



## A study to assess the investment related knowledge amongst the Medical and Dental Students of Vadodara: A Cross Sectional Study

Mital Thakkar\*, Mohit Verma<sup>1</sup>, Medha Wadhwa<sup>2</sup>, Subahsish Chatterjee<sup>3</sup>, Pinkal Shah<sup>4</sup>, Sandip Shah<sup>5</sup>,

<sup>1,2\*</sup>Department of Management, Sumandeep Vidyapeeth Deemed to be University, Piparia, Vadodara, Gujarat State, India

<sup>3</sup>ICFAI University, Agartala, Tripura state, India,

<sup>4</sup>Brookes College, Calgary, Alberta, Canada, Email ID:

<sup>5</sup>Department of Psychiatry, GMERS Medical Collage, Gotri, Vadodara, Gujarat

Email ID: mital\_thakkar87@yahoo.co.in,

### ABSTRACT

*A study to assess the investment related knowledge amongst the Medical and Dental students of Vadodara. This is descriptive cross-sectional in nature where the Healthcare Professionals who are willing to participate was included in the study. The data was collected through a closed ended questionnaire for assess their investment related knowledge. There were 30 statements included in the questionnaire and which is assessed by using the scale of Yes, No & Don't Know. This study includes 102 interns and post graduate students of Medical and Dental Colleges. From total population of study 64 (63%) participants were female while 38 (37%) participants were male. Mean Score of 102 participants was 11.94 (SD ±44.4). P Value is grater then 0.05 with respect to gender, age and category, which shows that there is no significance difference in the knowledge of Healthcare Professionals. Average mean score was very less which shows that they were not aware regarding the investment strategy. The score of participants will improve by providing the study material (self learning module) which will helpful to them for their future investment decisions. The important aspect of the study is to assess the knowledge of the Healthcare Professionals. They were graduates with some of the highest student loan debt level. They complete their graduation with minimal unbiased financial planning guidance. Assessing the knowledge amongst the participants will help in diversify investment.*

**Keywords:** Financial Literacy, Interns, Post Graduates, Medical, Dental, College, Investment

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### INTRODUCTION

The growth of any country depends upon the financial system. Financial Literacy is the key component for the development of the country as well as development of Individual's financial stability. Financial Literacy refers to knowledge and skills related to make effective and informed money management decisions. Knowledge in finance and planning for finance are essential for each and everyone may be for a school going kid or a retired person.[1] In India, parents support their children till they complete their higher studies. While most of the students live away from their parents during higher studies, hence they have to make a financial decision on whether to save, spend or invest based on their financial knowledge. It is necessary to teach basic financial education to budding professionals which will help them to build a secure financial future. Most of healthcare professionals complete their medical training without sufficient knowledge of business and finance. This leads to inefficient financial decisions, avoidable losses and unnecessary anxiety.[2]

Healthcare Professionals graduate with some of the highest student loan debt levels of any educational disciplines. Financing a higher education is an increasing burden for students as the cost of education continues to rise faster than the rate of inflation and the payback of student loan debt over a period of up to 30 years impacts future financial decisions and lifestyle choices.[3,4] As the healthcare students were not aware about the investment strategy it will better to provide them the Self learning module of Financial Literacy which will be helpful to them for better investment in near future. Through the review of literature, it appears that most of the studies on financial literacy amongst medical professionals have been done in US, Australia, UK and other developed nations. [5,6] Very few research studies have been carried out in developing countries like India. In India, research studies are done but very less compare to

other countries. In most of the studies, target population was college students, adult, Employees, Women but not on a budding healthcare professionals.

Aim of the Study to assess the investment related knowledge amongst the medical and dental college students of Vadodara.

The objective of the study is to find out that there is no significance difference in mean score of financial literacy with respect to Gender, Age and Category.

## **MATERIAL AND METHODS**

This is a descriptive cross-sectional study to assess the knowledge of the healthcare professionals regarding Investment. This study includes the healthcare professionals who are willing to participate was included for the study. The data was collected through a closed ended questionnaire for assess their investment related knowledge. There were 30 statements included in the questionnaire and which is assessed by using the scale of Yes, No & Don't Know. The data was collected from 102 healthcare professionals of Interns of Medical and Dental College & Post Graduate of Medical and Dental College.

