



CAESAREAN SECTION SURGICAL SITE INFECTION AND ASSOCIATED PERSONAL PATIENT RISK FACTORS: AN INTEGRATIVE REVIEW

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DISCLOSURE

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LEARNERS OBJECTIVE: The learner will be informed of the status of published literature on caesarean section surgical site infection and associated personal patient risk factors

CONFLICT OF INTEREST: None

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BACKGROUND

- Surgical site infection (SSI) - most prevalent HAI in developing countries and the second most prevalent in the developed world (WHO, 2016)
- CS SSI - associated with various complications, cost, extended hospital stay and can negatively impact on life of new mothers, babies and their families (Berríos-Torres et al., 2017; Mangram et al., 1999)
- CS SSI factors relate to preventable risks during: pre-operative, operative and post-operative phases of patient care (Mangram et al., 1999)
- Not known – existence of high quality evidence on association of personal patient risk factors to SSI

PURPOSE

To critically evaluate published research on CS surgical site infection and associated personal patient risk factors and to provide nursing recommendations that relate to this area of practice

METHODS

- informed by Whitemore and Knafel's integrative review approach, allows inclusion of various research methodologies
- Five-stage framework: problem identification, literature search, data evaluation, data analysis and presentation of findings

METHODS

- Key words used in conjunction with Boolean operators, truncation and spelling variants to search four electronic databases
- Search terms – “Caesarean section surgical site infection” OR “Cesarean section surgical site infection” OR “Caesarean section infection” OR “Cesarean section infection” AND “risk factor*” OR “patient factor*” OR “patient character*” OR “patient cultural practice*”
- Inclusion criteria: CS infection as an outcome measure, personal patient risk factors - age, obesity, smoking, diabetes mellitus and cultural practices; full text peer-reviewed academic journal; English; 10-year period (January 2008 - January 2018)

METHODS

- Cultural practice was operationally defined as traditional or customary activities in relation to post-caesarean section hygiene, wound care and physical activity
- Databases searched: CINAHL, PubMed and Science Direct
- Process of review followed Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) format – identification, screening, eligibility and inclusion.

METHODS

**Database search -
157 articles
+
free-hand search -
32 articles**

189 articles
Removed: 2
unavailable full
text and
duplicates

88 articles
Screened 2X

46 eligible
for full-text
evaluation

RESULTS

- 46 peer-reviewed publications met inclusion criteria for full-text review
- Quality of research elements evaluated: sample size, control, consistency of result, conclusion and research implications
- 20 of 46 studies scored highly on quality
- These supported an association between CS SSI and at least one identified risk factor - age, obesity, smoking and DM
- Only one research studied cultural practices and its association with CS SSI

CONCLUSION

Evidence regarding the association of personal patient risk factors such as age, obesity, smoking and diabetes mellitus to caesarean section surgical site infection is inadequate.

Even more scarce are studies that evaluate the association of cultural practices to caesarean section surgical site infection

RECOMMENDATIONS

- Further research on personal patient risk factors associated with CS SSI
- Research on cultural practices as risk factors to CS SSI

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THANK YOU

