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*Volume 5 Number 3*  
*September - December 2020*

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## Knowledge, Attitude and Practice Towards Foot Care Among Patients with Diabetic Mellitus between Urban and Rural Area

B Dheepa<sup>1</sup>, G Dinesh Kumar<sup>2</sup>, V Hemaltha<sup>3</sup>, S Gayathr<sup>4</sup>, K Ilakia<sup>5</sup>, K Indhumathi<sup>6</sup>,  
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B Dheepa, G Dinesh Kumar, V Hemaltha, *et al.*/Knowledge, Attitude and Practice Towards Foot Care Among Patients with Diabetic Mellitus between Urban and Rural Area. Community and Public Health Nursing. 2020;5(3):117-120.

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### Abstract

Diabetic mellitus is the third leading cause of death by diseases. People with diabetics are prone to foot problem because the disease can cause damage to the blood vessels and nerve. This in turn may result in decreased ability to sense trauma or pressure on the foot, so it is important to create awareness about foot care among diabetic patients. The present study was a comparative study to assess the level of knowledge, attitude and practice between urban and rural people towards foot care among patients with diabetes mellitus in selected areas of Puducherry.

*Materials and methods:* The research approach used for this study was quantitative research approach and descriptive research design was adopted. By using purposive sampling technique 60 samples (urban = 30 & rural = 30) were selected. The researchers used structured questionnaire to assess the level of knowledge, attitude and practice on foot care among the urban and rural people.

*Results:* According to the knowledge on foot care, more number of subjects 10(33.33%) are from urban area had adequate knowledge towards foot care when compared to the rural. According to the attitude towards foot care, more number of subjects 22(73.33%) are from urban area had positive attitude towards foot care when compared to rural. According to the practice towards foot care, more number of subjects 20(66.66%) are from urban area had adequate practice towards foot care when compared to rural area.

*Conclusion:* The major findings revealed that the subjects in urban area have adequate knowledge, attitude and practice towards foot care than the subjects in rural area.

**Keywords:** Foot Care; Diabetic; Attitude and Practice.

### Introduction

The human foot is a strong and complex mechanical structure with multiple movable parts and walks about hundred and ten thousand miles-three to

four times around the world in a lifetime. Diabetic mellitus is a metabolic disorder with heterogeneous aetiologies which is characterized by chronic hyperglycaemic and disturbances of carbohydrate, fat, and protein metabolism resulting from defects

in insulin secretion, insulin action or both. The long term relatively specific effects of diabetes include development of retinopathy, neuropathy and nephropathy. People with diabetes are also at increased risk of cardiac, peripheral, arterial and cerebrovascular diseases -WHO (2011)

Diabetic foot ulcer is a result of micro vascular and neuropathic complication in diabetes mellitus. It can lead to nerve damage in the feet and legs resulting in the loss of sensation. Any trauma or injury may not be felt and can even lead to serious problems such as ulcerations. Diabetic foot ulcers approximately develop in 50% of people with diabetes. 80% of lower limb amputation in diabetic patient is preceded by the development of foot ulcers (WHO).

The global diabetes prevalence in 2019 is estimated to be 9.3% (463 million people), rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045. The prevalence is higher in urban (10.8%) than rural (7.2%) areas.

Knowledge and skills acquired by patients have a significant impact on their therapeutic outcomes. Education is particularly important in chronic patients including patients with diabetic mellitus. The patients come to surgery very late with diabetic foot syndrome, and this leads serious consequences, for example sepsis or amputation of the lower extremity.

**Statement of the Problem**

A comparative study to assess the level of knowledge, attitude, and practice between urban and rural people towards foot care among patients with diabetic mellitus in selected areas of Puducherry.

**Objectives**

- To assess the level of knowledge, attitude and practice on foot care in urban and rural areas.
- To compare the knowledge, attitude and practice towards foot care between rural and urban people.
- To create awareness among the public regarding foot care.

**Materials and Methods**

- The quantitative research approach was

followed to conduct the study. A descriptive research design was used to assess the knowledge, attitude and practice of diabetic patient on foot care. The study was conducted in selected urban (Lawspet ) and rural (Sellipet) area in Puducherry. Totally 60 samples were selected (urban 30 and rural 30) using purposive sampling technique.

- After self introduction, the purpose of the study was explained to the subjects and requested their willingness and co-operation to participate in this study. The demographic data was collected and the level of knowledge, attitude and practice towards foot care was assessed from the subjects with the help of structured questionnaire. It took 20 to 30 minutes to collect the data from each subject.

