

Pretesting of Printed Information, Education and Communication Materials among Diabetic Patients (30 to 80) Years Old in a Selected Ward, South Kolkata, West Bengal, India

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Abstract:-

➤ *Background:*

In India, the (IEC) Information, Education & Communication strategy is designed to enhance public awareness and disseminate crucial information about the various benefits offered under the different schemes and programs initiated by the Ministry. This strategy plays a pivotal role in guiding citizens on effectively accessing these benefits, ensuring that the intended population is well-informed and empowered to take advantage of the available resources. A brief study was conducted to pretest the IEC material related to Diabetes Mellitus in a specific ward in Kolkata, West Bengal, India. Following this, we will evaluate and analyse the IEC material.

➤ *Methods:*

A locality-based cross-sectional mix method study was conducted in a selected ward, South Kolkata, West Bengal from 10/05/2024 to 31/05/2024. A predesigned pretested semi-structured questionnaire was used to collect quantitative and qualitative variables. Data were collected through personal face-to-face interviews using Epi-Collect 5 and analysed using EXCEL and SPSS.

➤ *Result:*

Out of 20 study participants, Cent per cent(20) of study participants voted that the IEC material is attractive. The brochure is interesting enough to attract and hold the attention of the target audience, participants like it. several messages attract the most attention. 95%(19)clearly, understand, almost comprehensible. Cent per cent(20) of participants accepted that IEC material is not offensive/inappropriate for the individuals or community. The brochure is perceived by individuals in the target audience. They feel that the brochure is made for themselves or made for those who are suffering from diabetic mellitus. Cent per cent(20) of the IEC material is relevant. Cent per cent(20) target audience opined that call to action regarding pretesting IEC material. The target audience is those suffering from diabetic mellitus and complications. Cent per cent(20) of the brochure can convince the study participants to undertake the desired

behaviour.25%(5) target audience opined that brochures regarding diabetic mellitus should be improved.

➤ *Conclusion:*

In this short study, we discovered that the use of (Brochure)IEC materials was affected by a variety of factors. Therefore, essential to focus on these IEC materials and strive for enhancements in their quality. Improving the quality of brochures can lead to better comprehension and engagement among the target audience. By addressing the many specific qualitative variables that influence their effectiveness, we can ensure that these materials serve their intended purpose more effectively. This will not only facilitate better communication but also promote a deeper understanding of the information being conveyed. This brochure(IEC) material could be implemented after improving quality in a selected ward, South Kolkata, West Bengal.

Keywords:- Pretesting, IEC Material, Health, Education, Promotion, Quality.

I. INTRODUCTION

Without testing their concepts, visuals, or narratives with the target audience, communication planners cannot guarantee that the materials they have carefully developed will be effective. Pretesting serves as a cost-efficient strategy to avoid significant, costly failures down the line. Pretesting involves assessing how a group of individuals responds to a communication or a series of communications before their broad distribution. The aim is to systematically evaluate which of the different versions of a communication is the most effective or to identify specific components of a single communication that could be adjusted to improve its effectiveness. (1)

Pretesting involves gathering members of the target audience to provide feedback on the elements of a communication campaign before they are finalized. This process assesses how the chosen group responds to the materials, helping to ascertain if the priority audience finds the components—typically draft materials—clear, credible, and

engaging. By ensuring that the designed materials resonate with the audience, pretesting enhances the effectiveness of Social and Behavioral Change (SBC) materials. Ultimately, this approach can save time, money, and effort, as it leads to the creation of more impactful communication. (2)

Sadly, the significance of pretesting is frequently overlooked because of limitations in time or budget, or the assumption that the information and materials are already fit for their intended use. This tendency to skip pretesting can be even more pronounced during emergencies, where there is a pressing need to deliver crucial information swiftly and punctually (3). Print materials like posters, brochures, flyers, and billboards designed to highlight information about diseases or health risks are commonly referred to as "information, education, and communication" (IEC) materials. Additionally, some electronic media can also serve this IEC purpose. Public service announcements, along with radio, television, and video programs that share information—whether through direct explanations or storytelling are included in the category of IEC materials. The primary goal of most IEC materials is not merely to attract attention to an issue but to deliver practical information that encourages the reader or viewer to take action(4)

In India. Ministry schemes and programs are supported by the Information, Education & Communication (IEC) strategy, which is designed to raise awareness and disseminate information about the benefits they offer it also serves to instruct citizens on how to effectively access these resources. The objective is also to encourage the build-up of health-seeking behaviour among the people in keeping with the focus on promotive and preventive health. The IEC strategy has

catered to the different needs of rural and urban people through various tools used for communication. (5)

So in this short study, with the help of semistructured predesigned, pretested questionnaires and personal interviews. We will pretest the IEC material regarding Diabetes Mellitus on a selected ward in Kolkata, West Bengal, India. Then we will analyse the IEC material.

II. OBJECTIVE

To assess the effectiveness of the diabetes IEC material in increasing knowledge and awareness among diabetes patients.

