to the cutting itself? [Article]. *International Journal of Impotence Research, 35*(3), 218-227. https://doi.org/10.1038/s41443-022-00661-6

Study Description. Explore whether wider psychosocial factors may also contribute to or predict health outcomes, beyond the singular focus on FGM/C; shed light on the health and well-being of a diasporic Somali community in the Southwestern U.S., associations between FGM/C and related obstetric, gynecologic, and sexual health outcomes juxtaposed against overarching experiences of discrimination and social support.

Literature Review: 97 references; many references related to feminism and pre-colonial; multiple older but diverse and do relate to the background/research

Design/Method/Fidelity. Cross sectional study; quantitative studies; surveys developed with expert review panel and community key informants including women and men, elders, and youth, and religious figures; surveys translated, back-translated, and made available in English, Somali and Maay languages. Data collection from wave 1 Feb to Dec 2017, and wave 2 from Dec 2018 to June 2019. Multilingual female Somalians who completed training verbally administered surveys using electronic tablets increasing interrater reliability. IRB through AZ state University

Sample/Setting. Somali and Somali Bantu women aged 15 and older, residing in the urban regions of Phoenix or Tucson, AZ recruited to participate in a cross-sectional survey. Informed consent was obtained; snowball sampling used to optimize recruitment. Wave 1 (n = 879) and Wave 2 (n= 654), response rate of 95.3%. Second survey wave, which occurred 18-24 months after the first wave, involved follow-up with 654 of the original sample with a retention rate of 75%. Matching helps control bias; snowball sampling could be perceived as bias

Analysis. Descriptive statistics: bivariate logistic regression analyses used for potential associations between FGM/C and 3 key categories of variables: (1) social experiences, (2) identity and heritage, and (3) health outcomes. Multivariable logistic models explored

if 2 health outcomes were associated with FGM/C status when accounting for these other factors. Controlled for age, education, and collinearity

Results/Limitations. No FGM/C women reported more frequently experiencing discrimination; religion was the most cited perceived cause of discrimination (n = 72, 11.3%); Perceived social support was high among both 'No FGM/C' and 'FGM/C' women; women with FGM/C were 18% less likely to report everyday discrimination experiences; relationship between having experienced one or more negative health events and FGM/C status was not significant; social support appears protective against psychological distress in this model, with those reporting higher support being 43% less likely to screen positive for distress

Clinical Significance/Practice Implications. Awareness of our implicit and explicit biases; implore trauma informed approaches by better understanding lived experiences; education so as to not perpetuate discrimination; education around word choice; reframe our understanding of FGM/C's impact on women's health and well-being through the lens of postcolonial African diasporic feminist discourse; health risks apply to all forms of genital cutting, including forms that are widely accepted in Western culture; social factors such as discrimination and support may play a larger role in health than FGM/C

Evidence Level. Level 4

McNair, S. M., & Boisvert, L. (2021). Prevalence of Adult Female Genital Trauma After Acute Sexual Assault: The Need for a Universal Definition of Genital Trauma. *Journal of Forensic Nursing, 17*(3), 140–145. https://journals.lww.com/forensicnursing/abstract/2021/09000/prevalence_of_adult_female_genital_trauma_after.3.aspx

Study Description. The authors argue that genital injury data only partially describe sexual assault injury. They examined injuries found in a sample of patients after sexual assault and used the data to provide a more multidimensional definition of genital injury pattern.

Literature Review. 29 references, all are greater than 5 years old, some noted to be seminal but quite a few were not

Design/Methods/Fidelity: A retrospective descriptive chart review of the sexual assault forensic records from a provincial regional SA treatment center conducted over a 4-year period (Sept 1, 1997-Aug 31, 2001). Patients presented within 72 hrs and had a SA kit, performed by author and a trained CNS. High interrater reliability, Cohens kappa of 0.91

Sample. 70 charts identified with 67 female patients that met inclusion of being 12 years old and over, who reported being sexually assaulted in the previous 72 hours and received a complete forensic examination. IRB obtained

Analysis. Descriptive analyses but does not clearly specify demographics that were collected. Does state that mean age was 28.79 but does not list out prevalence of each age. Unclear about ethnicity or age as it related to prevalence for the injury findings.

Results/Limitations. The prevalence of genital trauma ranged from 31%- 52%, depending on the definition of trauma utilized: 41% percent of the findings, the greatest number overall, were redness. Bruises, abrasions, and tears (lacerations), the components of blunt force trauma, accounted for 4%, 15%, and 14% of the findings, respectively. Limitations: retrospective charts from 20 years ago (unclear why authors looked at charts from so long ago); no forensic nursing authorship which is concerning when trying to implicate forensic nursing practice; sample was small and only represented one program so not generalizable; figure 2 is unclear since reader can add totals from figure 1; would have liked demographic tables correlating to findings, with age ranges and ethnicities.

