



**Knowledge and Awareness of Impacted Teeth among General  
population –A Questionnaire Study  
APDCH, MELMARUVATHUR**

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**ABSTRACT**

Introduction:

Third molar impaction and associated dental problems is a common complaint by the patients in dentistry. The diagnosis and management of wisdom teeth impaction and its pathologies are always unique and need attention. Impacted Wisdom teeth occur because of a lack of space, obstruction, or abnormal position. The objective of this study was to assess the Knowledge and awareness of wisdom teeth among patients of Adhiparasakthi Dental College and Hospital, Melmaruvathur.

## Materials and Methods

A cross-sectional Study was conducted among the patients [18 years to 40 years] of Adhiparasakthi Dental College and Hospital from May 2022 to August 2022. A structured questionnaire was framed with total 15 questions. After the collection of data, the data were organized in excel and analysed with Statically package of social sciences [ SPSS] and results were obtained.

## Results:

The study population was 100 patients with 49 % male and 51% females. There is no significant difference between males and females. Only 50% of the population were aware of the term wisdom tooth and 40% were aware about the problems associated with wisdom tooth and its treatment should be done by Oral and Maxillofacial Surgeons. A majority of the patients were not aware and did not have enough knowledge in the management of impacted third molar. Hence the P value  $<0.05$  are statistically significant.

## Conclusion:.

A greater effort into making the patients aware about the knowledge of wisdom teeth must be imparted. Knowledge regarding eruption and the indications of removal and diagnosis imparts a significant difference in the quality of management of these patients.

**Keywords:** Awareness, Wisdom teeth, Third molar, Impaction, Oral and Maxillofacial Surgeon

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## INTRODUCTION

An impacted tooth is defined as one that is prevented from erupting in to normal occlusal level due to lack of space in the arch which can cause pain and swelling of teeth and may also cause destruction of adjacent teeth and bone <sup>1,2,3</sup>. Among all the teeth, the third molars are the last to erupt with high chance of being impacted. Hence, the surgical extraction of the impacted teeth has become the most common dentoalveolar surgeries.

To provide standard care with the problems of the wisdom tooth, firstly the patients should have good knowledge and awareness about the eruption and to whom the problems of wisdom tooth should be consulted. When there is Proper Insight towards the dental surgical treatments among public there will be greater improvement in the oral health. Hence the main objective of the study was to know the awareness among the dental patients about the presence of wisdom teeth, and their attitude towards removal of wisdom teeth and to assess the importance of its removal for good dental health.

## METHODOLOGY

A cross-sectional study was performed among dental patients who reported to the Adhiparasakthi Dental College and Hospital Melmaruvathur. The questionnaire was designed that comprised of fifteen questions pertaining to the knowledge and awareness of wisdom teeth. The questionnaire was

divided into three parts, first part involving the perception of wisdom teeth, second part involving diagnosis and the last part involving the management of wisdom teeth. The questionnaire was then distributed among 100 dental patients. Respondents were asked to indicate any one of the options given. The results were collected and analysed using statistical analysis of social sciences. The study was done between May 2022 to August 2022.

#### Statistical analysis

The collected data was validated, tabulated and analysed with Statistical Package and results were obtained. Categorical variables were expressed in frequency and percentage and continuous variables chi-square test was used to test associations between categorical variables. P value < 0.05 was considered statistically significant.

#### **DISCUSSION:**

Third molars are the most commonly impacted teeth, and their removal is the most commonly performed procedure in oral and maxillofacial surgery<sup>4,5,8,9,10</sup> This study was conducted to explore the awareness about tooth Impaction among the patients in our college. Impacted teeth are those that fail to erupt in the dental arch within expected time<sup>6,7,8</sup>. The impacted teeth may remain embedded in the alveolar bone either completely or incompletely, thus failing to erupt fully into the oral cavity within expected time if its path of eruption is obstructed by bone, soft tissue, or any other pathology<sup>6,7,8</sup>.

