ASSOCIATION BETWEEN POSITIVE THINKING AND SELF-ESTEEM AMONG POST-MASTECTOMY PATIENTS AT JENDERAL AHMAD YANI GENERAL HOSPITAL IN METRO

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Abstract

Purpose: To determine the association between positive thinking and self-esteem among post-mastectomy patients at Jenderal Ahmad Yani General Hospital, Metro, Indonesia, in 2026. Methods: This quantitative analytical cross-sectional study involved 57 respondents selected by accidental sampling from a population of 131 patients. Data were collected using questionnaires from 2 to 9 March 2026. Positive thinking and self-esteem were classified into two categories each. The association was evaluated using a two-sided Fisher's exact test. An unadjusted odds ratio and 95% confidence interval were estimated. Findings: Positive thinking was reported by 48 respondents (84.2%), and high self-esteem by 45 (78.9%). Positive thinking was significantly associated with high self-esteem (p = 0.015; odds ratio = 7.321; 95% confidence interval: 1.570-34.146). Seven respondents with positive thinking had low self-esteem, while four with negative thinking had high self-esteem. Practical implications: The findings support attention to self-esteem and psychological needs during post-mastectomy nursing care. The cross-sectional design does not establish that positive thinking causes higher self-esteem; prospective studies are needed to evaluate this relationship.

Keywords: positive thinking; post-mastectomy; self-esteem

1. INTRODUCTION

Breast cancer remains a major health concern worldwide. The World Health Organization estimated that 2.4 million women were diagnosed with breast cancer and 694,000 people died from the disease globally in 2024 1 . In Indonesia, the 2021 national health profile reported 3,040 suspected breast cancer findings and 18,150 breast lump or tumour findings from screening 2 . These screening findings should be distinguished from confirmed cancer diagnoses. The burden of breast disease highlights the importance of care that addresses both treatment and patients' psychological needs.

Mastectomy can alter how patients perceive their bodies and evaluate themselves. A study of patients after unilateral mastectomy identified associations between body image disturbance, self-acceptance, perceived social support, and other clinical or personal characteristics3 . Self-esteem concerns a person's evaluation of their own worth and includes global and domain-specific aspects4 . In an Indonesian study, self-esteem was associated with quality of life among patients after mastectomy5 . Understanding self-esteem is therefore relevant to nursing care during recovery.

Positive thinking may be relevant to the way patients interpret physical changes and cope with illness. Recent trials have reported improvements in selected psychological outcomes following structured interventions involving mindfulness or cognitive behavioural approaches6, 7 . However, these interventions and their outcomes differ from positive thinking as assessed in an observational study. Evidence about psychological interventions cannot by itself establish an association between positive thinking and self-esteem in a particular clinical population.

A preliminary survey at Jenderal Ahmad Yani General Hospital, Metro, in November-December 2025 identified 21 patients undergoing mastectomy and 110 post-mastectomy patients attending routine follow-up and hormonal therapy at the oncology polyclinic. These local findings support attention to psychological needs after surgery. This study aimed to determine the association between positive thinking and self-esteem among post-mastectomy patients at this hospital in 2026.

2. METHODOLOGY

This quantitative study used an analytical cross-sectional design. It was conducted in the surgical ward and surgical oncology polyclinic of Jenderal Ahmad Yani General Hospital, Metro, Indonesia, from 2 to 9 March 2026. The study population comprised 131 post-mastectomy patients, and the sample consisted of 57 respondents selected using accidental sampling.

Eligible participants were patients who had undergone mastectomy at the hospital, were willing to participate, were fully conscious, and could communicate effectively. Patients with visual impairment, patients who were uncooperative, and those with cognitive impairment or severe mental disorders were excluded.

The independent variable was positive thinking, and the dependent variable was self-esteem. Data were collected using questionnaires assessing these variables. Positive thinking was classified as positive or negative, while self-esteem was classified as high or low. Frequencies and percentages were used to describe each variable.

The association was evaluated using a two-sided Fisher's exact test because one expected cell frequency in the two-by-two table was below five. Statistical significance was assessed at $p < 0.05$. An unadjusted odds ratio (OR) and its 95% confidence interval (CI) were used to describe the association between positive thinking and high self-esteem. Ethical approval was obtained from the Health Research Ethics Committee of Poltekkes Kemenkes Tanjungkarang under approval number 093/KEPK-TJK/II/2026.