Clinical Significance/Practice Implications. Greater consistency and standard taxonomy are needed for forensic nursing documentation and findings; redness must be understood by examiners as a non-specific finding; significance of using anatomically and pathologically correct terms

Evidence Level. Level 6

Scafide, K. N., Ekroos, R. A., Mallinson, R. K., Alshahrani, A., Volz, J., Holbrook, D. S., & Hayat, M. J. (2023). Improving the Forensic Documentation of Injuries Through Alternate Light: A Researcher–Practitioner Partnership. *Journal of Forensic Nursing, 19*(1), 30–40. https://learning.lww.com/ovidfiles/01263942-202303000-00005.pdf

Study Description. Authors explain plans to evaluate the use of alternate light systems (ALS) to improve assessment of bruises in adults who experienced interpersonal violence.

Literature Review: 32 references; many are older presumably because ALS is a newer emerging science and there is a gap in the literature. References relate to research issue

Design/Method/Fidelity. The purpose is an evaluation of the implementation of ALS during the MFE of cutaneous injuries among adult patients. Mixed method design; 5 phase project including assessment, development, implementation, maintenance, and evaluation. Data collected includes observations, policies, interviews, focus groups, admission data, nurse surveys, and clinical records review (fig 3&4). The results will inform the design of a larger scale outcome study; at time of publication was in assessment phase. IRB was obtained.

Sample/Setting. No current sample as the study hasn't started but will be patients from 2 forensic nursing depts located in Maryland; one that employs use of ALS, other does not. Data on cutaneous injury findings will be collected for 6 months

Analysis. Data will include descriptive statistics and thematic analysis for quantitative and qualitative data, respectively. The extent to which forensic nurses adopt the program, implement it based on the developed protocol, and reach patients will be determined by univariate analysis. Subgroup analysis using bivariate statistics may identify conditions in which ALS or its full protocol is less frequently administered. Will explore whether the number of injuries, characteristics and photo documentation quality change over time using a multilevel modeling framework. Multivariable analyses may identify if number of injuries documented varies by race/ethnicity, location on the patient's body, or other characteristics. Themes identified in the qualitative data will contribute to understanding of patients' willingness to be examined using ALS and nurses to use the ALS technology.

Results/Limitations. TBD results: limitations include generalizability depending upon patient variables (age, race, sex, etc.) and being in only one location of country

Clinical Significance/Practice Implications. Current practices disproportionately favor light skin tones so forensic nurses must develop and incorporate evidence-based tools (such as ALS toolkit) to support equitable practice and just outcomes; inform larger studies across multiple locations in the country as well as studies looking at LE and prosecutorial decisions; possible implications for injury findings on patients that can not provide a history

Evidence Level. Unclear since the actual study hasn't been completed; believe that researchers are looking to examine relationships between injury findings using ALS and not using ALS, so likely will be a level 4

Speck, P. M., Ekroos, R. A., Faugno, D. K., Johnson, J. L., Sievers, V., & Mitchell, S. A. (2023). Self-Collection Following Rape: An Integrative Literature Review. *Journal of the Academy of Forensic Nursing*, *1*(1), 18–41. https://mrujs.mtroyal.ca/index.php/jafn/article/view/644

Study **Description.** Authors conducted an extensive search of the literature on self-collection of evidence following rape to examine potential of the practice and implications.

Literature Review: 101 references; 35 of those were from 2017-current; some older ones were seminal; not a lot of research available on SANE kits and self-collection, so many had to include general medicine that allow for patient/self-collection

Design/Method/Fidelity. Identify practice of securing evidence and gaps in practice related to evidence collection, as well as the health care delivery impact; and provide an evidence-based path forward; An integrative literature review was completed, limited to publications 2012 – 2022, using a PubMed search; SWOT associated with self-collection were discussed and included in many sections throughout the article.

Sample/Setting. 90 articles: 6 publications related to self-collection, 2 articles were unresponsive (child HIV and Tuberculosis). Gray literature and references in the remaining articles used to find other relevant publications

Analysis. 4 sections were the focus and SWOT was provided for each:

1. The victim and their activities following a crime,
2. The HCP and a dual role in a system where the patient assessment occurs for injury, treatment, and referral,
3. The HCP as a collector of evidence, whether an RN at the bedside or APRN forensic nurse or physician in SA exam, and
4. The system's response when determining patient medical management or management of evidence and its usefulness after collection.

Results/Limitations. Evidence collection should be accurately recorded; more research needs to be done; medical forensic HCP do not determine culpability or probative value of items collected; the evidence supports robust data retrieval system, instructions in self-collection, access to education, location of nearest health care services, and detailed instructions about safe self-collection. There should be tracking of the self-collection from development through collection to destruction

Clinical Significance/Practice Implications. Lots of speculation in the height of COVID with self-collection and this article methodically looked at what is in the current literature where self-collection or patient collection with sensitive testing is currently permitted or being done; authors support direct medical care as a preferred option, but many other options may be considered in person-centered care. Telehealth with a SANE may be sufficient to guide the client through self-collection and this opens new thoughts/opportunities going forward.

Evidence Level. Level 5

Reference

Melnyk, B. M., & Fineout-Overholt, E. (2015). *Evidence-based practice in nursing and healthcare: A guide to best practice*. Wolters Kluwer.