

A STUDY TO ASSESS KNOWLEDGE OF POST CORONARY ARTERY
BYPASS GRAFT (CABG) PATIENTS REGARDING PREOPERATIVE
PREPARATION

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INTRODUCTION

- DayToDay Health, Bengaluru is an acute care management company. It provides support to the post-surgical patients by guiding them and tracking their health after the surgery. The organization provides its services through its application. Currently, the application has post-surgical modules only.
- Patient education is the essential part of the quality of healthcare. It is anticipated that the preoperative education will result in beneficial outcomes for the patient like better postoperative pain control, decreased anxiety, more realistic expectations of surgery and a better understanding of the surgery.
- With proper education and awareness of the expectations and goals of a surgery; the patient is empowered with the information to improve his/her outcome.
- Knowledge received by the patients is the key component of quality improvement in patient education. For this study, the knowledge was divided into biophysical dimension and functional dimension. The knowledge of the patients who have undergone CABG surgery is assessed on these two dimensions.
- The biophysical dimension included knowledge about illness, symptoms, treatment and complications. Knowledge about individual needs, mobility and nutrition was included under functional dimension.

RESEARCH QUESTION

What is the knowledge of post Coronary Artery Bypass Graft (CABG) patients regarding preoperative preparation?

OBJECTIVES

- To assess the knowledge related to pre-operative preparation among post CABG patients of different socio demographic profile.
- To assess the level of dimensional knowledge among employed and unemployed post CABG patients.

METHODOLOGY

The study has been conducted on 75 patients of the DaytoDay Health, Bengaluru (Karnataka) who underwent CABG surgery.

STUDY DESIGN – Descriptive cross-sectional study

STUDY POPULATION- Patients undergone CABG

STUDY AREA – DayToDay Health Organization, Bengaluru

SAMPLE SIZE – 75

Inclusion Criteria –Age above 18 years

Patients undergone CABG surgery.

Patients who have taken services from DayToDay organization for one month.

METHODOLOGY

Exclusion Criteria –

Patients who did not receive the call.

Patients who received the call but did not answer the questionnaire.

SAMPLING TECHNIQUE – Non-probability convenience sampling

DATA COLLECTION PROCEDURE – Through telephonic interviews

DATA COLLECTION TOOL – Structured questionnaire with a four-point Likert Scale. The format of Likert Scale was as follows-

- Strongly disagree
- Disagree
- Agree
- Strongly agree

METHODOLOGY CONTINUED

TYPE OF DATA – Primary data

DATA ANALYSIS – The analysis of data has been done using descriptive statistical methods.

OPERATIONAL DEFINITIONS

- **CABG:** It is a surgical procedure to restore normal blood flow to an obstructed coronary artery (in heart).
- **Knowledge:** Here it refers to the awareness among the patients regarding pre-operative information about the CABG disease.

SOCIO DEMOGRAPHIC PROFILE OF CABG PATIENTS

- 75 patients were interviewed. The percentage of male respondents was more than the female respondents.
- Maximum number of the respondents belong to the age group of 50-69 years.
- 53.3% of the respondents were graduate.
- Both employed and retired respondents had an equal number in the sample i.e. 33%.
- 8% of the respondents were employed in social or healthcare sector.

RESULTS

Percentage of Sample	
Received Preoperative Education	88%
Did Not Receive Preoperative Education	12%

88% of the respondents received preoperative education and 12% of the respondents did not receive it.

Percentage of Sample	
Received Preoperative Teaching Material	31%
Did Not Receive Preoperative Teaching Material	69%

69% of the respondents did not receive any preoperative teaching material while 31% of the respondents received it.

Age Group	Level of Knowledge (in%)
<30	-
30-49	88.88
50-69	90.17
>70	84.84

All the age groups showed a very good level of knowledge. However, the highest level of knowledge was shown by the age group of 50-69 years with an average knowledge of 90.17%.

RESULTS

	Level of Knowledge of Age Groups (in%)		
Dimensions of Knowledge	30-49 Years	50-69 Years	>70 Years
Biophysical	100	98	92
Functional	100	99.44	100

The respondents showed higher knowledge on the functional dimension as compared to biophysical dimension.

