



Knowledge, attitudes and practices on the use of European Number System and International Numbering System for coding food additives, among medical students of the Faculty of Medicine, University of Kelaniya.

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Introduction

Food additives are natural or synthetic substances which are added to food items to increase the durability & properties. When labeling food additives are cited on ingredient section using E-numbers or INS. The literature suggests consumers do not appear to pay attention to labeling information.

Objective

To describe the knowledge on the use of European Number and International Numbering System for coding food additives among the medical students of Faculty of Medicine University of Kelaniya

Method

Design - Cross sectional descriptive study

Study setting - Faculty of Medicine, University of Kelaniya

Study period - From December 2019 to January 2020

Study population - Medical undergraduates at the Faculty of Medicine, University of Kelaniya.

Sample size: 384

Sampling technique - Simple random sampling

Data collection instrument - MCQ & check list type questionnaire focused on responder's knowledge on food labelling, food additives and E number and INS coding systems.

Data collection - Self administrated questionnaire

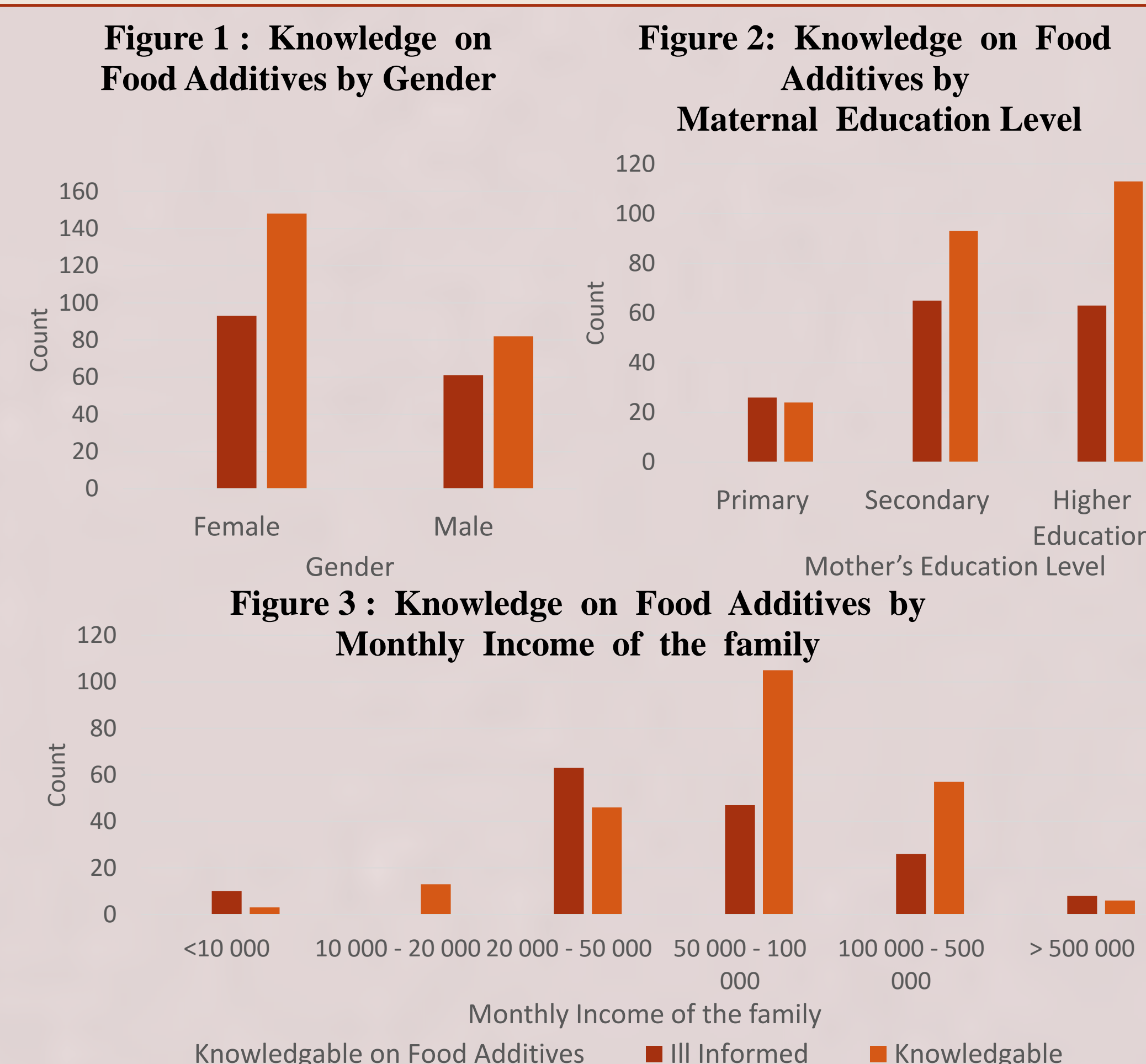
Data processing & Analysis - Descriptive statistics used to recognize the distribution of the students demographic factors collected during the study. Data was analyzed using IBM SPSS Statistics (version 25) statistical software.

