e - ISSN - 2349-0691



AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH



Journal homepage: www.mcmed.us/journal/ajanr

A STUDY IS TO IDENTIFY THE RISK OF BREAST CANCER AMONG WOMEN RESIDING AT SELECTED VILLAGES OF HORTI PHC BY THE HELP OF LEHIGH REGIONAL MEDICAL CENTRE RISK ASSESSMENT TOOL FOR BREAST CANCER

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Article Info

Received 25/12/2014 Revised 15/1/2015 Accepted 17/01/2015

Key word: Horti PHC, Breast cancer, Family planning.

ABSTRACT

A Descriptive research study was conducted to identify the risk of breast cancer among women residing at selected villages of Horti PHC by the help of Lehigh Regional Medical Centre risk assessment tool .The main objectives are to find out number of risk cases of breast cancer in specific reason among specific criteria. Total 150 women of the age 35 years and above were selected by using convenient and data was collected by using interview method. The data was analyzed and interpreted by percentage. the results show that out of 150 participants 84 belongs to the nuclear family (22.60%), 108 belongs to Hindu religion (72%), 110 women had the non formal education (73.30%), 142 are married (94.6%),69 are married at the age between 15 years (46%),78 are mixed (52.60%).and70 are adopted permanent family planning i.e.; tubectomy, it also reveals that out of 150 participants 30 are in the high risk category for getting immediate breast cancer (20%), 46 are at slightly high risk (30.6%),19 are at moderate (12.6%) and 55 are coming in low risk category for breast cancer. It concludes that majority of women are having risk of getting breast cancer which needs proper screening and appropriate management and awareness at the early stage to avoid feature major complication.

INTRODUCTION

"The goal is to live a full, productive life even with all that ambiguity, no matter what happens, whether the cancer never flares up again or weather you die, the important thing is that the days that you have had you will have lived".

Cancer is one of the major issues worldwide .At global levels it accounted for 11.4million new cases and

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Shshikumar Jawadagi Email:- mr.jawadagi@gmail.com 7.4million deaths (around17% of deaths) incidence in South East Asia region was 1.7million in 2004. Breast cancer ranks as one of the most prevalent causes of cancer death in women in 2013, the American cancer society estimates approximately 232,340 new cases of breast cancer will be diagnosed and 40,230 deaths due to breast cancer will occur in US. It is also important to note that man also develop breast cancer approximately 410 of the estimated death due to breast cancer in 2013 will be man.

Worldwide Breast cancer accounts for 22.9% of and India (18.55%) all cancers (excluding non - melanoma skin cancer) in women. In 2008 breast caused



458,503 deaths worldwide (13.7% of cancer deaths in women). Breast cancer is more than 100 times more common in women than in men, although men tend to have poorer outcomes due to delays in diagnosis .The burden of Breast cancer is increasing in both developed and developing countries; the peak occurrence Breast cancer in developed countries is above the age of 50 whereas in India it is above the age of 40. In India the age standardized incidence rate of Breast cancer varies between 9 to32 per 1,00,000 women.

It is estimated that there are nearly 2 to 2.5 million Cancer cases at any given point in India. Over 7 to 9 lakh new cases and 3 lakh new deaths occur annually in India due to cancer, Where as in Karnataka there are about 1.5lakh prevent cases of cancer and about 35,000 new cases are added to this every year .Breast cancer has been trending up words in last few decades globally .Over 100,000 new Breast cancer patients are estimated to be diagnosed annually in India. Moreover, breast cancer tends to affect Indian women at a younger age compared to their Western counterparts. According to a recent report approximately 1.5lakh patients are diagnosed with breast cancer every year in India.

Breast cancer is a type of cancer originating from breast tissue, most commonly from the inner lining of milk duct or the lobules that supply the supply the milk. Cancers originating from ducts are known as ductal carcinomas, while those lobules are known as Lobular carcinomas .Breast cancer occurs in humans and other mammals .While the overwhelming majority of human cases occur in women, male Breast cancer can also occur. Prognosis and survival rates for breast cancer vary greatly depending on the cancer type, stage, treatment, and geographical location of the patient. Survival rates in the Western world are high; for example, more than 8 out of women (85%) in England diagnosed with Breast cancer survive for at least 5yrs. In developing countries, however rates are much poorer.

