





# Knowledge, Attitude, and Practice on Breast Cancer and Their Relation to Late Presentation in Pahang, Malaysia

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## **INTRODUCTION**

Delayed diagnosis remains a challenge for breast cancer in uppermiddle-income countries, including Malaysia, where low screening rates and advanced presentations are prevalent. This study investigates the association between knowledge, attitude, and practices (KAP) towards breast cancer and late presentation using a KAP questionnaire in Pahang, Malaysia. Understanding these factors is crucial to improving early detection rates.

## **METHODS**

We conducted structured interviews using a KAP questionnaire on breast cancer patients diagnosed during an 18-month period (April 2022 to September 2023) at three major hospitals in Pahang, Malaysia. Statistical analysis was performed with multivariable logistic regression to investigate associations between delayed presentation (defined as presentation exceeding three after self-discovery months sociodemographic symptom), characteristics, and KAP items.

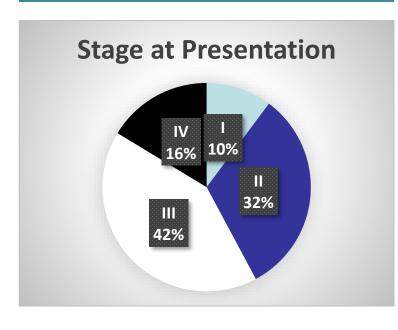


Patients were recruited from SASMEC @IIUM (Kuantan), Tengku Ampuan Afzan Hospital (Kuantan), Sultan Ahmad Shah Hospital (Temerloh)

#### RESULTS

A total of 147 patients were interviewed, 40% (n=60) presented late, and over half (57%) of patients presented with late-stage disease (Stage III and IV). Fear of diagnosis (aOR=3.1, 95% CI (1.55-6.34) p<0.5) strongly predicted delayed presentation. Patients with fatalistic beliefs were less likely to present late (aOR=0.45, 95% CI (0.26-0.76) p<0.5). No significant association was found between knowledge scores and delayed presentation.

40% presented more than three months since the onset of symptoms



## **KNOWLEDGE**

No significant association with delayed presentation. 49% of patients were unaware of ulcer as potential breast cancer symptom, however, it was not related with T stage at presentation.

### **ATTITUDE**

94% agree that BC is predetermined by fate. Beliefs in traditional medicine, and denial of diagnosis were not associated with delayed presentation.

#### **PRACTICE**

Patients reporting fear as a reason for delaying treatment were three times more likely to have a presentation exceeding three months from symptom onset (aOR = 3.1, CI (1.55-6.34) p = 0.001).

#### **DISCUSSION**

Delayed presentation in Pahang can be attributed to fear of diagnosis; in contrast, fatalistic beliefs have a protective impact on this population. This questionnaire tested the predetermination aspect of fatalistic belief but not the other dimensions. It is possible that due to most of the respondents being Muslims, inherent acceptance of diagnosis does not necessarily translate into pessimistic behaviour. Future efforts should address these psychological barriers alongside promoting early screening.

Scan this QR code to access the KAP questionnaire