Results

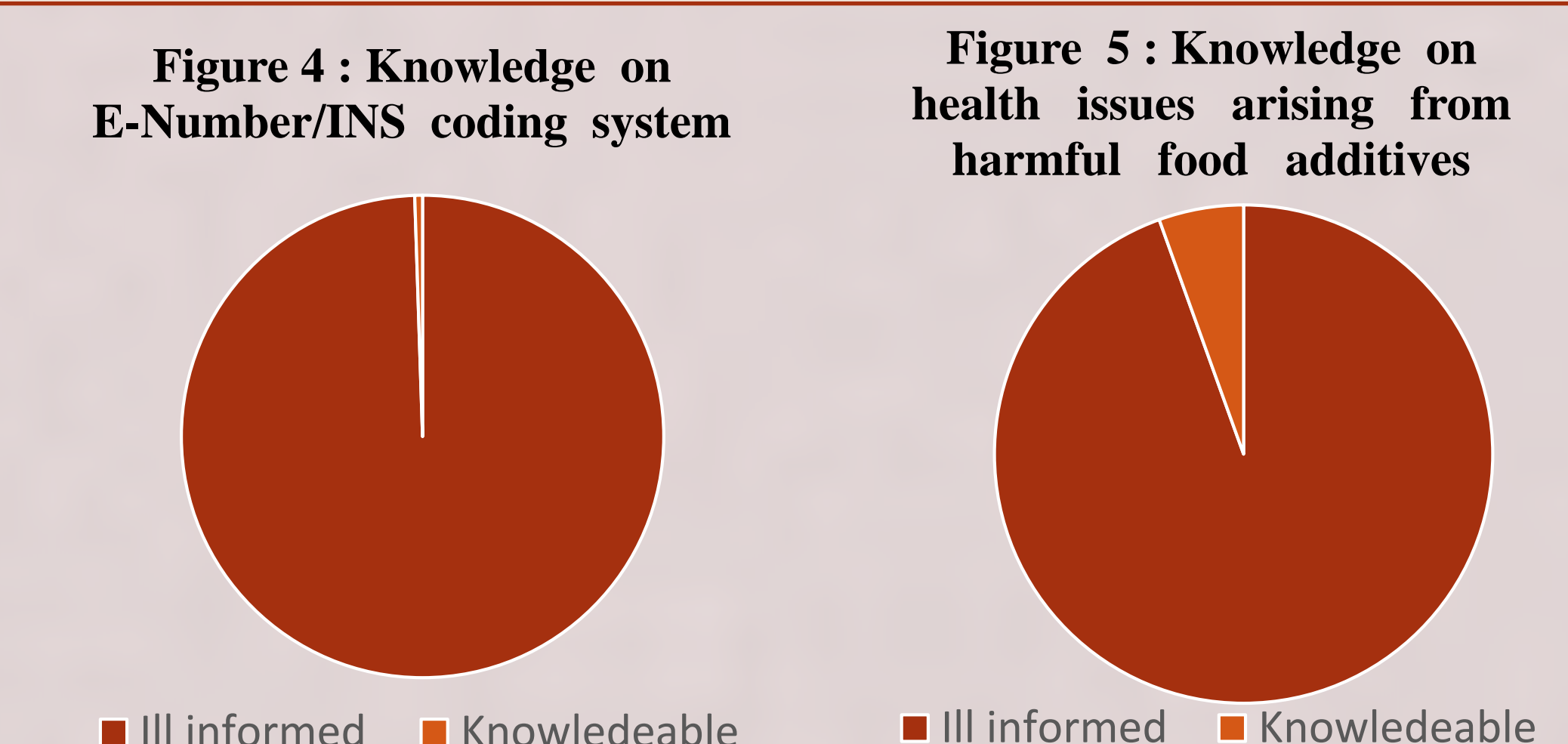
Table 1 : Basic demographic data of the study population.