For a country like India with a huge population, diverse culture, geographical variation, diets and habits, sources of on information on cancer risk factors are considerably limited .The reasons for varying incidence of Breast cancer among women are not fully understood, which are likely to be explain by reproductive and lifestyle factors such as literacy, diet, age at menarche and menopause, age at first delivery, abortion, family history of Breast cancer.

The first noticeable symptom of Breast cancer is typically a lump that feels different from the rest of Breast tissue .More than 80% of Breast cancer cases are discovered when the women feels a lump. The earliest Breast cancers are detected by mammogram. Lumps found in a limp node located in the armpits can also indicate Breast cancer. Indications of Breast cancers other than a lump may include thickening different from the other Breast tissue, one breast becoming larger or lower ,a nipple changing position or changing position or shape or becoming inverted ,skin puckering or dimpling , a rash on or around a nipple , discharge from nipples , constant pain in the part of breast or armpit ,and swelling beneath the armpit or around the collarbone .Pain ("mastodynia") unreliable tool in determining the presence or absence of Breast cancer ,but may be indicative of other breast health issues [1].

The primary risk factors for breast cancer are female sex and older age. Other potential risk factors include genetics, lack of child bearing, lack of breast feeding, higher levels of certain hormones, certain dietary patterns, and obesity .Recent studies have indicated that exposure to light pollution is a risk factor for the development of Breast cancer .Smoking tobacco appears to increase the risk of Breast cancer.

• Age - Breast cancer risk is low before age 30 and increases with age, leveling off at the Age of 80

• Race - African American women are likely to be Diagnosed with early onset (before age 45) Breast cancer compared to white American women.

• Reproductive and menstrual history – Exposure to estrogen is associated with Increased Breast cancer risk.

• Hormone replacement therapy (HRT) – Studies indicates that use of menopausal Hormone Therapy

• Exposure of Diethylstilbestrol – Diethylstilbestrol is a man –made estrogen, women who ingested this chemical during their pregnancy are at a slightly increased risk of developing Breast cancer

• Radiation exposure – Such as radiation therapy used to treat Hodgkin Lymphoma ,increases risk of breast cancer throughout the Remainder of a women's lifetime

• Dietary factor – High fat intake, high alcohol consumption and a diet rich in over cooked meats may increase Breast cancer

Other risk factors include radiation, and shift work. A number of chemicals have also be linked including: Polychlorinated by phenyls polycyclic aromatic hydrocarbons organic solvents and number of pesticides. Breast examination, mammography, ultrasound, breast MRI are used in the detection of breast cancer etc.

Women may reduce their risk of breast cancer by maintaining a healthy ,drinking less alcohol ,being physically active and breast feeding to their children .These modifications might prevent 38% of breast cancer in the US ,42% in the UK ,in Brazil and 20% in China .The benefits with moderate exercise such as brisk walking are groups including postmenopausal women . Marine omega – 3polyunsaturated fatty acid appears to reduce the risk [2].



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The first known use of a pink ribbon in connection with breast cancer awareness was in the fall of 1991, when the Susan G. Komen Foundation handed out pink ribbons to participants in its New York City race for breast cancer survivors.^[1] A pink and blue ribbon is sometimes used to symbolize breast cancer in men, which is relatively rare. The pink and blue ribbon was designed in 1996 by Nancy Nick, president and founder of the John W. Nick Foundation to bring awareness that "Men Get Breast Cancer Too!"

The pink ribbon represents fear of breast cancer, hope for the future, and the charitable goodness of people and businesses that publicly support the breast cancer movement. It is intended to evoke solidarity with women who currently have breast cancer.

Breast cancer organizations use the pink ribbon to associate themselves with breast cancer, to promote breast cancer awareness, and to support fundraising. While specifically representing breast cancer awareness, the pink ribbon is also a symbol and a proxy of goodwill towards women in general.^[11] Buying, wearing, displaying, or sponsoring pink ribbons signals that the person or business cares about women.

METHODOLOGY

This chapter deals with the research tools and techniques and methods adopted for the study. For any research work the methodology of the investigation is of vital importance. Research methodology is a way to systematically solve the research problems. It deals with defining the problem, formulation of hypothesis, methods adopted for data collection and statistical techniques used for analyzing the data and to logical validate the research problem in hand.