This questionnaire determines the knowledge of the Healthcare Professionals. A correct answer got one mark, whereas an incorrect answer received a 0 mark. Statistical reliability had been confirmed Cronbach's alpha is 0.832 for Healthcare Professionals. In the beginning, the legal procedures and different colleges Dean/Principal's consultation were performed. The analyses were performed using SPSS version 21.0 (Chicago,IL,USA). The data was analyzed by descriptive statistics, the Independent Sample T Test and ANOVA. The P values were set at <0.05.

## **RESULTS AND DISCUSSION**

The Questionnaire was distributed to 130 Healthcare Professionals of Medical College and Dental College, out of which 102 questionnaires get return. The frequency of demographic characteristics of participants, was 64 (63%) female participants while 38 (37%) male participants; 94 (89%) participants whose age is less than 25 years while 11 (11%) participants whose age is greater than and equals to 25 years. From the total participants which consisting 60 (59%) participants from Medical Colleges and 42 (41%) participants from Dental Colleges.

From the frequency of the statements shows that the knowledge of the Healthcare Professionals was shows that they were not aware about the different strategies of the investment. There was low level of knowledge among the healthcare professionals related to investment. The average means score of financial literacy amongst the Medical and Dental college students which was 11.94 (SD  $\pm$ 4.44). This result shows that the knowledge of the Healthcare Professionals is only 40%.

The different mean score and standard deviation of financial literacy amongst Female and Male which was 11.57 (SD  $\pm$ 4.73) and 12.55 (SD  $\pm$ 3.90) respectively and mean difference value was -0.97. The p value is 0.27 which is greater than 0.05. So the result shows that there is no significance difference between the knowledge of female and male. Hence the null hypothesis is failed to reject. The different mean score and standard deviation of financial literacy amongst the two different age group which was 12.04 (SD  $\pm$ 4.31) and 11.09 (SD  $\pm$ 5.59) respectively and mean difference value was 0.95. The p value was 0.50 which is greater than 0.05. So the result shows that there is no significance difference between the knowledge with respect to Age. Hence the null hypothesis is failed to reject. The knowledge of the participants with respect to category, here the p value was 0.176 which is greater than 0.05. Here there is no significance difference between the category of Healthcare Professionals (Interns of Medical College, Post Graduate of Medical Collage, Interns of Dental Collage and Post Graduate of Dental Collage) and knowledge. Hence the null hypothesis is failed to reject.

Fonseca, et al [7] discussed regarding the gender gap in financial literacy amongst the male and female whose age is around 18 years in the year 2009. Over a period of time again in 2010 the data was collected from the male and female whose age over 25 years. The result of the study was found that the equal education to the gender, financial decision by the gender would also equal. Here present study also shows the same results that the respondents from the budding healthcare professionals have same education and have a same financial decision. The result of this study shows that there was equal education which gives the equal financial decision with pertaining to gender.

Zamora-Lobato, et al [8] conducted study which tries to found the knowledge of the respondents in the area of Investment, Savings, Expenses, Budgets, credits and pensions. The result of the study was that the students have a positive perception towards basics of financial literacy. The present study covered Investment related statements and the data was collected through the Interventional study design. The present study shows the positive result amongst the respondents.

Demographic Factor	Options	Frequency	Percentage
Gender	Female	64	63
	Male	38	37
Age	Less than 25 Years of Age	91	89
	Greater than or Equal to 25 Years of Age	11	11
Category	Intern of Medical College	56	55
	Post Graduate of Medical College	04	04
	Intern of Dental College	35	34
	Post Graduate of Dental College	07	07

