

Research Dissertation

Submitted by

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Place of posting: Tata Medical Center Kolkata.

Broad area and specific area:

Broad area- M.Sc. Nursing (2025-27)

Specific area- Medical-Surgical Nursing (oncology)

Name of the Guide: Prof. Dr. Piyali Bose

Designation: Prof. cum CNS, Tata Medical Center, Kolkata.

Introduction :

Hysterectomy is a major surgical procedure commonly performed for conditions like cancer of reproductive organs. Although it is a life-saving intervention, it significantly affects women's physical and psychological well-being.

Background of the study :

Post-operative physical problems include pain, fatigue, urinary dysfunction, hormonal imbalance, and sexual dysfunction. At the same time, patients often experience psychological disturbances such as anxiety, depression, fear of disease recurrence, and altered body image.

Studies show that hysterectomy impacts both physical recovery and emotional health, highlighting the need for comprehensive care that addresses both aspects (PubMed).

Additionally, patients undergoing hysterectomy may experience psychological crisis, anxiety, and depression, which can influence recovery outcomes (PMC).

Need of the study:

Despite advances in screening and treatment, many patients are still diagnosed at stages requiring aggressive interventions such as hysterectomy. Tertiary cancer centers like Tata Medical Center (TMC), Kolkata, receive a large number of patients not only from West Bengal but also from neighbouring states due to the availability of specialised oncology services and multidisciplinary care. Many women undergoing hysterectomy experience significant post-operative physical complications such as pain, fatigue, urinary and bowel dysfunction, and sexual health issues. Additionally, psychological problems like anxiety, depression, fear of recurrence, and altered body image are common but often under-assessed in routine clinical practice. Furthermore, due to the busy clinical setting and focus on curative treatment, the comprehensive assessment of psychological well-being and quality of life may be overlooked.

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Problem statement:

Assessment of the physical and psychological problems among patients undergoing hysterectomy in a selected hospital, Kolkata.

Objectives:

1. To assess the physical and psychological problems experienced by patients undergoing hysterectomy.
2. To find out the association between selected socio-demographic and physical problems among patients undergoing hysterectomy.
3. To find out the association between selected socio-demographic and psychological problems among patients undergoing hysterectomy.

Literature review:

1.The Life Quality and Sexual Function of Women Underwent Radical Hysterectomy

Author- Roza Pak, Tolkyun Sadykova , Dilyara Kaidarova , Kasimova

Publication date-2021 Feb

A prospective study done on 157 total population.

Tools: 2 types of questionnaire- QL questionnaire developed by the European Organization for the Study and Treatment of Cancer & Female Self-Assessment Tool by The Female Sexual Function Index.

Results: The women's average age was 41.12 ± 5.4 in the RH group and 47.24 ± 6.1 in the CRT group ($p = 0.2$). We did not detect significant differences between both groups according to the QLQ C-30 questionnaire (T1). The differences between the RH and CRT groups ($p \leq 0.05$) were observed in terms of physical functioning, fatigue, nausea and vomiting, pain during the T2 period. High rates of emotional functioning ($p = 0.03$); global health and QL ($p = 0.02$), and symptoms of fatigue ($p = 0.04$) were detected in the RH group compared to the CRT group during T3. However, pain symptoms ($p = 0.001$), nausea and vomiting and loss of appetite ($p = 0.03$) dominated the CRT group. According to the results of FSFI-6 in the RH group, indicators for the domains "desire" ($p = 0.02$), "excitement" ($p = 0.03$), and "orgasm" ($p = 0.05$) were high, unlike in the CRT group during the T3 period. Nevertheless, the number of complaints on the 'pain during intercourse' in the CRT group was higher than in the RH group ($p = 0.001$).

2.Chronic postsurgical pain and neuropathic symptoms after abdominal hysterectomy, A silent epidemic.

Author- Serbülent Gökhan Beyaz , Hande Özocak

Publication date- 2016 Aug 19;95(33):e4484

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A quantitative study done on 16 to 65 ages old patients who underwent total abdominal hysterectomy, bilateral salpingo-oophorectomy and had passed a minimum of 3 months after surgery.

Tools- VAS, Douleur Neuropathique 4-questionnaire (DN-4) surveys

Results- Ninety-three patients were included to study. As the groups were compared by demographic data, no difference was obtained ($P > 0.05$). There was no difference between groups regarding patient and surgery attributes ($P > 0.05$). Most frequently performed incision type was Pfannenstiel. Neuropathic symptoms were observed in 90 patients (96.8%).

Sensorial alterations as hypoesthesia and hyperesthesia were detected around abdominal scar in 18 patients (19.4%) with pinprick test.

3. Anxiety and physical health problems increase the odds of women having more severe symptoms of depression, A quantitative study.

Author- Sandra J Weiss, Diana I Simeonova, Mary C Kimmel.

Epub 2015 Sep 24.

Abstract- The purpose of this research was to determine the degree to which age, physical morbidity, anxiety, and hormonal status predict the likelihood of severe depression among women with mood disorders ($n = 298$). Results of logistic regression analyses indicate that a woman's level of anxiety was the strongest predictor of her likelihood of having severe depression ($\text{Exp}(B) = 1.33$, $p = .000$), including thoughts of death or suicide. The number of physical health problems that a woman reported was also a significant predictor ($\text{Exp}(B) = 1.09$, $p = .04$). Neither age nor hormonal status was significant in the final model, although a trend was observed for women with surgically induced menopause to have more severe depression.