The entire chapter deals with the methodology that was selected by the investigator in order to assess the

risk of Breast cancer among women who are at the age of 35 and above. The methodology of study include research approach, research design, variables, setting of the study, sample, sampling techniques, criteria, development and description of tool, content validity of the tool, reliability, data collection process and plan for data analysis [3].

RESEARCH APPROACH

The research approach adopted for this study is an evaluative approach .It is an umbrella term that covers the basic procedure for conducting research, a way to look through the research problem.

RESEARCH DESIGN

The research design is the plan, structure and strategy of investigation of answering research question. It is the overall plan or blue print the researcher selected to carry out the study.

For the present study a descriptive design was adopted to assess the risk case of breast cancer among the women having the age of 35 and above.

VARIABLES

Variables qualities, properties are or characteristics of person, things or situation that change or vary.

• Research variables: - Breast cancer risk cases among women at age of 35 & above.

Demographic variables: - Age at marriage, religion, educational status, marital status, dietary pattern, contraceptive usage.

SETTING OF THE STUDY

Setting refers to the area where the study was conducted. It is the physical location and condition in which data collections take place.

The study was conducted in selected village comes under the HORTHI PHC.

POPULATION

Accessible population is defines "as the aggregate of cases which confirm to the designated criteria and which to accessible the researchers as a pool of subjects for the study."

150 women, of having the age group of 35 and above, were selected for study .The target population is define "as the entire aggregation of cases that meets designated set of criteria".

SAMPLE

Sample refers to subject of population that is selected to participate in a particular study, and which represents most of the characteristics of the population under investigation, so that the finding can infer to the



population.

In the present study, the sample consists of number of women risk for breast cancer from village of HORTI PHC, who fulfill the inclusion criteria for the study.

SAMPLING TECHNIQUES

Sampling defines the process of selecting a group of people or under elements with which conduct a study.

For the current study under taken, convenient sampling technique was adopted.

SAMPLE SIZE

Sample size was 150 women having the age of 35 and above, belongs to the selected village of HORTI PHC.

SAMPLING CRITERIA

1. Inclusion criteria

• Women having age of above 35.

• Women who are available at the time of data collection.

- Women who are willing to participate in the study.
- 2. Exclusion criteria
- Women who are not willing for study.
- Less than 35 years.
- Already diagnosed as breast cancer.

DEVELOPMENT OF THE TOOL

The research design and tool selected for the study should be as far as possible the nearest and the most reliable tool for the study so that it can obtain data for drawing conclusion, which are pertinent to the study.

The investigator has selected LEHIGH BREAST CANCER RISK ASSESSMENT TOOL, used to identify the risky women.

DESCRIPTION OF THE TOOL

SECTION: 1 Socio-demographic variables

It deals with demographic data which was used to collect the characteristics of the samples. This part of the tool consists of TEN items for obtaining information about the selected background factors such us nature of family, income of the family, religion, marital status, age at marriage, dietary pattern, use of contraceptives, types of contraceptives, duration of usage of contraceptives, whether they know about breast selfexamination and whether they done or not.

The researcher have conducted interview in order to collect the data.

SECTION 2:- "LEHIGH BREAST CANCER RISK

ASSESSMENT TOOL" is consists of 14 open ended question.

VALIDATION OF THE TOOL

When an instrument is valid, it truly reflects concept, it is supposed to measure .Content validity of the tool was established by giving it to experts in research and cancer. As per the suggestions of the experts the investigator had made necessary modification in the tool with the permission of the guides.

RELIABILITY OF THE TOOLS

It was listed by administering tool to 150 women of age 35 and above residing at selected villages of HORTI PHC. The sample excluded the subject on whom the tool was pretended split half method following spearman co-relation formula was used to conduct the reliability of tool.

PLAN FOR DATA ANALYSIS

Data was collected from 150 women having age of 35 and above from selected village of HORTI PHC .Convenient sampling was used for the collection of data and tabulated by applying descriptive and inferential statistics was planned for analysis which includes frequency and percentage. LEHIGH is an online assessment tool which gives the rate of breast cancer after entering the individual information, which has been categorized into high risk, slightly high, moderate and low risk.

RESULT AND ANALYSIS OBJECTIVE OF THE STUDY

➤ To find out the number of risk cases of breast cancer among the women having age of 35 and 35 above.

> To identify the specific reasons for risk for breast cancer in a specific criteria among the women.

