International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 08 Issue: 10 | Oct - 2024 SJIF Rating: 8.448 ISSN: 2582-3930

Statistical Survey on Knowledge of Anemia Among Women Population

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ABSTRACT

Anemia is thought to affect one in four people worldwide, and incidences are rising quickly among women, expecting mothers, young girls, and children under five. 42% of women in this 2024 study knew a good deal about anemia, 33% knew a little bit about it, and 24% knew very little. The study found that although women in this area were well-informed about anemia, anemia-causing behaviors were nevertheless common. A deficiency of healthy red blood cells that prevents oxygen from reaching body tissues is known as anemia. The prevalence of anemia as a health issue is significant, but it can be managed by increasing awareness and promoting the development of positive attitudes and behaviors. The goal of the current study was to determine the prevalence of anemia and evaluate the study population's knowledge, attitudes, and practices about anemia. Women participated in a week-long prospective observational questionnaire-based study.

For the study, 204 people in all were chosen. Every piece of information pertaining to risk variables was documented, along with the KAP questionnaire responses. Severity and prevalence rates were examined. The largest proportions of the 204 patients were between the ages of 26 and 50, followed by those between the ages of 51 and 75 and 19 and 25, respectively. There were 112 (54.9%) male patients, the highest number, and 92 (45.1%) female patients. Our findings demonstrated that a major contributing factor to the study population's elevated risk of anemia is their lack of knowledge about the condition. Our research indicates that anemia mostly has a detrimental effect on physical health, significantly lowering the patients' quality of life.

KEYWORDS: Anemia, KAP (Knowledge, Attitude and Practices) questionnaire, prevalence, prospective study

INTRODUCTION:

Around the world, anemia and iron deficiency are very prevalent among adolescent girls. The body of research on iron deficiency knowledge, attitudes, and practices is somewhat small [1]. The magnitude of anemia as a health issue is immense, and it can be tackled by promoting awareness and fostering the adoption of suitable attitudes and behaviors [2]. Data on what is known, believed, and done regarding a particular subject can be gathered through a representative study of a community known as a KAP survey [3]. Most KAP surveys use a structured, standardized questionnaire that an interviewer uses to collect data orally [4]. The subsequent analysis of this data might be quantitative or qualitative, contingent on the goals and methods of the study [5]. To gather information on broad behaviors and attitudes, a KAP survey can be specifically designed. Planning, carrying out, and assessing projects all depend on the KAP survey results [6].

WORK PLAN:

STEP 1: **Define the survey's goals**: Analyze the prior knowledge you possess. Establish the goal of the survey. Establish the areas of inquiry. Identify who the survey is intended for. Create an example plan.
STEP 2: Create a survey protocol: Put the components of the survey procedure in order. Make a plan, specify the main research questions, and determine if an ethical review is necessary for the survey. Plan your finances.
STEP 3: Design the survey questionnaire: Construct the survey's questionnaire; create a plan for data analysis. Finalize and pre-test the survey.
STEP 4: Conduct the KAP survey: Select the survey's dates and schedule. Hire interviewers and supervisors for surveys, Educate interviewers and supervisors, verify the caliber of the information gathered.
STEP 5: Analyse the data: Clean the data, implement a data analysis plan, interpret the findings

AIM: Analyzing women's knowledge, attitudes, and practices around anemia is the primary goal of this study.

OBJECTIVES:

- To determine the frequency of anemia in the female population
- To investigate the anemia risk factors in the female population
- Using surveys, determine the individuals' degree of knowledge.
- Using questionnaires, observe the individuals' attitude level.
- Using questionnaires, observe the subjects' level of practice.
- KAP levels of participants are determined by means of a validated questionnaire.
- To assess anemia determined by hemoglobin levels.
- To classify individuals into mild, moderate, and severe anemia in accordance with WHO guidelines.
- To inform the research participants about anemia.

MATERIALS AND METHODS:

- Patient data collection proforma
- Informed consent form (ICF)
- KAP questionnaire
- Patient Information Leaflet on Anemia

Inclusion criteria: Those over the age of eighteen who are admitted to an in-patient general medicine ward and who have hemoglobin levels below 12 g/dL, whether or not they have co-morbidities.
Method of Data Collection:
This prospective observational study was carried out by women protection cell, AITS, Tirupati. First, direct interviews are used to get the data. The following information was gathered during the interview and recorded on a proforma.