		Number	Percentage (%)
Gender	Female	241	62.8
	Male	143	37.2
Mother's education	Primary	50	13.0
	Secondary	158	41.1
	Tertiary	176	45.8
Monthly income of the family (Rs.)	<10 000	13	3.4
	10 000 – 20 000	13	3.4
	20 000 – 50 000	109	28.4
	50 000 - 100 000	152	39.6
	100 000 – 500 000	83	21.6
	>500 000	14	3.6

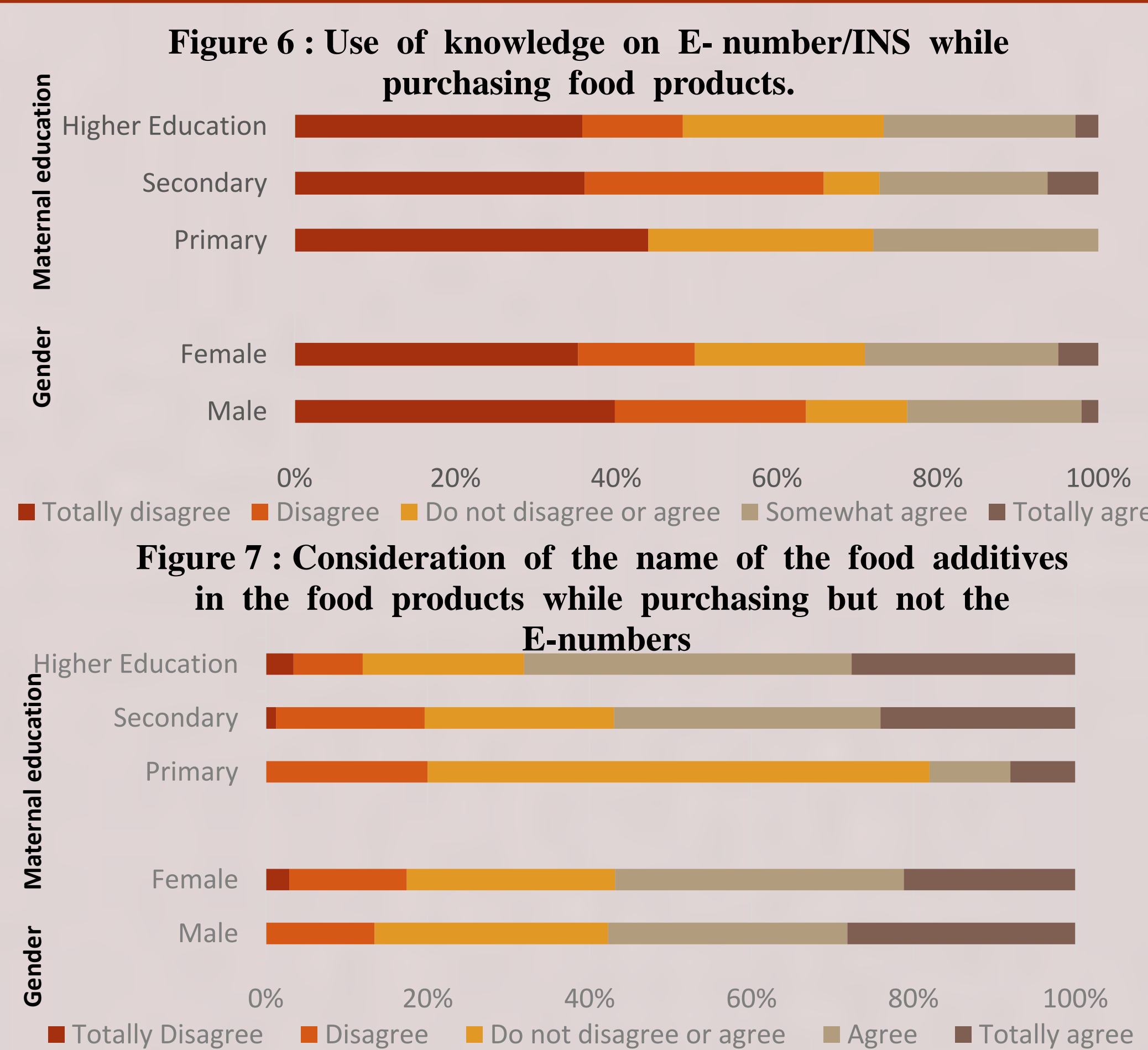
Knowledge on food additives was higher among females (Figure 1), students of mothers with higher education (Figure 2) and students with monthly family income between Rs.50,000-100,000. (Figure 3)