ORGANIZATION OF THE FINDINGS

The data collection was organized, tabulated, analyzed and interpreted by means of statistical tables and graphs on the basis of above mentioned objectives the data is presented in the

Section-1: Distribution of the subjects according to sociodemographic variables.

Section-2: Finding the risk cases of breast cancer in selected women (35&35above)

Section-3: Finding risk cases according to reasons.

Section 1: Distribution of the Subjects according to Socio-demographic Variables.





Sl.No	Nature of the Family	Total	Percentage
1	Nuclear family	84	22.60%
2	Joint family	61	14.60%
3	Extended family	5	3.30%
	Total	150	

Table 1. According to Nature of the Family

It reveals that out of 150 participants, 84 belong to the nuclear family (ie.22.60%), 61 belong to the joint family (ie.14.60%), 05 belong to the extended family (ie.3.30%).

Table 2. According to Religion

Sl. No	Religion	Total	Percentage
1	Hindu	108	72%
2	Muslim	42	28%
3	Christian	0	0%
	TOTAL	150	

It reveals that out of 150 participants 108 belong Hindu religion (ie.72%), 42 of them were Muslim (ie.28%), and among them there is no Christians.

Table 3. According to Educational Status

Sl. No	Educational Status	Total	Percentage
1	Non Formal	110	73.30%
2	Primary (1-4)	16	10.60%
3	secondary (5-7)	12	8%
4	High School (8-10)	8	5.30%
5	PUC	4	2.60%
	TOTAL	150	

TABLE 3:- It shows regarding the educational status of the selected women. Out of 150, 110 women had the non-formal education (ie.73.30%), 16 women got primary education (ie.10.60%), 12 women got secondary education (ie.8%) then 8 women got high school education (ie5.30%) and 4 are having PUC education qualification (ie.2.60%).

Table 4. According to Marital Status

Sl. No	Marital Status	Total	Percentage
1	Married	142	94.60%
2	Unmarried	1	0.60%
3	Widow	7	4.60%
	TOTAL	150	

This table shows the marital status of the selected women. Out of 150 women 142 are married (ie.94.6%), 1 is unmarried (ie0.6%) and the 7 are widow (ie.4.60%).

Table 5. According to Age at the Marriage

SL.No	Age at Marriage	Total	Percentage
1	>15	69	46%
2	16-20	68	45.30%
3	21-25	10	6.60%
4	26-30	3	2%
5	Above 30	NIL	0%
	TOTAL	150	

It reveals that out of 150 participants 69 are married at age below 15 years (ie.46%), 68 are married in between the 16-20 age (ie.45.30%), 10 married are coming in between 21-25 of age group (ie.6.60%), 03 are between 26-30 of age (ie.2%) and above 30 are nil.



Table 6. According to Dietary Patteren

SL.No	Criteria	Total	Percentage
1	Vegetarian	71	47.30%
2	Mixed	79	52.60%
	TOTAL	150	

This table shows that dietary pattern of the participants. Among 150, 71 are vegetarian (ie.47.30%), and the remaining 79 are mixed (ie.52.60%).

Table 7. According to Type of Family Planning Adopted

SL.No	Method	Total	Percentage
1	Temporary	25	16.60%
2	Permanent	70	46.60%
3	Not Adopted	55	36.60%
	TOTAL	150	

Indicates that the types of family planning these participants are adopted. Out of 150, 25 are adopted temporary family planning method (ie.16.60%), the 70 are adopted permanent family planning i.e. Tubectomy (ie.46.6%), then the remaining 55 are not adopted any family planning method

Section: - 2 Finding the Number of Breast Cancer in Selected Women (35 & 35 Above) Table 8. Nature of Risk of Breast Cancer

SI:No	Nature of Risk	Total	Percentage
1	High	30	20%
2	Slightly high	46	30.60%
3	Moderate	19	12.60%
4	Low	55	36.60%
	Total	150	

This reveals that out of 150 participants 30 are in the high risk category for getting immediate breast cancer (ie.20%), then 46 are at slightly high risk (ie.30.6%), 19 are at moderate (ie.12.6%) and 55 are coming in low risk cases.

Section 3: Finding risk Cases According to Reasons.