The primary reasons to remove impacted teeth are to correct associated pathology and to intercept reasonably expected pathological process.<sup>11,12,13</sup>

There is also general agreement that third molar teeth that are completely erupted and functional, painless, free of caries, in hygienic position with a healthy periodontium, without other associated pathologic conditions, are disease-free teeth that may not require extraction but do require hygiene maintenance and periodic clinical and radiographic surveillance if retained.<sup>14,15,16</sup>

Mandibular 3<sup>rd</sup> molar is the most frequently affected teeth in the dental arch. Sometimes canine and premolar may also involve. Third molars are the last teeth to erupt, which can get complicated due to lack of space in the dental arch.<sup>17,18,19,20</sup> Each individual impacted third Molar removal requires careful examination and evaluation. Periodontitis and pocket depth between the impaction and 2<sup>nd</sup> Molar is present, early extraction should be done to scale back the periodontal damage. Extraction of third molars prophylactically should be supported as an estimate of the balance between the likelihood of retained third molars causing problems within the longer term and therefore the risks or advantages of Surgery administered earlier compared with later.<sup>17,18,19,20,21</sup>

So that there will be predominant incidence of symptoms associated with third molars during the 2<sup>nd</sup> to 4<sup>th</sup> decades than any other tooth. The main aim of the study was to evaluate the awareness and knowledge of wisdom teeth and the time of eruption and management. While the nomenclature of wisdom teeth was aware by majority, there was variability with the Respondents on the indications and management of Impacted wisdom teeth.



The gender distribution was 49% (49) male and 51% (51) female among the respondents.[Figure 1] Among the population, Knowledge and awareness of wisdom teeth are more among the females than males. Females were aware that wisdom tooth eruption takes place above 18 years and also that the problems associated with wisdom teeth are consulted with oral surgeons and had better knowledge that removal of third molars won't affect the general health.