**Results and Discussion**

*Demographic Data of the Subjects:*

Urban: The demographic data reveals that out of 30 subjects, 37% of them were in the age group of 50 to 70, 60% of them were male, 53% of them were illiterate, 63% of them were easy workers, 63% of them had family income less than 5000, 73% of them were married, 47% of them had the habit of smoking, 73% of them were non vegetarian, 53% of them had no history of diabetic mellitus and 40% of them had diabetic mellitus for a duration of 2 to 5 years.

Rural: The demographic data reveals that out of 30 subjects, 43% of them were in the age group of 50 to 70, 53% of them were female, 21% of them were illiterate, 37% of them were house hold workers, 73% of them had family income less than 5000, 67% of them were married, 40% of them had the habit of smoking, 80% of them were non vegetarian, 63% of them had no history of diabetic mellitus and 50% of them had diabetic mellitus for a duration of less than 5 years.

**Table 1:** Level of knowledge of the subjects in rural and urban areas. N=60

Variable	Urban (30)		Rural (30)	
	N	%	N	%
Adequate knowledge	10	33.33	5	16.66
Moderate knowledge	17	56.66	15	50
Inadequate knowledge	3	10	10	33.33

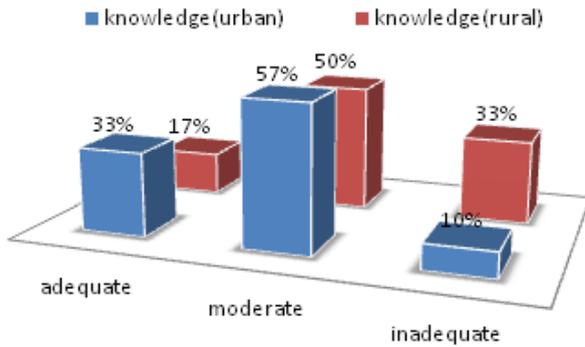


Figure 1: Distribution of the subjects by their knowledge.

According to the knowledge on foot care, more number of subjects 10(33.33%) from urban area had adequate knowledge towards foot care when compared to the rural as revealed by table 1.

Table 2: Level of attitude of the subjects in rural and urban areas.

Variable	Urban (30)		Rural (30)	
	N	%	N	%
Positive attitude	22	73.33	13	43.33
Negative attitude	8	26.66	17	56.66

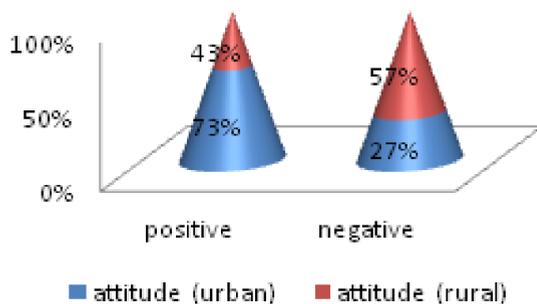


Figure 2: Distribution of the subjects by their attitude.

According to the attitude towards foot care, more number of subjects 22 (73.33%) are from urban area had positive attitude towards foot care when compared to rural as revealed by table 2.

Table 3: Level of practice of the subjects in rural and urban areas.

Variable	Urban (30)		Rural (30)	
	f	%	f	%
Adequate practice	20	66.66	14	46.66
Inadequate practice	10	33.33	16	53.33

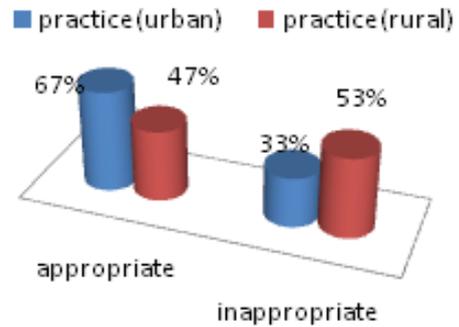


Figure 3: Distribution of the subjects by their practice.

According to the practice towards foot care, more number of subjects 20(66.66%) are from urban area had adequate practice towards foot care when compared to rural as revealed by table 3.

### Conclusion

The study results show that urban people have adequate knowledge, attitude and appropriate practices towards foot care when compared with the rural people. Researchers provided health education o the public through flip chart and created awareness regarding foot care mong the public.

The major findings revealed that, it was crystal clear that the subjects in urban area have adequate knowledge, attitude and practice towards foot care than the subjects in rural area.