3. RESULTS

3.1 Univariate Analysis

Positive thinking and high self-esteem were the predominant categories in the sample. The distributions of both variables are presented in Table 1.

Table 1. Distribution of positive thinking and self-esteem among respondents

Variable	Category	n	%
Positive thinking	Negative	9	15.8
Positive thinking	Positive	48	84.2
Self-esteem	Low	12	21.1
Self-esteem	High	45	78.9

Note: n = 57 for each variable.

3.2 Bivariate Analysis

Table 2 presents the distribution of self-esteem according to positive thinking category.

Table 2. Association between positive thinking and self-esteem among respondents

Positive thinking	High self-esteem n (%)	Low self-esteem n (%)	Total n (%)
Positive	41 (71.9)	7 (12.3)	48 (84.2)
Negative	4 (7.0)	5 (8.8)	9 (15.8)
Total	45 (78.9)	12 (21.1)	57 (100.0)

Note: Percentages use the total sample (n = 57) as the denominator. Two-sided Fisher's exact test: p = 0.015. OR = 7.321; 95% CI: 1.570-34.146, comparing positive with negative thinking for high self-esteem.

Positive thinking was significantly associated with self-esteem. Respondents with positive thinking had higher odds of high self-esteem than those with negative thinking (OR = 7.321; 95% CI: 1.570-34.146). The confidence interval was wide, indicating substantial uncertainty in the estimated magnitude of the association.

4. DISCUSSION

This study identified a significant association between positive thinking and self-esteem among post-mastectomy patients. The result is consistent with the proposed relationship between patients' thinking patterns and their evaluations of themselves. Nevertheless, the observed odds ratio describes an association at one point in time. It does not show that positive thinking causes an increase in self-esteem or that changing thinking patterns would produce the same magnitude of benefit.

Related intervention studies provide context for this finding. Pehlivan and Eyi reported improved self-esteem and body perception after mindfulness-based meditation and yoga among women undergoing modified radical mastectomy6 . Ream and colleagues found improvements in selected aspects of positive psychological well-being and coping self-efficacy following brief cognitive c therapy, but no significant intervention effects on optimism or benefit finding7 . These studies assessed different interventions and outcomes. They support further investigation of psychological care after breast cancer surgery, while providing indirect evidence for the specific association examined here.

The relationship was not uniform across respondents. Seven patients classified as having positive thinking nevertheless had low self-esteem, while four patients classified as having negative thinking had high self-esteem. These combinations indicate that thinking category alone does not fully describe an individual's self-esteem. Research on patients after mastectomy has associated body image with self-acceptance, perceived social support, and clinical characteristics3 , while self-esteem research distinguishes global evaluations from evaluations within specific life domains4 . These findings offer possible explanations for variation between patients. However, the present study did not evaluate these explanations, so the reasons for the two discordant groups cannot be established from its data.

For nursing practice, the findings suggest that assessment of self-esteem should accompany attention to patients' thinking patterns and psychological concerns. Positive thinking should not be assumed to exclude low self-esteem, and patients reporting negative thinking may still retain a strong sense of self-worth. Education, counselling, and appropriate psychological or family support may be considered according to individual needs. Their effects on self-esteem require evaluation through intervention research rather than inference from this cross-sectional association.

Several limitations should be considered. The cross-sectional design does not establish temporal order or causality. Accidental sampling at a single hospital limits generalisability. The negative-thinking group contained only nine respondents, contributing to imprecision in the odds ratio. Questionnaire responses may be affected by reporting bias, and dividing scores into two categories can conceal differences within each group. The bivariate analysis did not adjust for potential confounding factors.

Larger prospective studies with clearly specified measurement procedures and multivariable analyses are needed.

5. CONCLUSIONS

Among post-mastectomy patients at Jenderal Ahmad Yani General Hospital, Metro, in 2026, 45 respondents (78.9%) had high self-esteem. Positive thinking was demonstrated by 48 respondents (84.2%). There was a significant association between positive thinking and self-esteem (two-sided Fisher's exact test, p = 0.015).

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