	Level of Knowledge of Employed & Retired Respondents (in%)	
Dimensions of Knowledge	Employed	Retired
Biophysical	97.57	97.57
Functional	100	98.98

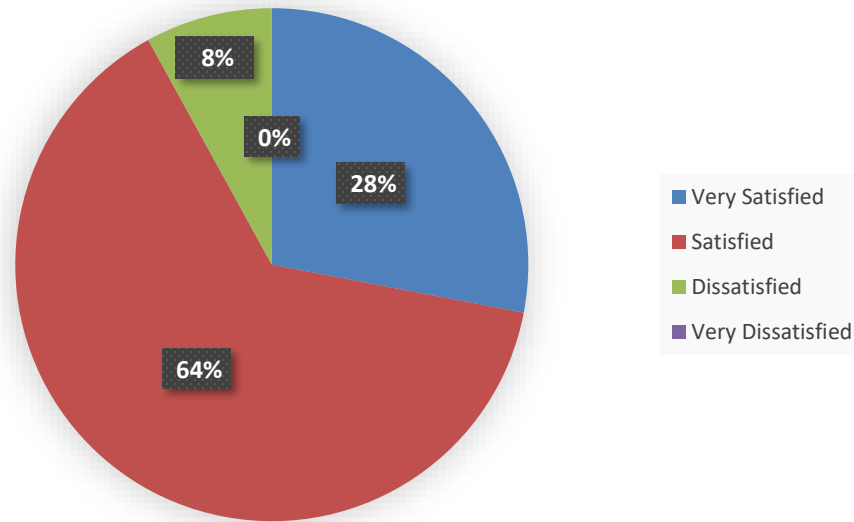
The employed respondents had 97.57% knowledge on biophysical dimension and 100% knowledge on the functional dimension. The retired respondents showed 97.57% knowledge on the biophysical dimension and 98.98% knowledge on the functional dimension.

	Level of Knowledge of Postgraduate & Graduate Respondents (in%)	
Dimensions of Knowledge	Postgraduate	Graduate
Biophysical	94	98
Functional	100	100

Both the graduate and postgraduate respondents showed equal knowledge on functional dimension, but the graduate respondents had higher knowledge on the biophysical dimension.

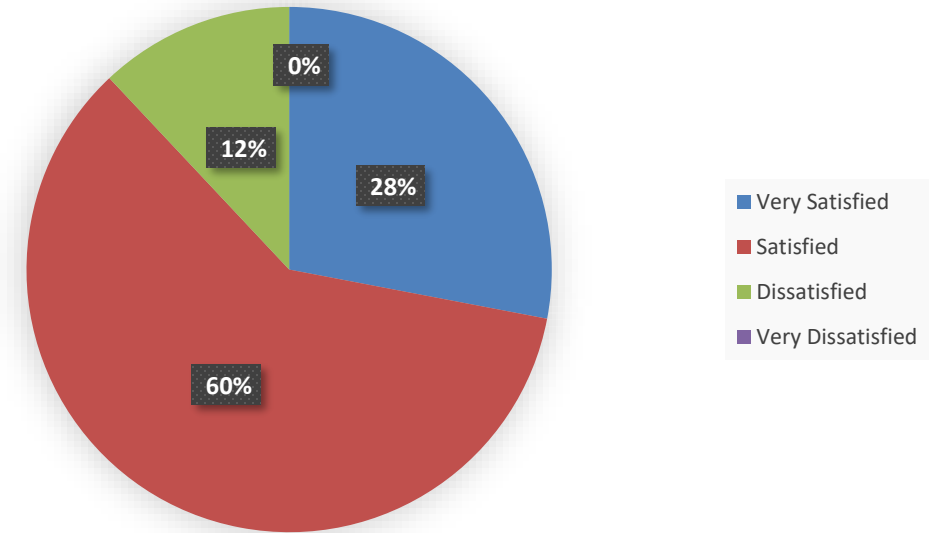
SATISFACTION LEVEL

Satisfaction Level About the Explanation of Surgery



92% respondents were satisfied about the explanation of the surgery in the preoperative information 8% of the respondents were dissatisfied with the preoperative information provided.