Table 9. a) High Risk Cases

SI:No	Reason for High	Total	Percentage
1	Age	20	66.60%
2	Over weight	6	20%
3	Early menarche before 12 yr	2	6.60%
4	First pregnancy before 17 yr	2	6.60%
	TOTAL	30	

This table shows the reasons for high risk cases. Because of their age 20 are in high risk (ie.66.6%), because of overweight 6 are in high risk (ie.20%), then due to early menarche (before 12 year) 2 are in high risk (ie6.6%), and due to the first pregnancy before 17 year 2 are having high risk (ie6.6%).

Table 10. b) Slightly High Risk Cases

SI:No	Reason for Slightly High	Total	Percentage
1	Age	40	86.90%
2	Over weight	4	8.60%
3	First pregnancy before 18 yr	2	4.30%
	TOTAL	46	

This reveals the reason for slightly high cases. Out of 46 participants 40 are in slightly high risk because of age (ie.86.9%), due to the overweight 4 are in slightly high risk (ie.8.6%), then 2 are in slightly high risk because of first pregnancy before 18 years (ie.4.3%)



SL.No	Reason for Moderate	Total	Percentage
1	Age	6	31.50%
2	Age of menarche before 12yr	4	21.50%
3	over weight	5	26.30%
4	First pregnancy after 30 yr	2	10.50%
5	menopause after 55 yr	2	10.50%
	τοται	19	

Table 11. c) Moderate Cases

This table shows the reason for moderate cases. From 19 cases, 06 are in moderate because their age (ie.31.5%), because of age of menarche before 12 years 04 are in moderate risk, because of overweight 05 are in moderate risk (ie.26.3%), due to first pregnancy after 30 years the 02 are having moderate risk for breast cancer and due to menopause after 55 year 02 are having moderate risk for breast cancer (ie.10.5%).



Research Article





62



DISCUSION

This chapter attempts to discuss the significant finding on the breast cancer risk assessment among selected women. The research outcome is discussed based on the results of the present work also quoting of the similar findings of the studies conducted in India & other countries. This study is aimed to finding out the risk cases of breast cancer among women.

Cancer has become one of the ten leading causes of death in India and most common diagnosed as malignancy in India, it ranks second to cervical cancer. An increasing trend in incidence is reported from various registries of national cancer registry project and now India is a country with largest estimated number of breast cancer deaths worldwide [3].

For a country like India with a huge population, diverse cultures, geographical variations, diet and habits, sources of information on cancer risk factors are considerably limited. The reasons for varying incidence of breast cancer among women are not fully understood, which are likely to be explained by reproductive and lifestyle factors such as Literacy, Diet, Age at menarche and menopause, Age at first delivery, Abortion, Family history of breast cancer.

The findings of the study explain that

Table 8 – Among 150 women of age 35 and above 35, 30 are belong high risk, 46 are slightly high risk, 19 are moderate risk and 55 are low risk for breast cancer. Present study finding compared with previous study by Dr Rajesh A Dikshit, Professor of Epidemiology , Tata memorial center that The crude Breast cancer cases in urban India women is 25-30 and the age adjusted rate is 30-35 new cases per 1,00,000 women per year. Breast cancer is increasing – the average increase over a 30 year period in Mumbai was 11 per cent per decade Breast cancer is increasing both in young (11 per cent per decade) and old women (16 percent per decade). There are an estimated 1,00,000-1,25,000 new Breast cancer cases in India every year. The number of Breast cases in India is estimated to double by 2025.

Table 9-As per the study the main reason for getting risk for Breast cancer in high risk cases are 66.60% in of age, 20 % overweight. These findings are consistent with previous study, Dr Jain also pointed about increase in cases of Breast cancer in women below the age of 40 .Delayed marriages, imbalance of hormonal flow, and contraceptive pills are major contributors to Breast cancer. A study conducted by breastcancerindia.net shows that there is a shift in age group for occurrence of Breast cancer. The disease is creeping into younger women. The study points, 25 year back, out of every 100 Breast cancer patients, 2 were in 20 to 30 age group, 7 were in 30 to 40 and 69 patients were above 50 year of age. Presently, 4 are in 20 to 30 age group, 16 are in 30 to 40, 28 are in 40 to 50 age group. So, almost 48% patients are below 50 [4].

Table10- As per the study the main reason for getting risk for Breast cancer in slightly high risk cases are 8.60% is of overweight. Present study finding compared with previous study AIRC (section reviewed 14/04/2014, section update 14/04/2014) Greater body fatness (measured by BMI) is classified by WCRF/AICR as a causes of post-menopausal breast cancer, and also body fatness is classified by WCRF/AICR as possibly protective against pre-menopausal breast cancer.