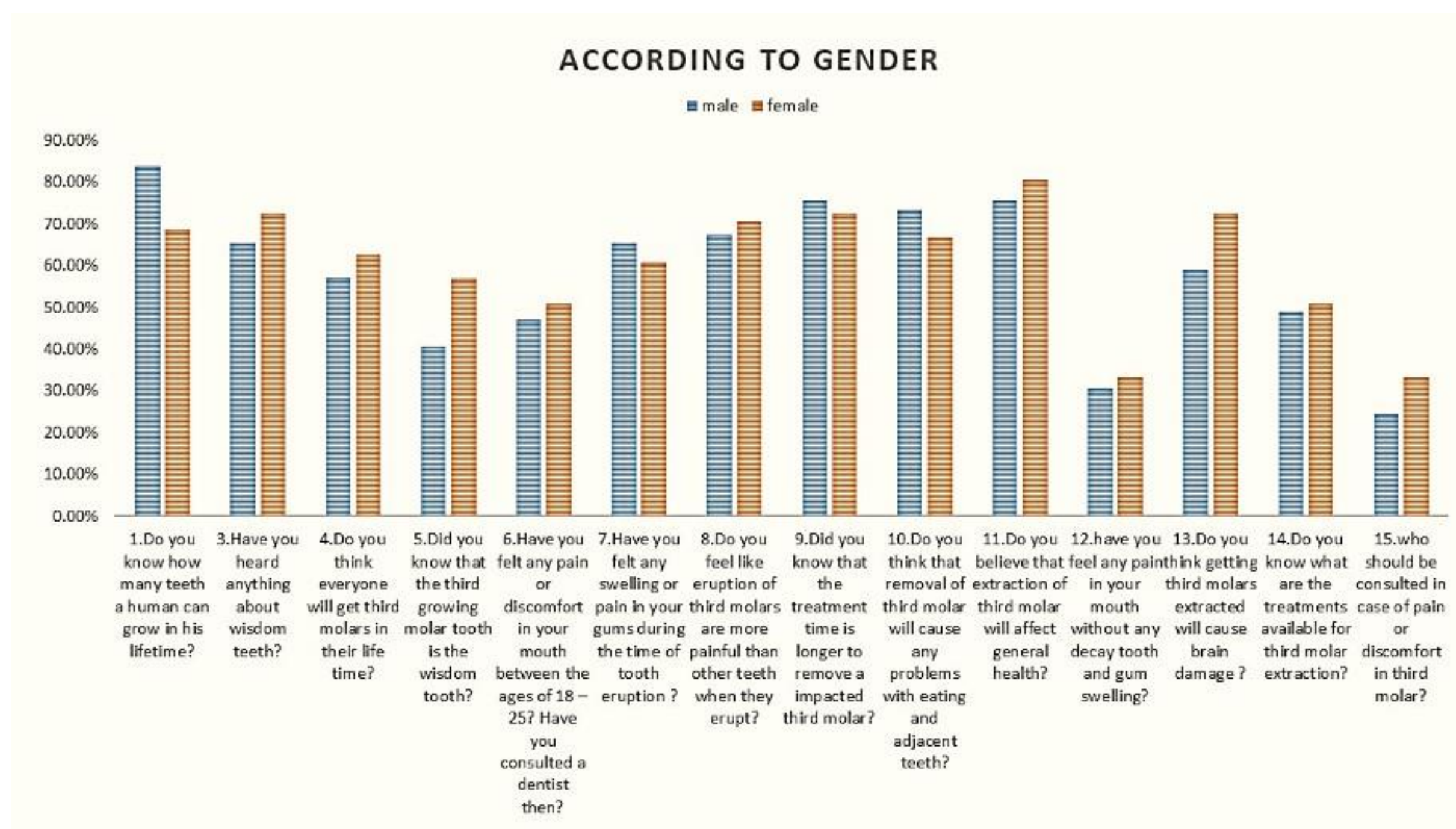


Figure 1 depicts the gender distribution and answers given by the population According to educational status we divided the study population into 5 groups as graduate, diploma, high school, middle school and illiterate.

Among all, only graduates and diploma were aware that human can grow 32 teeth in his /her life time. Graduates were majorly aware that third molar problems should consulted by an oral surgeon, about the treatments of removal of third molar and have knowledge that removal of third molar won't affect general health. Among all Illiterate and comparatively middle school population were least aware. Regarding this, the p value < 0.05 were statistically significant.



Table 1 shows the data of the study according to the educational status of the population

Questions	Graduate(45)		Diploma(27)		High school(10)		Middle school(16)		Illiterate(2)		P value
	yes	no	yes	no	yes	no	Yes	no	ye s	No	
Qn3.Have you heard anything about wisdom teeth?	75.4%	24.6%	28.6%	71.4%	40%	60%	81.6%	12.5%	0%	100%	0.003*
Qn4.Do you think everyone will get third molars in their life time?	66.2%	33.8%	28.6%	71.4%	50%	50%	56.2%	43.8%	50%	50%	0.315
Qn5.Did you know that the third growing molar tooth is the wisdom tooth?	52.3%	47.7%	14.3%	85.7%	40%	60%	62.5%	37.5%	0%	100%	0.175
Qn6.Have you felt any pain or discomfort in your mouth between the ages of 18 – 25? Have you consulted a dentist then?	53.8%	46.2%	85.7%	14.3%	50%	50%	43.8%	56.2%	50%	50%	0.418
Qn7.Have you felt any pain in your mouth in empty spaces at end row of upper and lower teeth with gum swelling?	63.1%	36.9%	85.7%	14.3%	70%	30%	50%	50%	50%	50%	0.520
Qn8.Do you feel like eruption of third molars are more painful than other	72.3%	27.7%	85.7%	14.3%	60%	40%	56.2%	43.8%	50%	50%	0.446