4. Women's Experiences Following Peripartum Hysterectomy: A Qualitative Study

Author- Sheenu Gahlawat , Monika Dutta , Venkadalakshmi Varatharajaperumal , Pradip Kumar Saha

Publication date- 2024 Jun;18(2):101–107.

A qualitative study done on 19 women. Purposive sampling technique was adopted to enroll the participants and 19 women were interviewed before saturation of responses was reached. All interviews were audio recorded and then transcribed into verbatims.

Results: Based on participants' verbatims eight major themes emerged: Awareness status regarding peripartum hysterectomy; Body's response to peripartum hysterectomy; Perceived need of support; Facilitators in overcoming post-hysterectomy challenges; Relational turbulence; financial burden; Perceived psychological adaptation; Disturbed body image and low self-esteem.

Conclusion: Derived themes in the present study highlighted the multidimensional effects of peripartum hysterectomy. Peripartum hysterectomy affected physical, psychological, sexual and financial health of the women. Increased dependence and changes in the self-concept are the other problems faced by peripartum hysterectomy women. Need based individualized

psychological therapeutic interventions will facilitate the successful adaptation to the traumatic situation by the reinforcement of positive coping mechanisms.

Variables: Physical problems, Psychological problems, Hysterectomy.

Operational definitions:

Physical problems-

- Parameters like pain, fatigue, wound complications, and urinary problems, bowel disturbances, nausea, and vomiting.
- Scored and categorised as mild, moderate or severe based on predetermined scoring criteria.

Psychological problems-

- Components such as anxiety, depression, body image disturbance, fear of recurrence, and emotional distress.
- Total score will be calculated and categorised into levels (normal, mild, moderate and severe) according to the scoring guideline.

Hysterectomy-

- It is of two types in Total hysterectomy, in which the uterus, along with the cervix, is also removed, but in Partial hysterectomy, only the uterus is removed, and the cervix remains same.

Research Methodology:

Research design: Quantitative approach

Setting: OPD of Tata Medical Center ,Kolkata.

Population: Female patients undergoing hysterectomy

Sample : 40 or 50

Sampling technique: Simple random sampling

Inclusion criteria:

- Patients who are willing to participate
- Patients having hysterectomy.

Exclusion criteria:

- Recurrent malignant neoplasm,
- Undergoing treatment (both prior radiation and chemotherapy)
- Disability due to the presence of mental disorders or cognitive impairment.

Sample size calculation:

For a quantitative descriptive study, the sample size is calculated using: Cochran's Formula.

$$n = \frac{Z^2 \times pq}{d^2}$$

Description of Terms

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n = Required sample size

Z = Standard normal deviate at 95% confidence level = 1.96

p = Estimated prevalence of problem (assumed 50% = 0.5) (used when exact prevalence is unknown)

q = 1 – p = 0.5

d = Acceptable error (precision), taken as 15% = 0.15 (for feasibility in small studies)

Calculation- $n = [(1.96)^2 \times 0.5 \times 0.5] / (0.15)^2$

n = 0.96/0.0225

n = 42.6 = 43

Final Sample Size-

considering feasibility, time constraint and availability of subjects 40

Data collection tools & techniques :

Demographic data -Kuppuswamy scale

Physical problems checklist- QOL, SF36

Psychological assessment scale (e.g., anxiety/depression scale)-DASS 21

Steps of data collection :

- Obtain permission from the hospital authority and IRB approval
- Explain the purpose to participants
- Obtain informed consent
- Collect data using a structured questionnaire/interview
- Maintain confidentiality

Ethical consideration :

- Approval from Institutional Ethics Committee (IRB)
- Informed consent will be obtained
- Confidentiality maintained
- Right to withdraw ensured
- No harm to participants

Plan for statistical analysis :

Descriptive statistics: Frequency, percentage.

Inferential statistics: Mean, median, mode, SD and Chi-square test for association.

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References:

1. Machado LS. Emergency peripartum hysterectomy: Incidence, indications, risk factors and outcome. North American Journal of Medical Sciences. 2011;3(8): 358–61.
2. Saha JK, Mistri PK, Sinha N. Critical Evaluation of Emergency Peripartum Hysterectomy Cases in a Tertiary Care Centre in Eastern India. J. Evolution Med. Dent. Sci. 2019;8(46):3422–3426.
3. Banale M. Emergency peripartum hysterectomy: experience of a tertiary care hospital in South India. Asian Pac. J. Health Sci. 2015; 2(4):42–46
4. Frumovitz M, Sun CC, Schover LR, et al. Quality of life and sexual functioning in cervical cancer survivors. J Clin Oncol. 2005;23:7428–36. doi: 10.1200/JCO.2004.00.3996.
5. Filocamo MT, Serati M, Li Marzi V, et al. The female sexual function Index (FSFI): linguistic validation of the Italian version. J Sex Med. 2014;11:447–53. doi: 10.1111/jsm.12389.