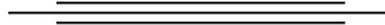
### Recommendations

- This study may be replicated on larger samples.
- The study can be done by using experimental designs.
- The same study can be conducted for a longer duration.
- The experimental study can be done by pre-test and post-test method.
- Similar study can be done over rural and urban areas separately.

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# Knowledge on COVID 19 Among Adults in the Selected Urban Community, Chennai

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## How to cite this article:

Madhurima D, M Hemamalini, C Nallathai. Knowledge on COVID 19 Among Adults in the Selected Urban Community, Chennai. *Community and Public Health Nursing*. 2020;5(3):121-125.

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## Abstract

COVID 19 is a newly emerged disease affecting the respiratory system and resembling the SARS disease. It has become a pandemic not less than 3 months from its first case reported in China. The study was carried out with the objectives to assess the knowledge on COVID 19 among adults in urban area of Chennai, Tamil Nadu. The study was conducted using quantitative approach with descriptive study design. 100 Adult men and women between 18 – 59 years of age willing to participate in the study were included using non probability convenient sampling. 65% of the participants were women, 49% were graduate and 46% of the participants were employed. Results of the study showed that about 55% of the participants had adequate knowledge and none of the demographic variables were associated with the level of knowledge on COVID 19 at  $p \leq 0.05$

**Keywords:** Covid-19; Adults; Pandemic; Disease.

## Introduction

Novel coronavirus had halted the whole world, brought rest to the busy cities and placed every human in the freeze mode. A new virus originated in the Wuhan city of China had travelled the whole world and made the health sector busy. The novel disease is termed as Corona Virus Infectious Diseases - COVID-19 also named as SARS-CoV-2. SARS-CoV-2 shares 79% sequence identity with SARS-CoV, the virus which caused a major outbreak in 2002–2003.<sup>1-3</sup> The most common symptoms of the current pandemic includes the fever, chest tightness and dyspnea and most of the patients experienced mild illness course.<sup>4</sup> The disease commonly spread

by the respiratory route through contact with the infected person. Virus has also been detected in patient stool samples.<sup>5</sup> The incidence and the mortality rates are being the breaking news everyday. Globally it has reached 61 million cases of which USA is the worst affected nation. India has reported its first case in Kerala on 30th January 2020 and slowly had its berth in other states from March 2020. In India, the active COVID positive cases has reached to the peak of 45,000 at an average per day during the month of September 2020. Free and rapid access to high quality information from verifiable sources is valuable to optimise the medical response to crises such as the current COVID 19 pandemic.<sup>6</sup> There is a need to intensify

the awareness and address the mental health issues of people during this COVID-19 pandemic. More than 80 % of the people were preoccupied with the thoughts of COVID-19 and 72 % reported the need to use gloves, and sanitizers.<sup>7</sup>

The health education intervention would be more effective if it targets certain demographic groups, for example, the COVID-19 knowledge may be greatly increased if the health education programs are specifically designed for men and persons with a low level of education.<sup>8</sup> Online-based cross-sectional study conducted among Bangladeshi residents aged 12–64 years, recruited via social media, of which 69.8% living in urban areas revealed that 48.3% of participants had more accurate knowledge.<sup>9</sup> A cross sectional web based study was conducted among the health care workers to find the knowledge on COVID has revealed that about 61% had adequate knowledge.<sup>10</sup>

The present study aimed to assess the knowledge on COVID 19 among urban adults was conducted when the Italy was hopeless in managing the disease and Tamil Nadu has not yet reported a single case of COVID 19. By seeing the daily hit cases of COVID 19 worldwide, the researcher has planned to create an awareness among the people in the prevention of the worst pandemic disease thereby made to conduct the study as the baseline information.

### **Objectives of the Study**

- To assess the knowledge on COVID-19 among the adult population.
- To associate the knowledge on COVID-19 with selected demographic variables.

### **Null Hypothesis**

NH0 - There is no significant association between the knowledge on COVID-19 with selected demographic variables.

### **Methodology**

A quantitative research approach using descriptive research design was used in the study. Research variable of the study includes knowledge on COVID 19 and demographic variables included in the study were age, gender, education, income and occupation. The study was conducted in the urban areas of Pazhavanthangal, Chennai, Tamil Nadu. All the adult men and women between 18 – 59 years

of age available at the time of data collection and willing to participate in the study were included in the study. The study was conducted among 100 adults selected using a non probability convenient sampling.