teeth when they erupt?												
Qn9.Did you know that the treatment time is longer to remove a impacted third molar?	73.8 %	26.2 %	85.7 %	14.3%	70%	30%	75%	25%	50 %	50%		0.909
Qn10.Do you think that removal of third molar will cause any problems with eating and adjacent teeth?	35.4 %	65.6 %	0%	100%	0%	100 %	43.8 %	56.2 %	0%	100%		0.034*
Qn11.Do you believe that extraction of third molar will affect general health?	15.4%	84.6 %	28.6 %	71.4%	20%	80%	43.8 %	56.2 %	50 %	50%		0.103
Qn12.have you feel any pain in your mouth without any decay tooth and gum swelling?	29.2 %	76.8 %	14.3%	85.7 %	50%	50%	62.5 %	37.5 %	50 %	50%		0.559
Qn13.Do you think getting third molars extracted will cause brain damage ?	38.5 %	61.5 %	28.6 %	71.4%	30%	70%	75%	25%	0%	100%		0.755
Qn14.Do you know what are the treatments available for third molar extraction?	63.8 %	36.2 %	48.6 %	51.4%	30%	70%	16.2%	83.8 %	50 %	50%		0.502
Question	Graduate (45)		Diploma (27)		High school (10)		Middle school (16)		Illiterate (2)		P value	
	Correct response	Incorrect response	Correct response	Incorrect response	Correct response	Incorrect response	Correct response	Incorrect response	Correct response	Incorrect response		
Qn1.Do you know how many teeth a human can grow in his lifetime?	86.2 %	13.8%	71.4%	28.6%	40%	60%	68.8%	31.2%	50%	50%		0.002*
Qn15.who should be consulted in	67.5 %	32.5%	34.8%	65.2%	25%	75%	20%	80%	0%	100%		0.002*



case of pain or discomfort in third molar?

Note : P value \* < 0.05 are statistically significant

According to the Occupation, population analysed as skilled worker, unskilled worker, semi professional and unemployed

Semi-professionals were aware about the third molar eruption during 18 -25 years, and of consulting oral surgeons with regarding the problems of wisdom teeth and knew the treatments for removal of third molars and agreed that removal of third molar won't affect the general health. Of all unskilled workers were least aware. The p value < 0.05 were statistically significant. [table 2]

Table 2 shows the data of the study according to the occupational status of the population

Questions	Semi professional(34)		Skilled worker(29)		Unskilled worker(14)		Unemployed(21)		P value
	Yes	No	yes	no	Yes	No	yes	No	
Qn3.Have you heard anything about wisdom teeth?	86.7%	13.3%	58.3%	41.7%	33.3%	66.7%	29.1%	70.9%	0.210
Qn4.Do you think everyone will get third molars in their life time?	70.8%	29.2%	45.8%	54.7%	39.3%	60.7%	30.8%	69.2%	0.297
Qn5.Did you know that the third growing molar tooth is the wisdom tooth?	70.8%	29.2%	45.8%	54.7%	33.3%	66.6%	17.8%	82.2%	0.032*
Qn6.Have you felt any pain or discomfort in your mouth between the ages of 18 - 25? Have you consulted a dentist then?	60%	40%	33.3%	66.7%	66.6%	33.3%	55.8%	44.2%	0.615
Qn7. Have you felt any pain in your mouth in empty spaces at end row of upper and lower teeth with gum swelling?	66.7%	33.3%	70.8%	29.2%	100%	0%	65.1%	34.9%	0.138



Qn8.Do you feel like eruption of third molars are more painful than other teeth when they erupt?	83.3%	16.7%	66.7%	33.3%	100%	0%	65.1%	34.9%	0.117
Qn9.Did you know that the treatment time is longer to remove a impacted third molar?	79.2%	20.8%	63.3%	36.7%	33.3%	66.6%	22.4%	77.6%	0.131
Qn10.Do you think that removal of third molar will cause any problems with eating and adjacent teeth?	20.8%	79.2%	33.3%	66.7%	33.3%	66.7%	68.9%	38.1%	0.132
Qn11.Do you believe that extraction of third molar will affect general health?	12.5%	87.5%	16.7%	83.3%	66.6%	33.3%	25.6%	74.4%	0.252
Qn12.have you feel any pain in your mouth without any decay tooth and gum swelling?	29.2%	70.8%	16.7%	83.3%	33.3%	66.7%	37.2%	62.8%	0.191
Qn13.Do you think getting third molars extracted will cause brain damage ?	15.8%	84.7%	41.7%	58.3%	66.6%	33.3%	78.6%	21.6%	0.244
Qn14.Do you know what are the treatments available for third molar extraction?	70.7%	29.3%	54.7%	45.8%	33.3%	66.6%	24.2%	75.8%	0.281