- Demographic Details
- Detailed Symptoms
- Past Medical History
- Past Medication History
- Dietary Habits
- Previous And Current Alcohol Consumption Habits
- By viewing the case profile of the student the following data was collected and entered into proforma:
- Laboratory Findings
- Systemic Examination

- Previous Surgical History
- Medication Therapy

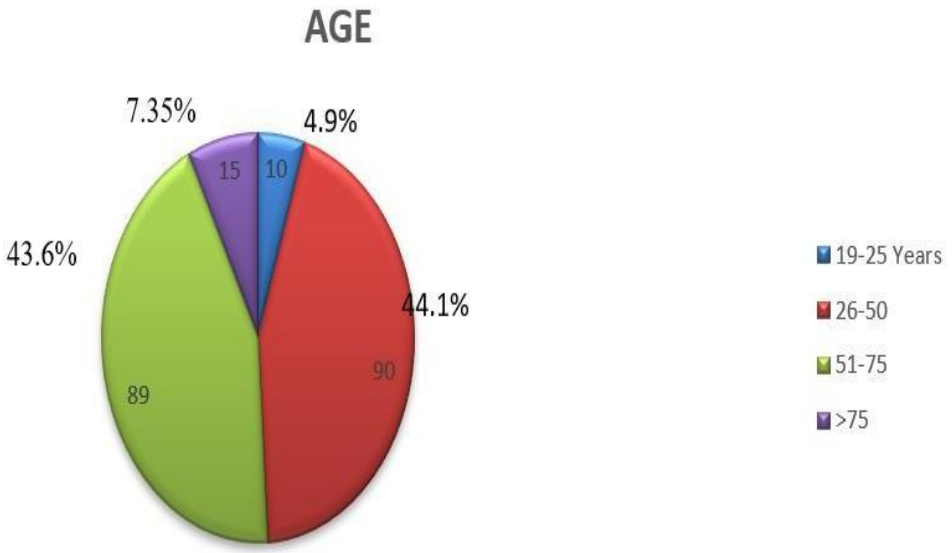
Based on this data the prevalence data of anemia and the Knowledge, Attitude, Practices of students was assessed.

Statistical Analysis: Following the use of the KAP Questionnaire, the responses were imported into Microsoft Excel 2022, where calculations were performed based on the domains and outcomes were generated.

RESULTS:

Following data collecting, demographic information was applied, KAP replies were input into Microsoft Excel 2022, calculations were performed, and first, demographic information was separated. Figure 1 illustrates that of the 204 students, 90 (44.1%) belonged to the age range of 26–50 years, followed by 89 (43.6%), 15 (7.35%), and 10 (4.9%) for those between 51 and 75 years, and >75 years for those between 19 and 25 years.

Figure 1: Age wise distribution in study group



Out of 204 maximum number was male 112 (54.9%) followed by females were 92 (45.1%) respectively, as shown in (figure 2).