### **Description of data collection tool**

The self- structured questionnaire consists of two sections A and B was used in the study.

Section A: Demographic data such as age, gender, education, occupation and monthly income.

Section B: Semi-structured questionnaire to assess the knowledge on COVID-19 consists of 20 simple statements of closed ended questions (yes/no type) which were self explanatory. The questionnaire covered statements on all the aspects of COVID 19 developed by the investigator. The tool was validated by the experts of the research committee in Hindu Mission College of Nursing and the reliability of the tool was assessed using test re test method at the correlation coefficient value  $r = 0.83$  which was found to be higher and the tool was found more reliable for the study.

### **Ethical Consideration**

The study was approved by the research committee of Hindu Mission College of Nursing, West Tambaram, Chennai. The purpose of the study was explained to the participants and informed consent was obtained.

### **Data Collection**

The data was collected for a period of 2 weeks during the month of March 2020. The semi structured questionnaire was administered to the participants. The participants were allowed to read the questionnaire and mark their answer in the column given aside. Each participant took approximately 15 minutes to complete the tool.

### **Results**

Data was coded and entered in the excel sheet and analysed using the descriptive and inferential statistics. Distribution of demographic variables and level of knowledge were described using the mean and percentage values and the association of knowledge with the selected demographic variables was found using the chi square.

**Table 1:** Frequency and percentage distribution of the demographic variables.

S. No.	Demographic variables N=100	Frequency (n)	Percentage
1	Age		
	18-27years	36	36%
	28-37years	32	32%
	38-47years	24	24%
	48-57years	8	8%
2	Sex		
	Male	35	35%
	Female	65	65%
3	Educational Qualifications		
	Illiterate	8	8%
	Primary education	24	24%
	Secondary education	19	19%
	Graduate	49	49%
4	Working Status		
	Working	56	56%
	Not working	44	44%
5	Monthly Income		
	Rs. 5000-10000	29	29%
	Rs. 11000-15000	29	29%
	Rs. 16000-20000	17	17%
	Above Rs. 21000	10	10%

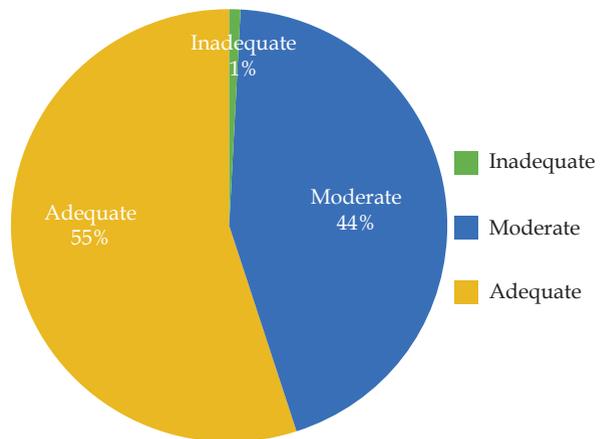
Table 1 describes the distribution of demographic variables which shows that about 36% of the participants belong to 18 – 27 years of age 65% are women and about 56% are employed.

Table 2 describes that 42% of the participants have adequate knowledge on the signs and symptoms of COVID 19, 55% had adequate knowledge on the causes or risk factors of COVID 19, 40% had adequate knowledge on the management of COVID 19 and 48% of the participants had adequate knowledge on the preventive aspects of COVID 19

**Table 2:** Distribution of level of knowledge based on the categories of questions on COVID 19.

S. No.	Category	Level of knowledge					
		Inadequate		Moderate		Adequate	
		n	%	n	%	n	%
1	Signs and symptoms of COVID 19	25	25%	13	13%	52	52%
2	Causes/Risk groups of COVID 19	32	32%	23	23%	55	55%
3	Management of COVID 19	27	27%	23	23%	50	50%
4	Preventive aspects of COVID 19	40	40%	12	12%	48	48%

The overall knowledge of the participants is found to be adequate among 55% of the participants and moderate among 44% and inadequate among 1% of the participants. The same was described in Figure 1



**Figure 1:** Knowledge of adults on covid- 19 outbreak.

The overall knowledge on COVID 19 was not associated with any of the demographic variables at the 5% level of significance and  $p \leq 0.05$  which is described in table 3