Questions	Semi professionals (34)		skilled worker(29)		Unskilled workers(16)		Unemployed(21)		P value
	Correct response	Incorrect response	Correct response	Incorrect response	Correct response	Incorrect response	Correct response	Incorrect response	
Qn1.Do you know how many teeth a human can grow in his lifetime?	100%	0%	83.3%	16.7%	58.2%	41.8%	39.5%	60.5%	0.002*



Qn15.who should be consulted in case of pain or discomfort in third molar?	79.2%	20.8%	66.7%	33.3%	29.2%	70.8%	12.6%	87.4%	0.009*
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Note : P value\* < 0.05 are statistically significant

### Results:

The study population was 100 patients with 49 % male and 51% females. There is no significant difference between males and females. Only 55% of female and 45% of male[figure 2] were aware about wisdom tooth and the problems associated with it and only 79% of graduated people[figure 3,4] its treatment should be done by Oral and Maxillofacial surgeons, others are unaware. A majority of the patients were not aware and did not have enough knowledge in the management of impacted third molar. Hence the P value <0.05 are stastically significance.

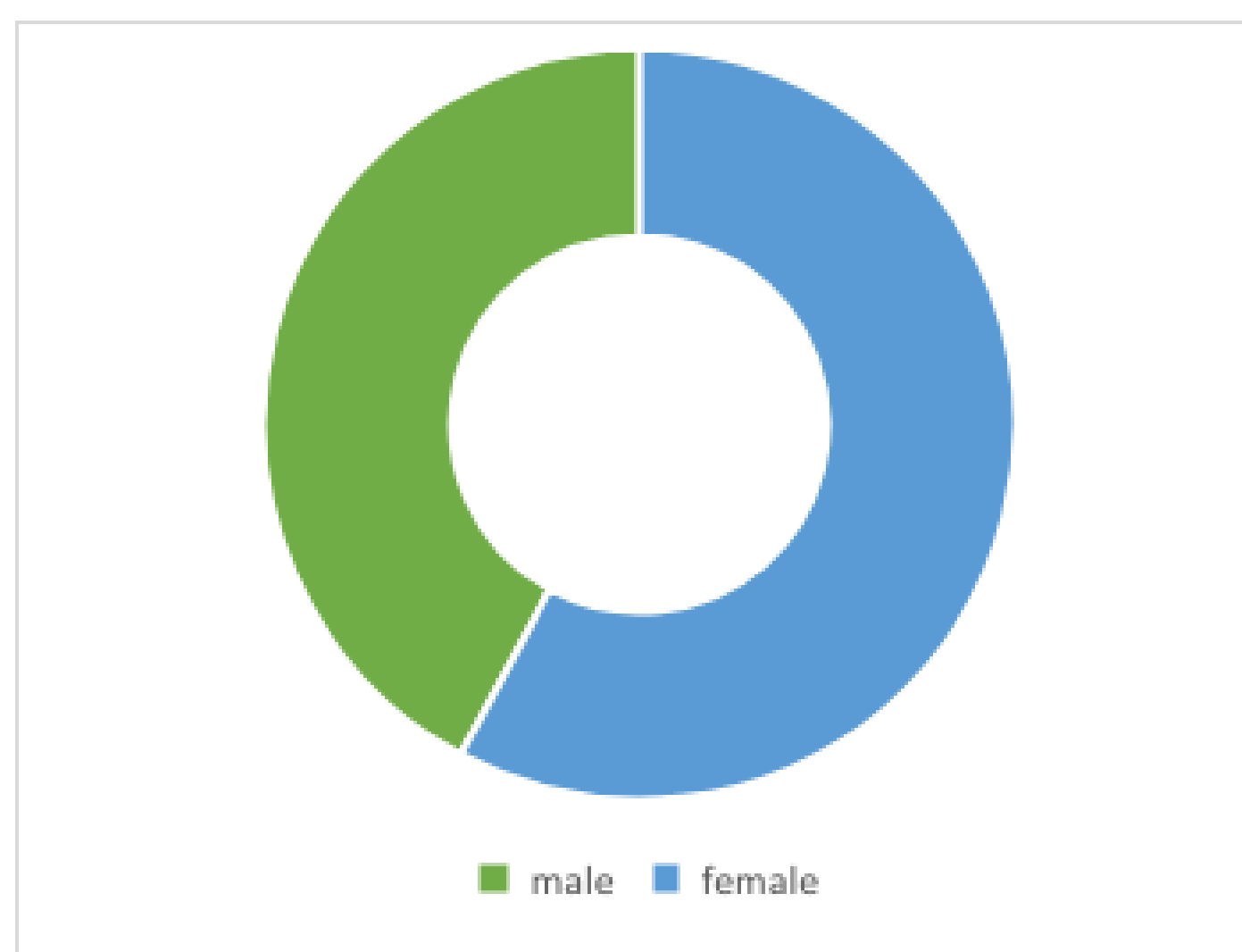


Figure 2 shows that Female were more aware of impacted tooth than males among the population