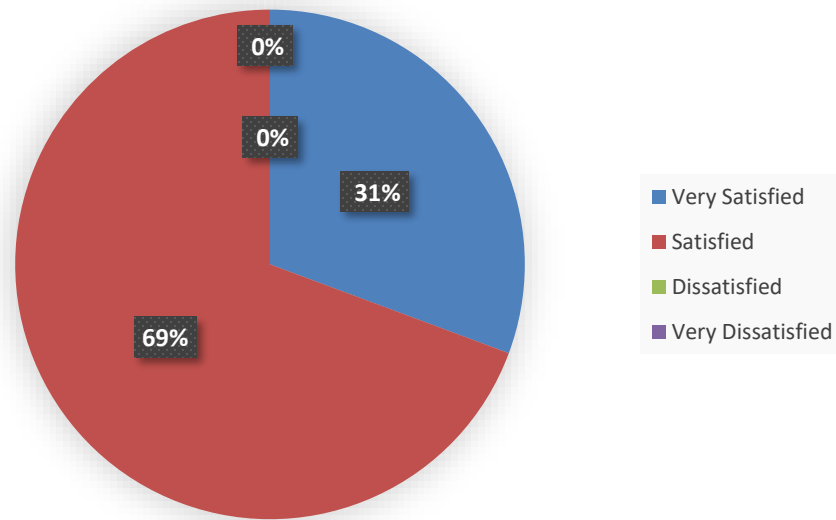
Satisfaction Level With The Amount of Information Provided



88% of the respondents perceived that they were satisfied with the amount of information provided to them.12% were dissatisfied with the amount of information provided in the pre-operative period.

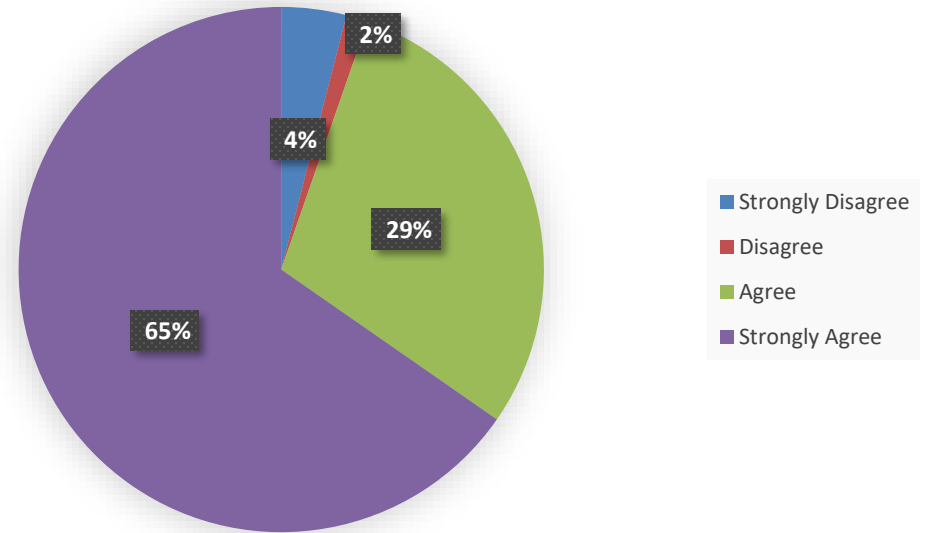
RESULTS

Satisfaction Level With the Explanation About Hospital Stay



100% of the respondents were satisfied with the explanation about the hospital stay.