**Table 3:** Association of knowledge of COVID 19 with the selected demographic variables.

Demographic Variables	Levels of Functions						Chi Square
	Inadequate Knowledge		Moderate Knowledge		Adequate Knowledge		
	F(n)	%	F(n)	%	F(n)	%	
AGE							$\chi^2 = 2.75$
18-27years	0	0	14	14	22	22	P = 15.75 NS
28-37years	1	1	15	15	16	16	
38-47years	0	0	11	11	13	13	
48-57years	0	0	4	4	4	4	

Gender							
Male	0	0	14	14	21	21	$\chi^2 = 9.77$
Female	1	1	30	30	34	34	$P = 3.84$ NS
Education							
Illiterate	1	1	3	3	4	4	$\chi^2 = 16.92$
Primary Education	0	0	13	13	11	11	$p = 12.59$ NS
Secondary Education	0	0	12	12	7	7	
Graduate	0	0	16	16	33	33	
Working Status							
Employed	0	0	28	28	28	28	$\chi^2 = 3.89$
Unemployed	1	1	16	16	27	27	$p = 3.84$ NS
Monthly Income							
Rs. 5000 - 10000	0	0	16	16	28	28	$\chi^2 = 9.74$
Rs. 10001 - 15000	1	1	14	14	14	14	$p = 12.59$ NS
Rs. 15001 - 20000	0	0	6	6	11	11	
>Rs. 20001	0	0	8	8	2	2	

N=100,  $p \leq 0.05$ , NS - non significant, S - Significant

## Discussion

The present study describes that about n=55(55%) of the study participants had adequate knowledge regarding the COVID 19 and no demographic variables were found to be associated with the knowledge which may be due to the very less number of samples participated in the study. The present study is supported by the study done by Bao Liang Zhung et al in China who conducted a descriptive study on the knowledge attitude and practice had showed that about 90% of the participants had adequate knowledge on COVID 19 and age, education and working status of the participants were associated with the knowledge level at  $p \leq 0.01$  which supports the present study.<sup>8</sup>

## Conclusion

The results of the present study showed that the participants had moderate to adequate knowledge on COVID 19. The study was limited to the assessment of the knowledge level.

The level of knowledge among the participants may be good due to the extraneous variables like awareness and advertisements. The study can be done along with the assessment of attitude and practice with more number of participants involved in the study. Various educative materials can be prepared on COVID 19 and can be tested for

their effectiveness to improve the knowledge and practices to prevent COVID 19 and its effects.

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# Knowledge and Attitude on Umbilical Cord Blood Banking Among Antenatal Mother

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## How to cite this article:

M Kanimozhi, A Karthiga, B Komadi et al. / Knowledge and Attitude on Umbilical Cord Blood Banking Among Antenatal Mother. Community and Public Health Nursing. 2020;5(3):127-130.

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## Abstract

Umbilical cord is the vital direct interlink between mother and fetus which is always depicted as the relationship of an emotional bonding of motherhood which is a beautiful experience for a women. When mother gives birth the blood remains in the placenta and umbilical cord is referred as cord blood. Cord blood is the blood which remains in the umbilical cord and placenta post-delivery. Cord blood banking is the process of collecting the cord blood and extracting and cryogenically freezing its stem cells and other cells of the immune system for potential future medical use. Cord blood banking is a once in a life time opportunity to save our baby and the cord blood stem cells for potential medical uses like malignancies, bone marrow failure disorders, inherited metabolic and immunological disorder. A community based descriptive survey design study was conducted to assess the level of knowledge and attitude regarding umbilical cord blood banking among antenatal mothers.

*Materials and methods:* The research approach used for this study was quantitative research approach and descriptive cross sectional survey design was adopted. By using purposive sampling technique 100 subjects were selected from primary health centre during antenatal clinic. Out of 100 subjects, 63 (63%) had inadequate level of knowledge and 66 (66%) of the subjects had positive level of attitude. There was a positive correlation between knowledge and attitude between the subjects towards umbilical cord blood banking. There was statistically significant association ( $p < 0.005$  level). between the knowledge and attitude with selected demographic variables as type of family, monthly income, previous knowledge on umbilical cord blood banking.

*Conclusion:* It was evident that antenatal mothers had positive attitude towards umbilical cord blood banking and inadequate knowledge about the umbilical cord blood banking. After data collection with the information booklet, the researcher created awareness to all the antenatal mothers and motivated to do the umbilical cord blood banking for the welfare of their children and they got positive feedback as most of the mothers registered for cord blood banking. This study enlightens the knowledge of the parents about umbilical cord blood banking and generate a strong voice for the children future all around the world.