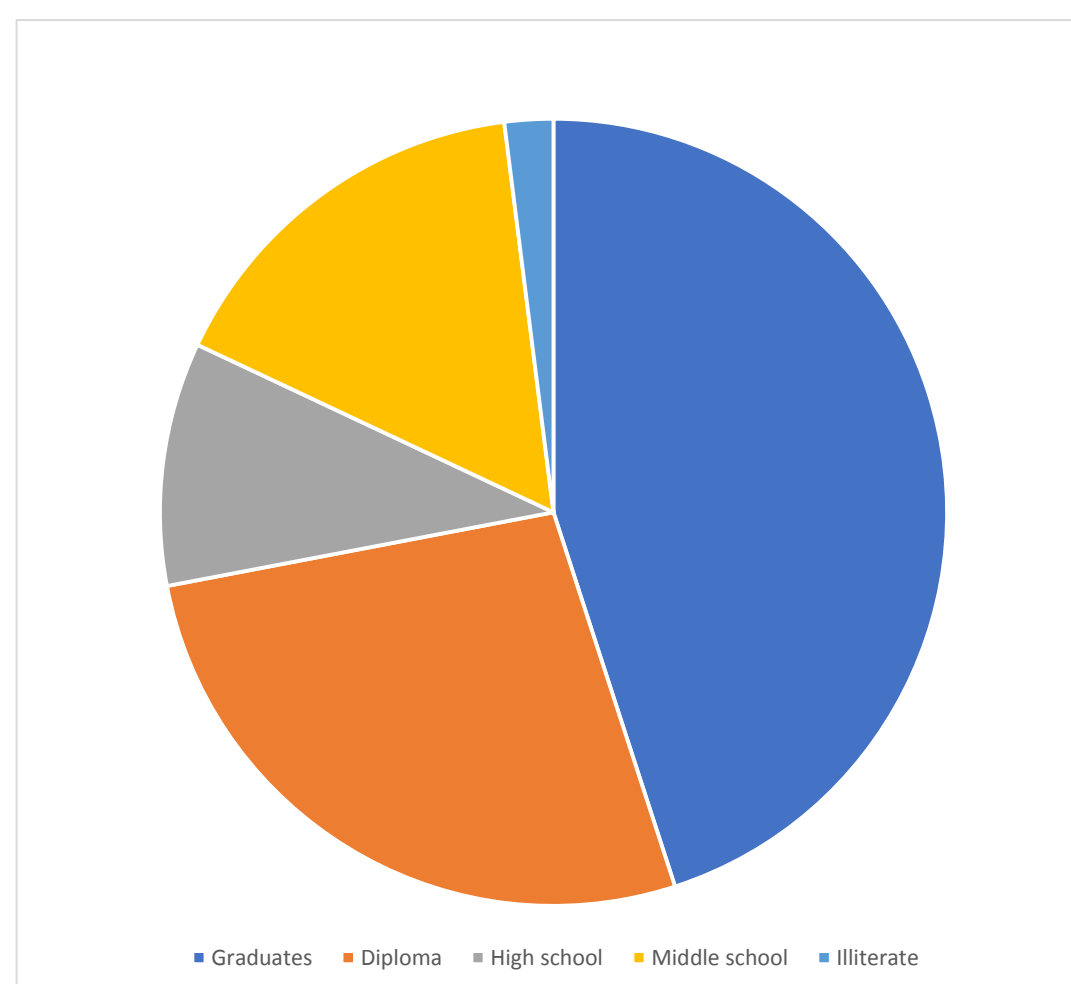


Figure 3 shows that graduate people were more aware and illiterate people were the least aware among the study population