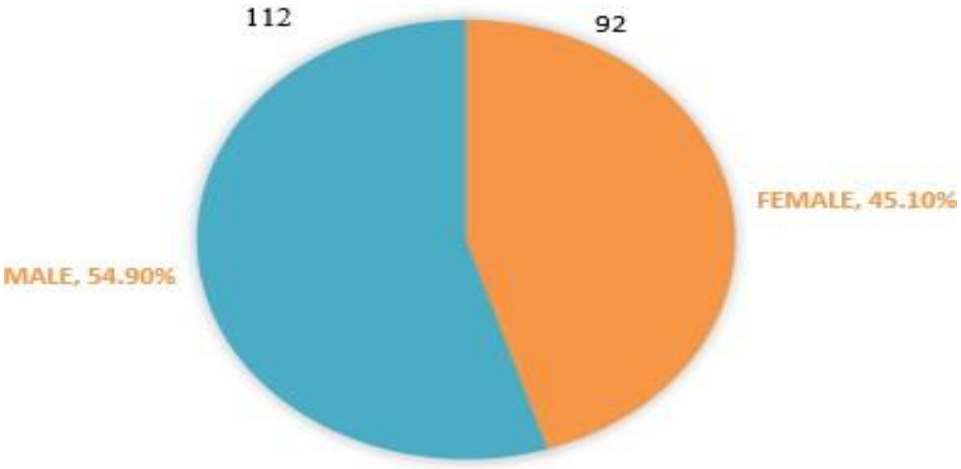


Figure 2: Gender wise distribution

Out of 204 maximum number were moderately anemic were 128(62.7%) followed by severely anemia were 63 (30.9%), mildly anemic were 13(6.4%) respectively, as shown in (figure 3).