**Keywords:** Umbilical cord blood banking; Antenatal mothers.

## Introduction

Cells are the basic building blocks of living things. The human body is composed of trillions of cells, all with their own specialised function. The complexity of the human body consists hundreds of different types of cells. The human cell types are Bone cells as three primary types of bone cell. Osteoclasts, which dissolve bone. Osteoblasts, which form new bone. Osteocytes, which are surrounded by bone and help, communicate with other bone cells. Types of blood cell as Red blood cells, which carry oxygen around the body. White blood cells, which are part of the immune system. Platelets, which help blood clot to prevent blood loss after injury. Muscle cells are also called myocytes, muscle cells are long, tubular cells.

Stem cells are the basic foundation cells of every organ tissue in our bodies. They remain in the tissues and organs of our body right from inception embryo, embryonic stem cells, thought foetal life in prenatal tissues and after birth into the adult life. Stem cells are found in multi cellular organism. The two broad types of mammalian stem cells are embryonic stem cells and Adult stem cells. Umbilical cord is the vital direct interlink between mother and fetus which is always depicted as the relationship of an emotional bonding of motherhood which is a beautiful experience for a woman. When mother gives birth the blood remains in the placenta and umbilical cord is referred as cord blood. Cord blood banking is a once in a life time opportunity to save your baby cord blood stem cells for potential medical uses like malignancies, bone marrow failure disorders inherited metabolic and immunological disorder

Cord blood is the blood which remains in the umbilical cord and placenta post-delivery. Cord blood banking is the process of collecting the cord blood, extracting and cryogenically freezing its stem cells and other cells of the immune system for potential future medical use to save the life of the children. In 1990s the umbilical cord and its blood were considered as medical waste. Today, parents play major role in banking or store their baby's umbilical cord blood because the stem cells protect their children in the treatment of life-threatening and debilitating disease.

Cord blood is beneficial for the treatment of nearly 80 disease which is approved by the FDA and this treatments have been performed more than 35,000 times around the world to treat cancers (including lymphoma and leukaemia), anaemia, inherited metabolic disorders and some solid

tumours and orthopaedic repair. Cord blood which is taken from a baby's umbilical cord is always a perfect match for the baby. Immediate family members are more likely to also be a match for the stored cord blood. In addition, siblings have a 25% chance of being a perfect match and a 50% chance of being a partial match. Parents, who each provide half the markers used in matching, have a 100% chance of being a partial match. Even aunts, uncles, grand parents and other extended family members have a higher chance of being a match and could possibly benefit from the banked cord blood. So, the Researchers have been interested in doing the study as to assess the level of knowledge and attitude regarding umbilical cord blood banking among antenatal mothers and create awareness by distributing information booklet and promote the health of the future citizens.

## Statement of the Problem

A study to assess the level of knowledge and attitude on umbilical cord blood banking among antenatal mothers attending antenatal clinic in selected Primary Health Centres, Puducherry.

## Objectives

1. To assess the level of knowledge on umbilical cord blood banking among antenatal mothers.
2. To assess the level of attitude towards umbilical cord blood banking among antenatal mothers.
3. To find out the correlation between the level of knowledge and attitude regarding umbilical cord blood banking
4. To find out the association between the level of knowledge and attitude regarding umbilical cord blood banking.
5. To create awareness by distributing information booklet on umbilical cord blood banking among antenatal mothers.

## Materials and Methods

A descriptive research design was adopted for this study. The study was conducted in selected primary health centre as PHC, Lawspet and PHC, Koodapaakam areas during antenatal clinic, Puducherry. Totally, 100 samples were selected by using purposive sampling technique. After self-introduction the purpose of the study was

explained to the subject and got their willingness and cooperation to participate in this study. The demographic data was collected by using interview method and the level of knowledge and the attitude towards umbilical cord blood banking was assessed from the subjects with the help of 20 self administered knowledge related questionnaires and 10 attitude questionnaire. It took 15-20 minutes to collect the data from each subject. Each subjects give their positive feedback and received information booklet on umbilical cord blood banking.