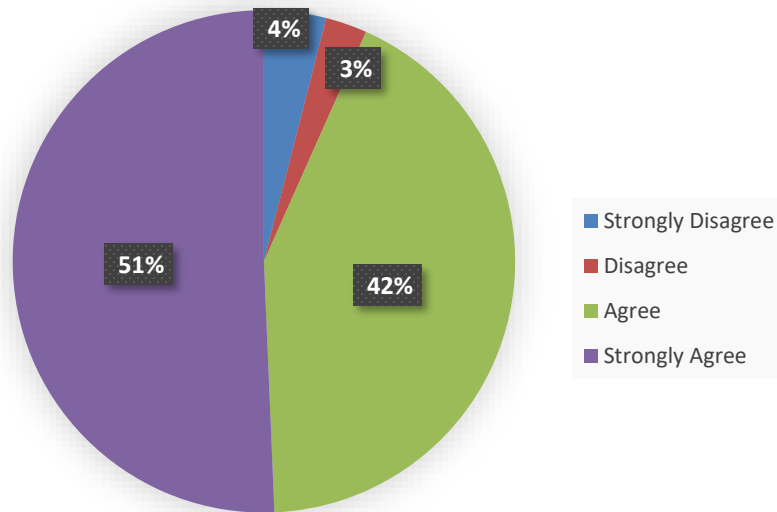
Duration Of Preoperative Information Helps in Building Confidence



94% of the sample is of the perception that the amount of time spent in providing the pre-operative information gives them confidence and strength before and after the surgery.

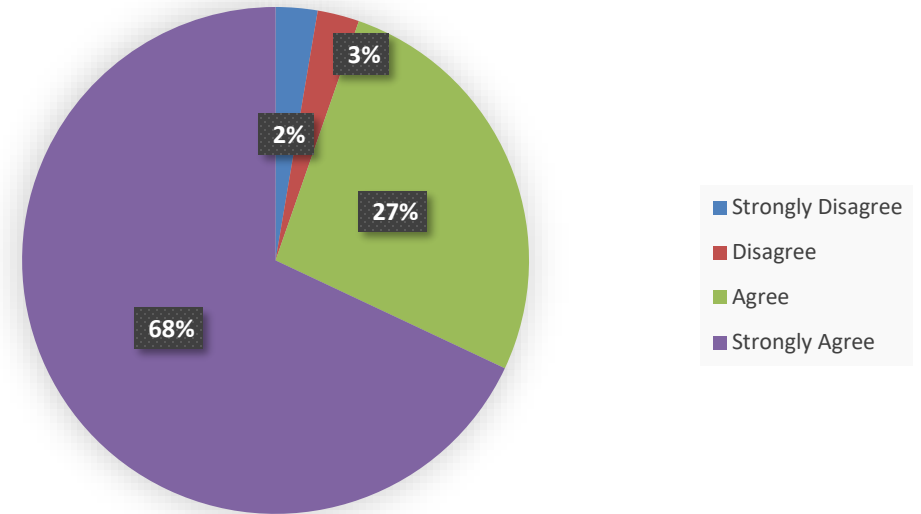
RESULTS

Prior Information About Pain Management Helps in Pain Management



93% of the respondents perceive that if they had been told about the pain management in the pre-operative period; it would have been effective in managing the pain in the postoperative period and 7% of the respondents did not think so.

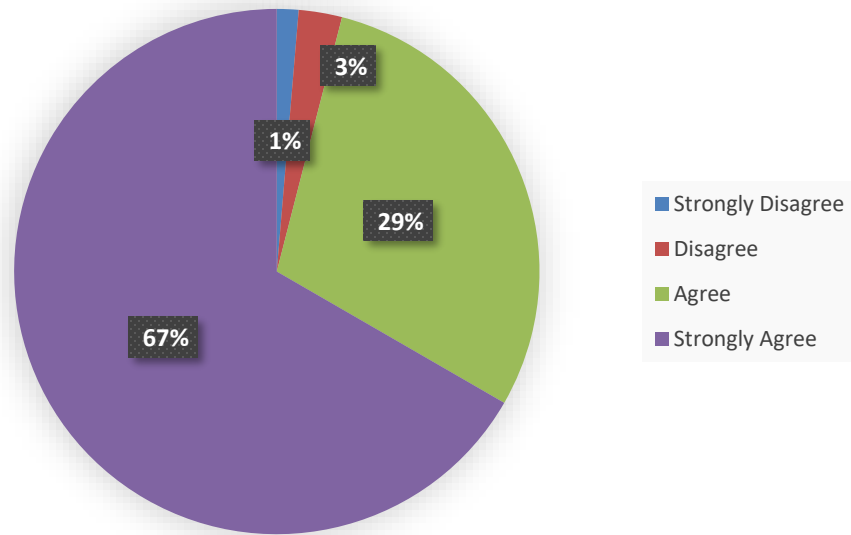
Reminders for Medications Help in Better Outcomes



95% of the respondents have the perception that reminders for medications can help in better recovery after the surgery while 5% of the respondents did not perceive the same.