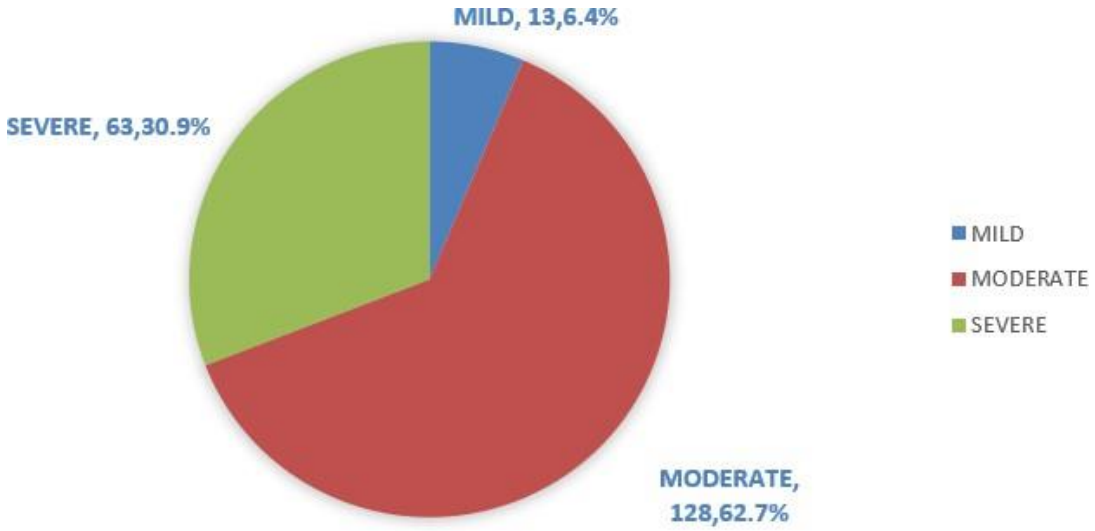


Figure 3: Categorization of Anemia severity

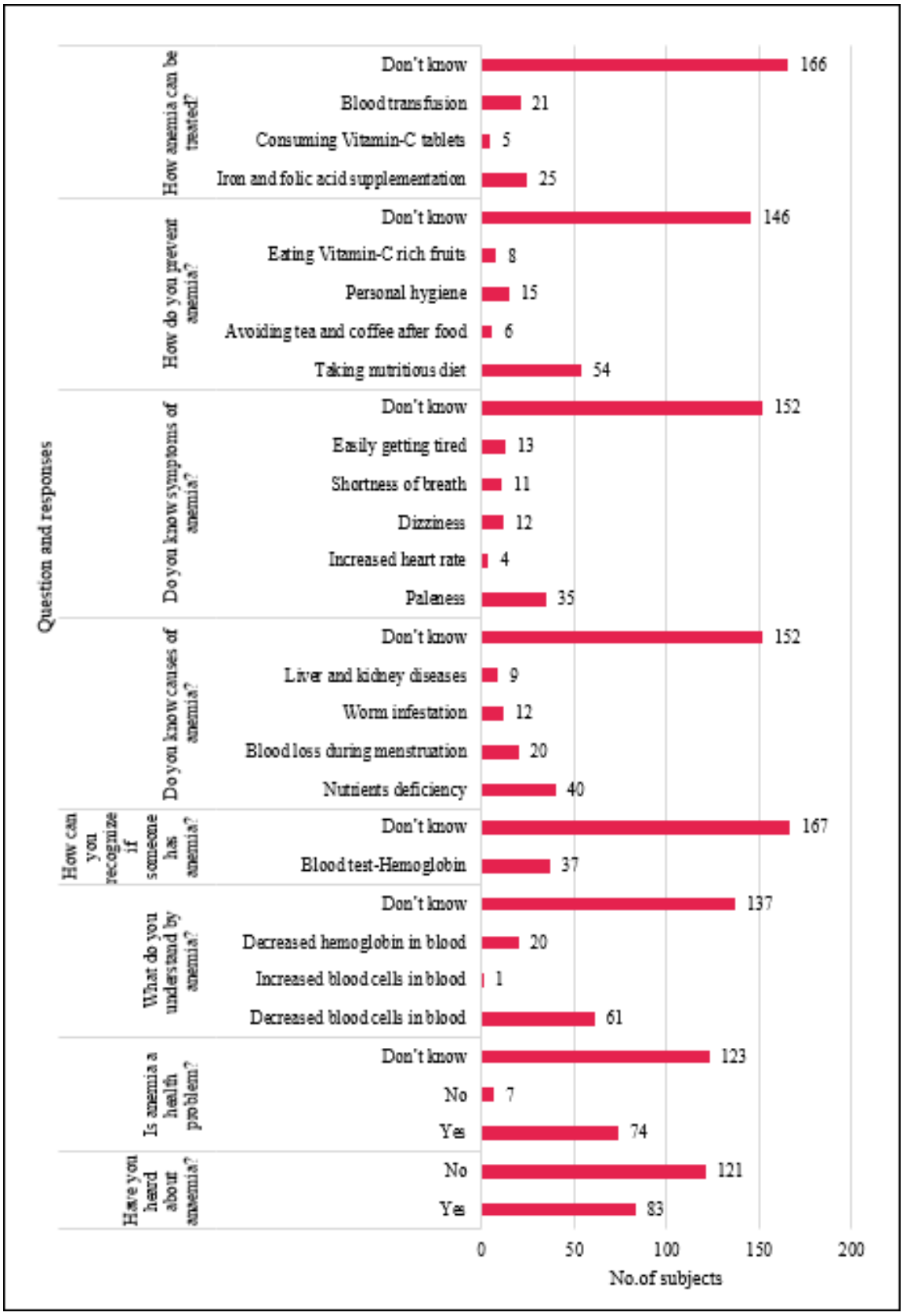


Figure 4: Graphical representation of responses to knowledge-based questions

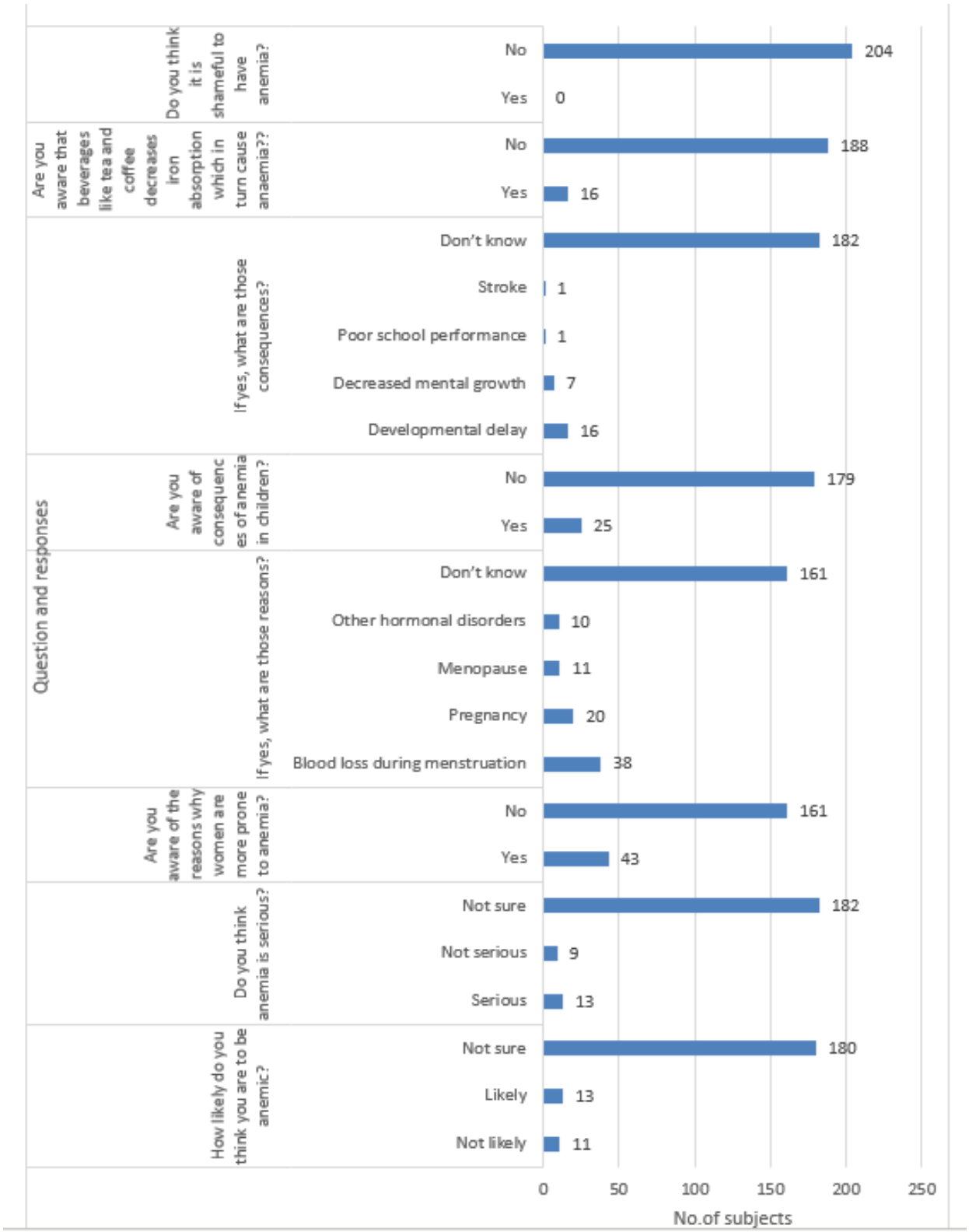


Figure 5: Graphical representation of response to attitude-based questions

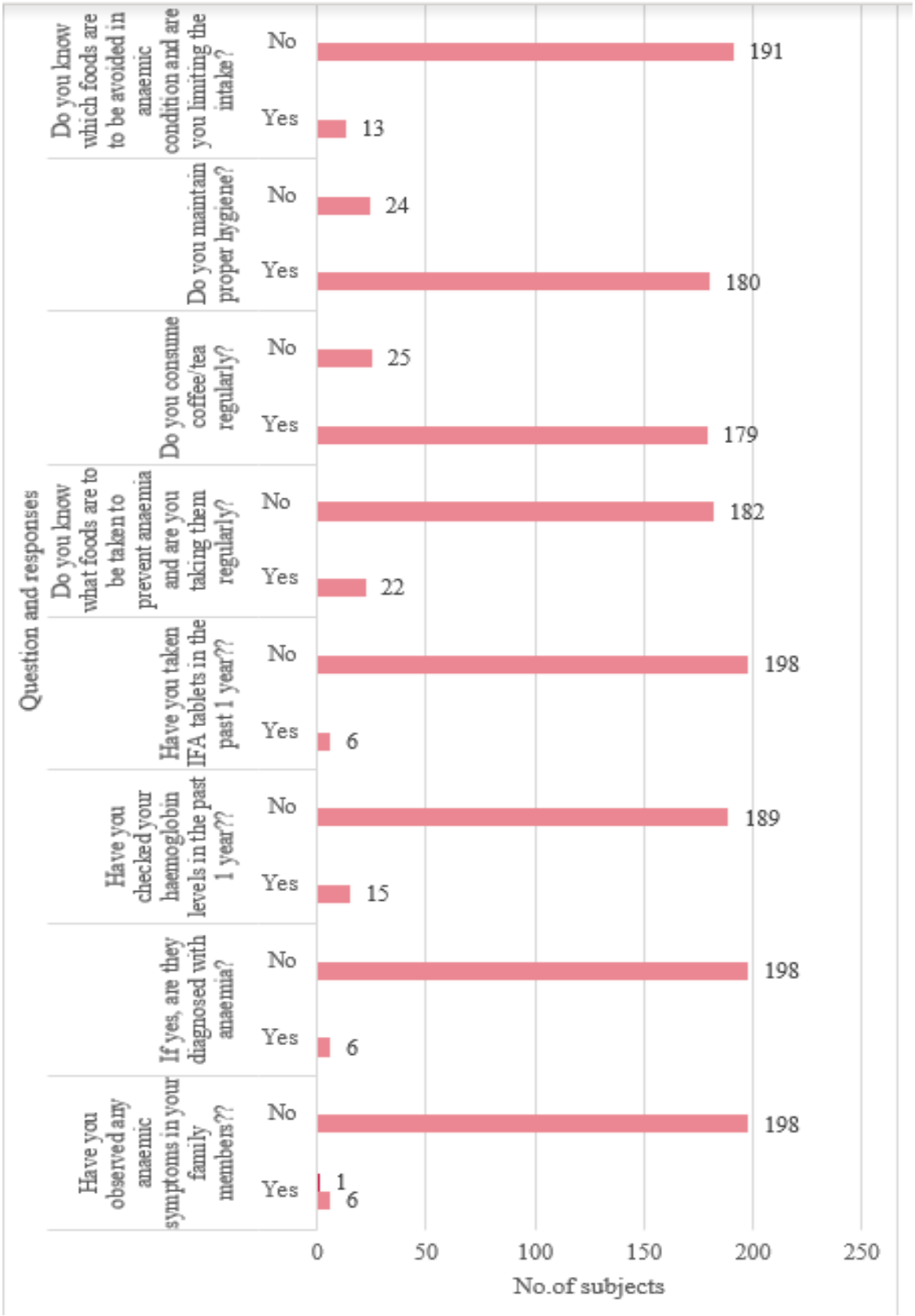


Figure 6: Graphical representation of response practice-based questions

DISCUSSION:

Based on the information, attitudes, and practices gathered from the questionnaire, our study illustrates the ignorance and lack of awareness regarding anemia. A significant number of people are not aware that anemia is a medical condition. Utilizing specifically created patient information pamphlets, we improved the patients' quality of life by educating them about anemia.

For both male and female patients, our study assesses the prevalence of anemia and shows how different domains affect the severity of anemia in anemic individuals. There are 204 anemia patients in all included in the study's