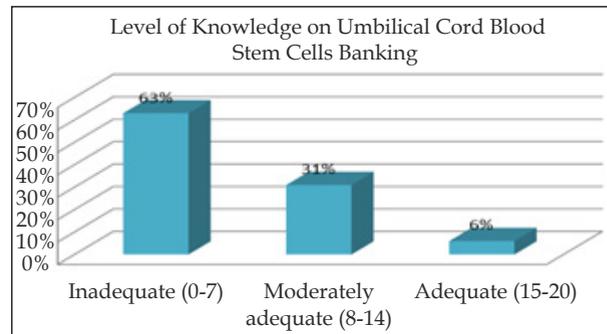
### Results and Discussion

The demographic data reveals that out of 100 subjects, 44% of them were in the age group of between 21-25 years, among 100 subjects, 85% of them were Hindus. 41% of the subjects' educational status was high school level. Most of them were (94%) were house wives, 56% of the subjects were earning monthly income as below Rs.10,000 and 48% of them were in joint-family. Regarding their level of knowledge, 63% of them had inadequate level of knowledge, 31% had moderately adequate level of knowledge. Regarding their attitude, 66% of them had positive attitude towards umbilical cord blood banking. There was a positive correlation between knowledge and attitude between the subjects towards umbilical cord blood banking. There was a statistically significant association ( $p > 0.005$ ) level between the level of knowledge and attitude with selected demographic variables as type of family, monthly income, previous knowledge about umbilical cord blood banking.

**Table 1:** Percentage wise distribution of level of knowledge on umbilical cord blood banking among the subjects. N=100

S. No.	Variables	Frequency (N)	Percentage (%)
1	Inadequate Knowledge	63	63
2	Moderately adequate Knowledge	31	31
3	Adequate Knowledge	06	06

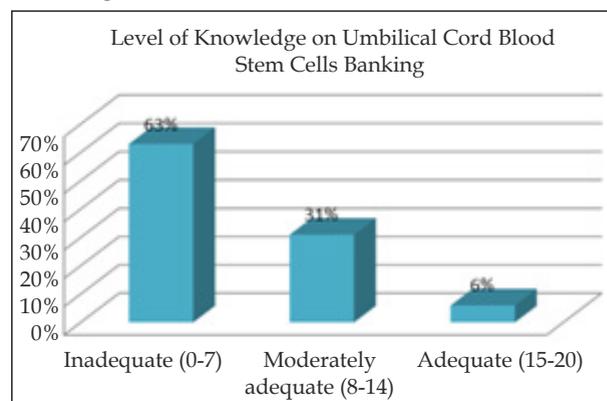
Table 1: showed that out of 100 subjects, 63% of them had inadequate level of knowledge, 31% of them were moderately adequate level of knowledge and 6% of them only aware about umbilical cord blood stem cells respectively.



**Table 2:** Percentage wise distribution of attitude on umbilical cord blood banking among the subjects. N=100

S. No.	Variables	Frequency (N)	Percentage (%)
1	Positive Attitude	66	66
2	Negative Attitude	34	34

Table 2 showed that out of 100 subjects, 66% of the subjects had positive attitude towards umbilical cord blood banking and 34% had negative attitude due to ignorance.



**Table 3:** Correlation between the level of knowledge and attitude on umbilical cord blood banking among the subjects. (N=100)

Variables	Mean	Standard Deviaton	'r' Value	'p' Value
Knowledge	7.06	3.964	0.473	0.001**
Attitude	33.16	4.854		

\*\*-p < 0.001 highly significant

Table 3: showed that there is positive correlation between knowledge and attitude towards umbilical cord blood banking. It was evident that there was significant relationship between knowledge and attitude of the subjects on umbilical cord blood banking.

### Conclusion

On the basis of findings, the present study illuminates that the level of knowledge regarding

umbilical cord blood banking and importance of cord blood cell among antenatal mothers need to be addressed right from the antenatal period itself and antenatal mothers were considered as vulnerable group. This study will enlighten the knowledge on umbilical cord blood banking and help them as well their children throughout their life time till they reach their another generation.

It is highly significant to create awareness and educates the antenatal mothers about the umbilical cord blood banking in the form of formal education and distributing information booklet during antenatal clinic in PHC as well as mass media. This study indicates need of health educational activities among antenatal mothers, future parents as adolescent girls and family members. So Nursing professionals are in a key position and guide the antenatal mothers via pamphlets health talk on umbilical cord blood banking. The Government play a major role in creating awareness about umbilical cord blood banking and prepare policy among the stakeholders to protect the children from the communicable and non communicable diseases. Media plays major role in creating an awareness and importance of cord blood banking in women especially during antenatal period. Thus we can generate a strong voice for women all around the world and prevent the children from communicable and non communicable diseases.