Table 11- As per the study the main reason for getting risk for Breast cancer in moderate risk cases are 10.50% is of first pregnancy after 30 years, 10.50% are of menopause after 55 years. Present study finding compared with previous study WCRF/AIRC, section reviewed 02/04/14 and section updated 02/04/14 shows that Breast cancer risk increases by 3% for each year older a women



is when she first giving birth, a meta-analysis. And also shows in post-menopausal women, Breast cancer risk is around twice as high in those with the highest sex hormone levels, a pooled analysis of cohort studies [5,6].

CONCLUSION

Nursing Implication

The findings of the study have implications in various areas of Nursing Education, Nursing Research and Nursing Administration

Nursing Education

> As a nurse educator, there are an abundant opportunities for nursing professionals to educate .The women regarding high risk assessment of breast cancer through various methods.

➤ The community health nurse should periodically organize the special health education program on risk assessment of breast cancer among women in community.

> The student nurse and all health professionals should be given the responsibility to teach the women, regarding risk assessment of breast cancer.

➤ Nurse need to take role as a motivator ,facilitator ,educator ,councilor and researchers

Nursing Practices

> Today health care delivery system has changed from care oriented approach to promotion of health and prevention of illness oriented approach. So its focuses mainly on primary prevention, which is aimed at health promotion considering these factors nursing personnel can contribute much for promotion of breast cancer by creating awareness in the community through special programmes on risk assessment of breast cancer.

> Nurses walking in different setting such as hospitals, clinic or community are in a better position to understand the risk and provide knowledge regarding the breast self-examination at all needed time hence nurses should take intent in preparing different strategies suitable to the community .

NURSING ADMINISTRATION

> The main focus of nursing administration is to organize seminars, workshop & other educational programmes for staff nurses as a part of in – service education programme by which knowledge towards risk assessment of breast cancer shall be enhanced.

➤ Nurse as an administrator plays an important role in educating the professionals & in policy making such as counseling, referral services & mass health education.

> The nursing administrator should plan for organize the continuing education programme.

> The nursing administrator should explore their potential s & encourage innovative ideas in the preparation of appropriate teaching material. She should

organize sufficient man power, money & material for disseminating health information.

Nursing Research

> The essence of research is to build a body of knowledge in nursing. The finding of the present study serves as the basis for the professions & the students to conduct further study.

> The generalization of the study result can be made by replication of the study.

> Nursing research is the means by which nursing profession is growing.

Recommendation

On the basis of the study that had been conducted, certain suggestions are given for future study.

1. A similar study can be done large population .

2. A study can be done with urban population.

3. A pre test & post test can be conducted to study the effectiveness of SIM among literate or working women.

4. A comparative study can be done on rural & urban community.

5. A correlation study can be done between knowledge & practice regarding risk assessment of breast cancer.

ACKNOWLEDGEMENT

"God gives every bird its food, But He doesn't throw it into its nest"

Before everything else we would like to thank the Almighty for giving as strength and blessings as from all kind of possible and hindrances in carrying out our research work.

Success of an individual is only possible when she/he is being supported by others. In the course of research the investigator had being fortunate enough to receive immense help from various sources. The investigator wishes to thank them all.

Our heartfelt thanks to Prof. Shalmon Chopade, principal of B.L.D.E.A's Institute of nursing and sciences Bijapur, Karnataka, for his permission to conduct this study, unconditioned support, unwavering faith has continually motivated as to complete this study.

We express our cordial gratitude to our friends for their support during the entire study ,they are the moving spirit behind this research work, their suggestions and evocation were of guiding light to us invoking new thoughts and insinuating new ideas which helped us in the process of the research work.

We wish to express our sincere thanks to our librarians Mr.Ramanagouda Chattarke, Ms Shobha and all the staff for their whole hearted help and assistance rendered during the course our study.

We owe our sincere thanks with gratitude and respect to our dear parents, brothers, sisters and our dear



family members for their prayers, blessings and unfailing support which cannot be put into words.

Last but not the least we express our special sense of affection and heartfelt gratitude to all our

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friends, colleagues, well wishes and all those whom have helped directly or indirectly to accomplish this study.