Investment Statements	Correct / Incorrect Answer	Frequency	Percentage
Equity Shares are also known as Preference Shares	Incorrect	72	70.6
	Correct	30	29.4
The dividend is paid lastly to equity shareholders after the payment of all liabilities.	Incorrect	53	52.0
	Correct	49	48.0
If you want high return you need to take high risk.	Incorrect	51	50.0
	Correct	51	50.0
Preference Shares cannot be converted in to Equity Shares.	Incorrect	67	65.7
	Correct	35	34.3
Preference shareholders generally get the arrears of dividend along with the present year's dividend if not paid in the last previous year.	Incorrect	68	66.7
	Correct	34	33.3
Mutual funds pay a guaranteed rate of return which depends on their past performance	Incorrect	63	61.8
	Correct	39	38.2
The price of a mutual fund unit is known as Net Asset Value	Incorrect	55	53.9
	Correct	47	46.1
IPO is known as Institutional Public offering	Incorrect	71	69.6
	Correct	31	30.4
The companies' shares have to be initially made available to the public through an initial public offering(IPO)	Incorrect	45	44.1
	Correct	57	55.9
The life insurance premium payments do not enjoy the tax benefits under section80C	Incorrect	66	64.7
	Correct	36	35.3
Life Insurance offers you risk coverage and takes care of monetary needs of your family after your death	Incorrect	49	48.0
	Correct	53	52.0
A Unit Linked Insurance Plan (ULIP) is a product offered by insurance companies	Incorrect	66	64.7
	Correct	36	35.3
First ULIP launched by HDFC	Incorrect	68	66.7
	Correct	34	33.3
Major guidelines for ULIP is issued by IRDA (Insurance Regulatory and Development Authority	Incorrect	76	74.5
	Correct	26	25.5
Real estate or properties are one of those investments which have a physical existence and can be touched and seen	Incorrect	61	59.8
	Correct	41	40.2
Any vacant land where activities like ranching or farming take place is also a form of real estate	Incorrect	66	64.7
	Correct	36	35.3
A commodity market is a physical or virtual marketplace for buying selling and trading raw or primary products	Incorrect	69	67.6
	Correct	33	32.4
Hard and soft commodities are typically natural resources.	Incorrect	63	61.8
	Correct	39	38.2
Producers can protect themselves from fluctuations in commodity prices by implementing financial strategies	Incorrect	69	67.6
	Correct	33	32.4
National Saving Certificate (NSC) is a long term risky investment	Incorrect	59	57.8
	Correct	43	42.2
NSC is a tax saving investment that can be purchased from any post office by an Indian Resident	Incorrect	52	51.0
	Correct	50	49.0
Post office Monthly Income Scheme (POMIS) is a low-risk MIS and generates a steady income	Incorrect	54	52.9
	Correct	48	47.1
The premature withdrawal does not carry any penalty charges	Incorrect	68	66.7

after one years of investing in POMIS	Correct	34	33.3
Public Provident Fund (PPF) is one of the most popular investments due to its government banking and tax benefits	Incorrect	48	47.1
	Correct	54	52.9
People have PPF account in their own name not in their minor child's name	Incorrect	63	61.8
	Correct	39	38.2
Corporations and governments frequently issue debentures to raise capital or funds	Incorrect	61	59.8
	Correct	41	40.2
Convertible Debentures are bonds that can convert into preference shares of the issuing corporation after a specific period	Incorrect	68	66.7
	Correct	34	33.3
As part of a healthy investment diversification you want to have some bonds to go with your stock investments	Incorrect	61	59.8
	Correct	41	40.2

Table 3 Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge Score	102	0.00	23.00	11.94	±4.44

Table 4 The Difference in the knowledge with respect to Gender								
	Gender	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference	t value	p value
Knowledge Score	Female	64	11.57	4.73	0.59	-0.97	-1.07	0.28
	Male	38	12.55	3.90	0.63			

Table 5 The Difference in the knowledge with respect to Age								
	Age	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference	t value	p value
Knowledge Score	Less than 25 Years of Age	91	12.04	4.31	0.45	0.95	0.66	0.50
	Greater than or Equal to 25 Years of Age	11	11.09	5.59	1.68			

Table 6 ANOVA					
Difference in the knowledge with respect to category					
	Sum of Squares	df	Mean Square	F	p value
Between Groups	97.940	3	32.647	1.682	0.176

## CONCLUSION

Overall financial literacy level of the respondents was concluded as low. The level of financial literacy among male respondents is little more than the female respondents whereas the age and category of the respondents does not play any significant role in the financial literacy level of the people. Based on the previous study it has been revealed that as the education increase financial literacy level moves from low to high, so the self learning module was helpful to healthcare professionals for decision making of investment. Apart from this in India parents support their children till they complete their education, so they don't have any practice of how to make a financial decision on whether to save, spend or invest.

Government had already taken a step for improving financial literacy amongst healthcare professionals in developed countries. In USA, AMA (American Medical Association) established center of Financial Literacy for their Healthcare Students. Government of India has also taken a step in 2012 through United Nations Development programme for improving the financial literacy amongst both students and professionals. Thus it is suggested that various financial institutions may be committed to impart training on financial literacy for the Healthcare Students, which in turn would help them to make wiser financial decisions.

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