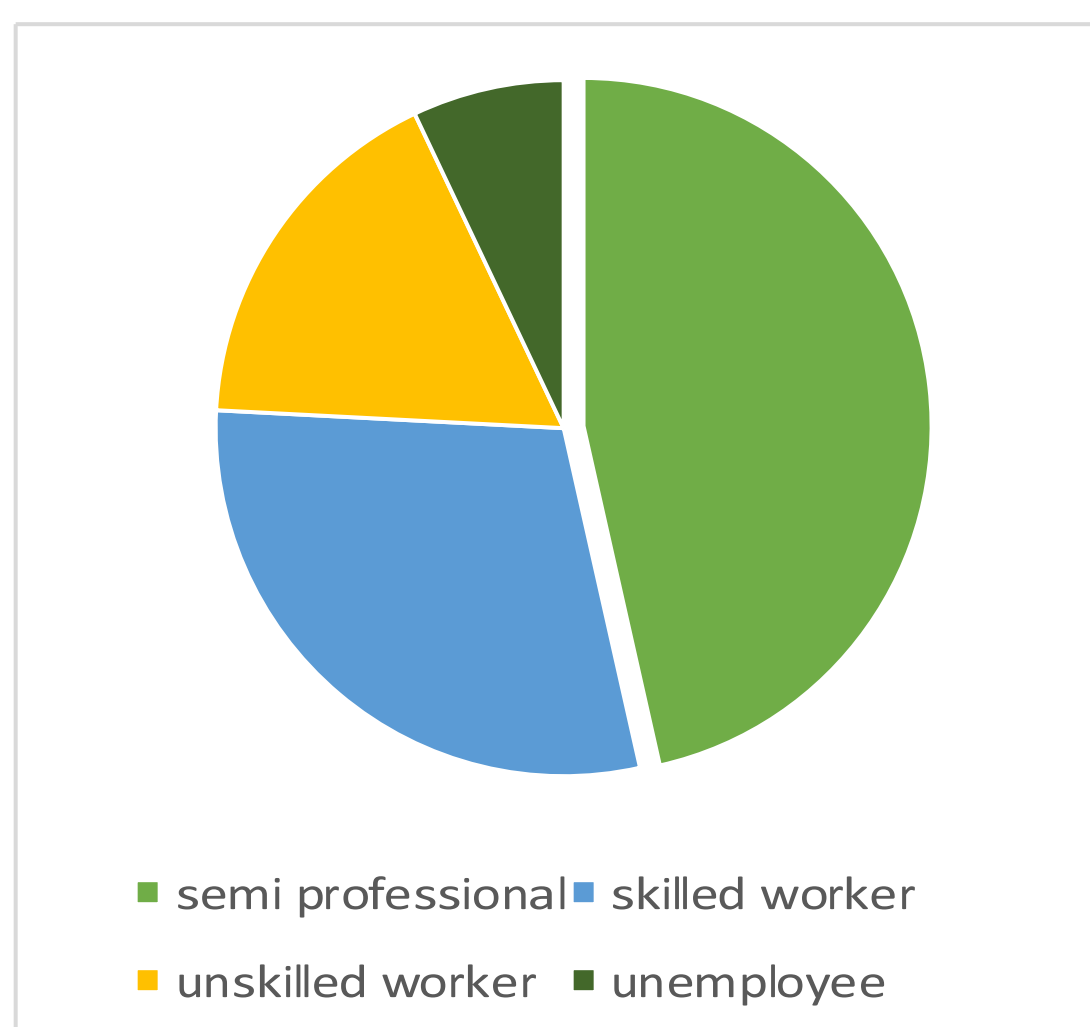


Figure 4 Shows that semi-professionals people were more aware about the Impacted tooth among the study population

Conclusion:



Within the limits of the study, it can be concluded that the dental patients aged between 18 years to 40 years did not have adequate awareness about the wisdom teeth eruption and treatment. Awareness should be created and efforts to improve the knowledge towards wisdom teeth and surgical treatment procedures should be taken. Therefore, awareness was created through pamphlets and distributed among the patients.





**Have you heard anything about wisdom tooth? Did you know that the third growing molar tooth is the wisdom tooth?**

Humans get 32 teeth in their lifetime. 8 incisors, 4 canines, 8 premolars and 12 molars.

3 molars usually grow at each quadrant. The third growing molar is termed as 'wisdom tooth'



**Do you think everyone will get third molars in their life time?**

Normally, everyone has four wisdom teeth that appear at the end of each row of the upper and lower teeth between the ages of 18-25 years. Females above the age of 18 and those who are about to get married are advised to consult their dentist regarding their oral health, as pregnant women are contraindicated for taking radiography and have complications in removal of tooth.



**Have you felt any pain or discomfort in your mouth between the ages of 18 – 25?? Have you feel any pain in your mouth in empty spaces at end row of upper and lower teeth with gum swelling?**

Due to late eruption, often there is a lack of space to grow. When they are prevented from reaching their functional position, they are deemed as impacted.

This impacted tooth will result in pain or discomfort, at that time getting consultation from dentist will reduce further impact.