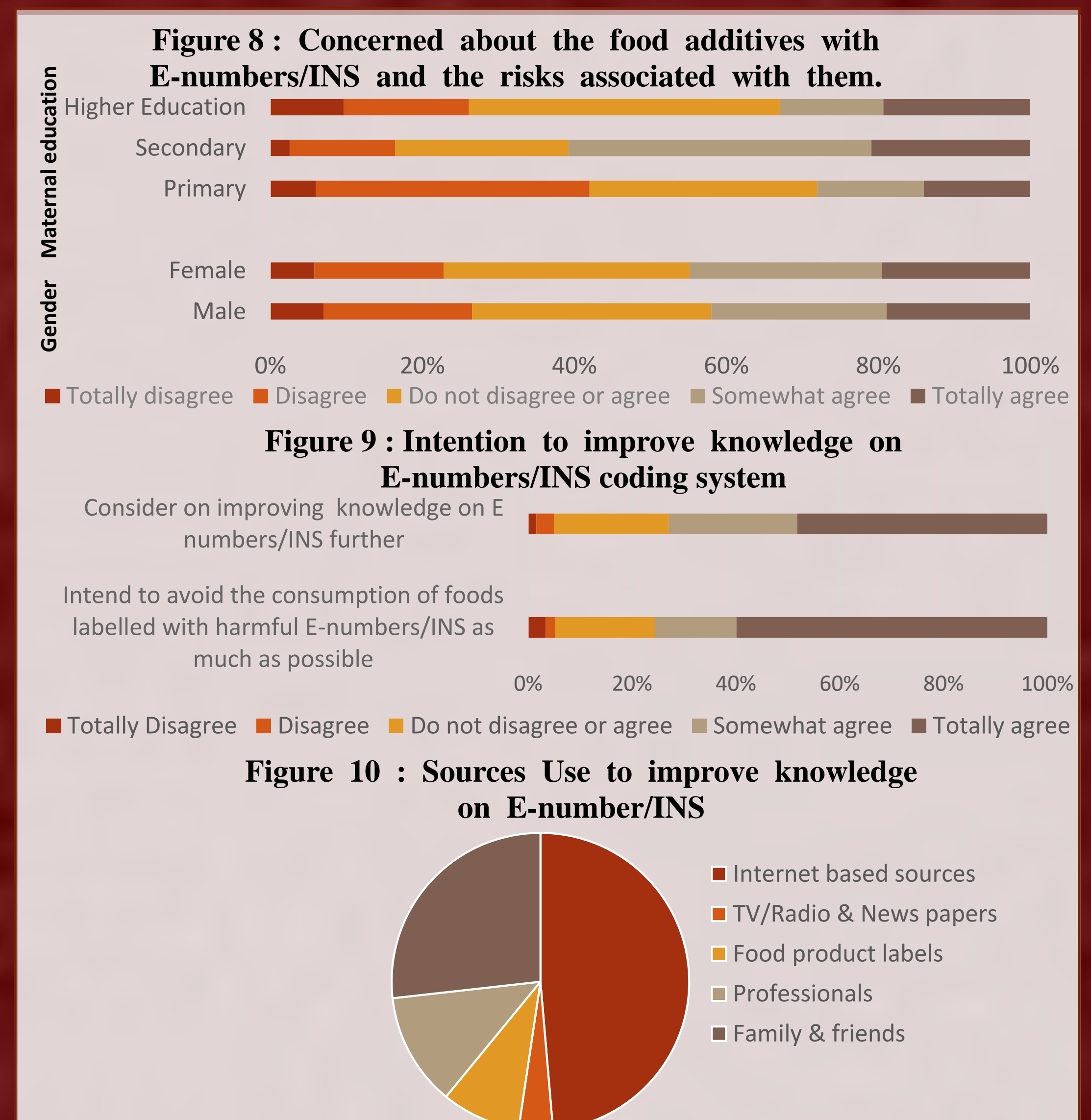
Majority of the population is ill informed on E-numbers / INS coding system and health issues arising from harmful food additives. (Figure 4 and Figure 5)



Varying degree of use of knowledge on E-numbers/INS when purchasing food items observed but the most of the study population did not care about the E numbers other than the name of the food additive (Figure 6 and Figure 7)



Out of 158 students of mother's with secondary education, 61% of students were concerned about the food additives with the E-number/INS code and the risk associated with them. When considering the whole study population more than 50% were concerned with the risk associated with E-number/INS coded food additives. (Figure 8)



Conclusion

Majority of the population was ill informed on E-Numbers and INS coding system irrespective of gender, maternal education level and monthly income of the family. Most of them used their knowledge on food additives while purchasing food products rather than using the knowledge on E-numbers. There was no significant variance in the knowledge on health issues arising from harmful food additives between gender, mother's education level and monthly income of the family. Most of them were intended to use internet based sources to improve their knowledge on E-number/INS coding system.

Recommendation

Publish a poster in faculty canteen to improve the knowledge on E-Numbers and INS coding system among the medical students.

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