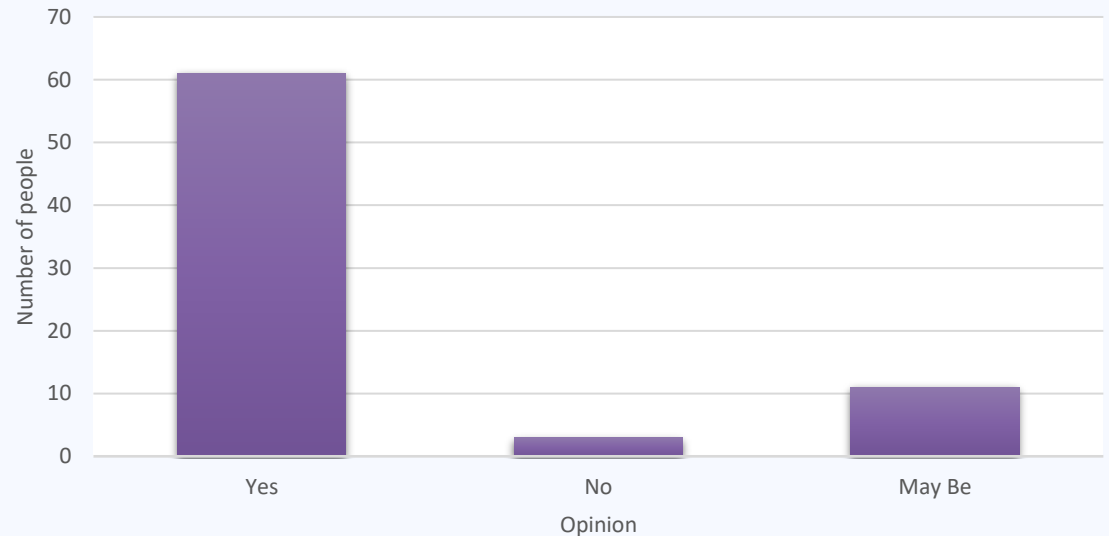
RESULTS

Preoperative Information Assist in Surgical Treatment



96% of the respondents believe that the information provided in the pre-operative period assists them in their surgical treatment. 4% of the respondents did not perceive the same.

Perception Of Inclusion Of Preoperative Information Module In The App



61 respondents in the sample believe that if DaytoDay comes up with a preoperative information module in its application; it would be beneficial for them and their family members. 11 respondents in the sample think it may be beneficial for them.

RESULTS

Even though the knowledge was on the higher side; still respondents felt that certain components from the management aspect were missing. The sample perceived that the information provided in the preoperative period about pain management, incentive spirometry and reminders for medications would have been effective in comforting them in the post-operative period.

SUGGESTIONS

- Majority of the respondents are aware of the necessary components of preoperative education. But knowledge alone is not important. According to the patient's perspective, preparing them for what to expect and after care with the information; it empowers them and helps them make sound decisions.
- There is a need for ongoing education for the patients as well as it satisfies the patient's immediate expectations and desire for the information.
- Patients value accurate and comprehensive information. It can be delivered or made available by **incorporating a preoperative teaching module in comprehensive clinical pathway**. It will
- **Help to achieve maximum patient satisfaction.**
- Help in being a catalyst for delivering customer service excellence.
- Increase customer retention and loyalty.
- Ensure sustainable customer service improvement.
- Assist in benchmarking.

CONCLUSION

It is seldom questioned, if information delivered to a patient produces knowledge. Knowledge about the pre-operative information is a powerful predictor of the perception of people who have undergone CABG surgery regarding their illness and the quality of the services they receive. Significant number of patients are aware of the preoperative information and its benefits on the postoperative outcomes. They also believe that this information empowers them. The result of this study shows that there is a need of including a pre-operative teaching module in the DaytoDay application.

THANK YOU