### **Recommendation**

- A study may be conducted on large sample for wider generalization
- A comparative study may be conducted in urban and rural area.

- An exploratory study can be done to access the knowledge and attitude of antenatal mother regarding umbilical cord blood banking.

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## Guidelines for Authors

Manuscripts must be prepared in accordance with "Uniform requirements for Manuscripts submitted to Biomedical Journal" developed by international committee of medical Journal Editors

### Types of Manuscripts and Limits

Original articles: Up to 3000 words excluding references and abstract and up to 10 references.

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The second page should carry the full title of the manuscript and an abstract (of no more than 150 words for case reports, brief reports and 250 words for original articles). The abstract should be structured and state the Context (Background), Aims, Settings and Design, Methods and Materials, Statistical analysis used, Results and Conclusions. Below the abstract should provide 3 to 10 keywords.

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The methods section should include only information that was available at the time the plan or protocol for the study was written such as study approach, design, type of sample, sample size, sampling technique, setting of the study, description of data collection tools and methods; all information obtained during the conduct of the study belongs in the Results section.

Reports of randomized clinical trials should be based on the CONSORT Statement (<http://www.consort-statement.org>). When reporting experiments on human subjects, indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional or regional) and with the Helsinki Declaration of 1975, as revised in 2000 (available at [http://www.wma.net/e/policy/17-c\\_e.html](http://www.wma.net/e/policy/17-c_e.html)).

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Present your results in logical sequence in the text, tables, and illustrations, giving the main or most important findings first. Do not repeat in the text all the data in the tables or illustrations; emphasize or summarize only important observations. Extra or supplementary materials and technical details can be placed in an appendix where it will be accessible but will not interrupt the flow of the text; alternatively, it can be published only in the electronic version of the journal.

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List references in alphabetical order. Each listed reference should be cited in text (not in alphabetic order), and each text citation should be listed in the References section. Identify references in text, tables, and legends by Arabic numerals in square bracket (e.g. [10]). Please refer to ICMJE Guidelines ([http://www.nlm.nih.gov/bsd/uniform\\_requirements.html](http://www.nlm.nih.gov/bsd/uniform_requirements.html)) for more examples.

### Standard journal article

[1] Flink H, Tegelberg Å, Thörn M, Lagerlöf F. Effect of oral iron supplementation on unstimulated salivary flow rate: A randomized, double-blind, placebo-controlled trial. *J Oral Pathol Med* 2006; 35: 540-7.

[2] Twetman S, Axelsson S, Dahlgren H, Holm AK, Källestål C, Lagerlöf F, et al. Caries-preventive effect of fluoride toothpaste: A systematic review. *Acta Odontol Scand* 2003; 61: 347-55.

### Article in supplement or special issue

[3] Fleischer W, Reimer K. Povidone-iodine antiseptics. State of the art. *Dermatology* 1997; 195 Suppl 2: 3-9.

### Corporate (collective) author

[4] American Academy of Periodontology. Sonic and ultrasonic scalers in periodontics. *J Periodontol* 2000; 71: 1792-801.

### Unpublished article

[5] Garoushi S, Lassila LV, Tezvergil A, Vallittu PK. Static and fatigue compression test for particulate filler composite resin with fiber-reinforced composite substructure. *Dent Mater* 2006.

### Personal author(s)

[6] Hosmer D, Lemeshow S. Applied logistic regression, 2nd edn. New York: Wiley-Interscience; 2000.

### Chapter in book

[7] Nauntofte B, Tenovou J, Lagerlöf F. Secretion and composition of saliva. In: Fejerskov O,

Kidd EAM, editors. Dental caries: The disease and its clinical management. Oxford: Blackwell Munksgaard; 2003. pp 7–27.

### No author given

[8] World Health Organization. Oral health surveys - basic methods, 4<sup>th</sup> edn. Geneva: World Health Organization; 1997.

### Reference from electronic media

[9] National Statistics Online – Trends in suicide by method in England and Wales, 1979–2001. [www.statistics.gov.uk/downloads/theme\\_health/HSQ20.pdf](http://www.statistics.gov.uk/downloads/theme_health/HSQ20.pdf) (accessed Jan 24, 2005): 7–18. Only verified references against the original documents should be cited. Authors are responsible for the accuracy and completeness of their references and for correct text citation. The number of reference should be kept limited to 20 in case of major communications and 10 for short communications.

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- Conflicts of interest disclosed

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