framework. The age group with the highest percentage of hospitalized patients was 26–50 years old (90), followed by 51–75 years old (89), >75 years old (15), and 19–25 years old (10).

The study found that a significant proportion of patients (62.7%) had moderate anemia, followed by severe anemia (30.9%) and light anemia (6.4%). High rates of anemia are caused by a number of causes, including low dietary intake of iron and folic acid, poor iron absorption, and ongoing blood loss from infections.

The most common diagnostic method used for all admissions was CBC, with hemoglobin being the primary factor taken into account. Our study employed a structured questionnaire to gather information on household food security, individual dietary diversity, and sociodemographic factors. This information was compared to a comparable study [7,8].

The study's findings recommend that in order to spread appropriate anemia knowledge, a vigorous nutrition and health education campaign be launched. The occurrence of anemia can be significantly decreased by health professionals' ongoing education, which may lead to changes in patients' eating patterns, adjustments to contraceptive methods, and guarantees of early registration and frequent follow-up.

CONCLUSION:

Patients' practices, attitudes, and knowledge are evaluated in the current study. Together with classifying anemias according to severity, it shows the prevalence of anemias according to age and gender. According to our findings, the research population's higher risk of anemia is significantly influenced by their lack of knowledge about the condition. The results of our study suggest that anemia significantly lowers quality of life and primarily has a negative effect on physical health. In order to stop the increased risk of anemia, it is our responsibility as clinical pharmacists to offer counseling. According to our research, frequent attempts at dietary advice for anemia may help to avoid more difficulties. Anemia should receive more consideration in therapeutic settings from a practical standpoint.

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