**Did you know that removal of third molar will cause any problems with eating and other teeth? Do you believe that extraction of third molar will cause harm to the body?**

Temporary experience of pain, swelling, fatigue, tenderness, and limitation of mouth opening. The pain are usually tolerable and the swelling will get resolved after 3-4 days, medications are prescribed for it. Mouth opening exercises are demonstrated to manage mouth opening. This will not affect the general health.



**Do you think getting third molars extracted will cause brain disease?**

It is a biggest myth that getting any upper teeth extracted will affect the brain. The truth is any tooth extraction will reduce further risk, and it will not provide any risks.



**Do you know what treatments are available for third molars removal? Did you know that the treatment time is longer to remove an impacted third molar?**

If impacted wisdom teeth cause troubles like changes in tissues around the wisdom teeth, they need to be surgically removed. The procedure will take much longer time than normal extractions.

- Procedure: After the dentist/oral surgeon makes sure that you are completely numb, the dentist/oral surgeon will make a small cut in the gum around the wisdom tooth.
- To get access, the dentist/oral surgeon might drill the bone around the tooth. Additionally, the dentist/oral surgeon might cut the wisdom tooth into small pieces to remove it.
- During the procedure, you might experience some vibration and/or pressure. If you feel sore at any point just raise your hand and the surgeon will stop.
- After the removal, the dentist/oral surgeon will wash, inspect, clean out and smooth the bone before stitching your gum. Normally, the stitches will. You will be asked to bite on a moist piece of gauze.



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