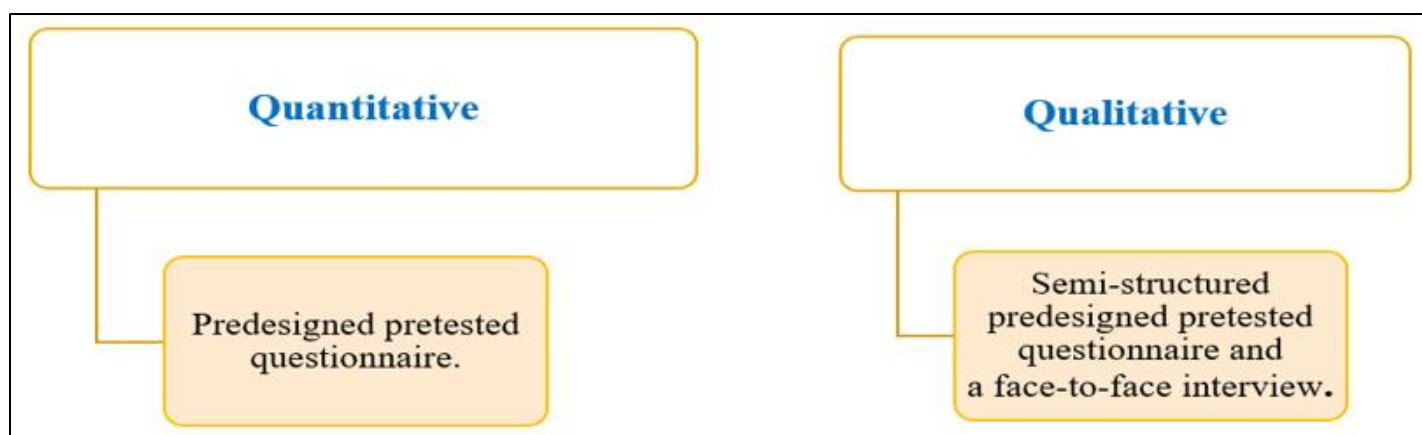
To assess the improvement of diabetes IEC material.

To implement diabetes IEC material for specific geographical areas.

III. MATERIALS AND METHOD

- Study Type: Locality-based, Observational Study.
- Study Design: Mixed method design, Cross-Sectional.
- Study periods: From 10/05/ 2024 To 31/05/2024.
- Study Population: All Diabetic Mellitus Patients under (30-80) years old.
- Sampling Technique: Simple random sampling.
- Study Sample: Randomly selected 20 Diabetic Mellitus Patients under (30-80) years old in a selected ward, South Kolkata, West Bengal. And who gave verbal concern with the help of their knowledge, attitude, practice and belief. And who have a basic literacy level.

IV. STUDY TOOLS AND TECHNIQUES



- Quantitative Variable-Age
- Qualitative Variable- Gender Attractiveness, Comprehension, Acceptance, Relevance, Action, Persuasion, and Improvement.

- Data analysis was done by Microsoft Excel and SPSS software. Excel sheet downloaded from the Epicollect-5 application. Results are presented in the form of tables.

Table 1: Age-Wise Distribution of Diabetes Participants

n	Minimum	Maximum	Mean	Std. Deviation
20	33	75	58.85	14.199

Table 2: Average age-wise distribution of target audience

Average Age	Percent(%)	Total
(33-65)	65	13
(70-75)	35	7

Table 3: Gender-Wise Distribution of Diabetes Participants

Male	Female	Total
9(45%)	11(55%)	20(100%)

Table 4: Frequency Distribution of Qualitative Variables

Attractiveness	Comprehension	Acceptance	Relevance	Call of Action	Persuasion	Improvement
20(100%)	19(95%)	20(100%)	20(100%)	20(100%)	20(100%)	5(25%)

Table 5: Attractiveness Regarding IEC Material

Comment	Frequency	Percent(%)
Yes	20	100.0

Table 6: Comprehension Regarding IEC Material

Yes	19	95.0
Free from diabetics	1	5.0

Table 7: Acceptance Regarding IEC Material

Yes	20	100.0
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Table 8: Relevance Regarding IEC Material

Of course	1	5.0
Yes	19	95.0

Table 9: Call of Action Regarding IEC Material

Yes	20	100.0
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Table 10: Persuasion regarding IEC material

Yes	20	100.0
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Table 11: Improvement Regarding IEC Material

Not to do	15	75.0
Yes to be improved	5	25.0

Question 1		
Answer by participants	Frequency	Percent
I like it, yes	1	5
Very good it's attractive	1	5
Yes	18	90
Total	20	100

Question 2		
Answer by participants	Frequency	Percent
All are attractive	2	10
All pictures are attractive	1	5
All pictures are good	1	5
Almost good	1	5
Attractive	1	5
Content should be big	1	5
Everything is good	1	5
I like all the photos	1	5
I like it	2	10
It's kind of attractive	1	5
Not much	1	5
Nothing to say	1	5
Picture of Drinks and smoke	1	5
Picture of smoking and alcohol	1	5
Should be big material	1	5
Some picture are not understandable	1	5
That all are ok	1	5
You are intimidating me by your leaflet	1	5
Total	20	100

Question 3		
Answer by participants	Frequency	Percent
All are eye catching	1	5
All of pictures	1	5
Doctor's consultation	1	5
Doing meditation and exercise	1	5
Don't drink and smoke	1	5
Foot ulcer, blind eye, kidney and heart problem	1	5
Fruits pictures	1	5
Heart problem	1	5
Pag.No 1	1	5
Page no 3	1	5
Page no 4	1	5
Page no 7	1	5
Person taking insulin	1	5
Picture of alcohol and smoking	1	5
Picture of drink and smoke	1	5
Picture of smoking and alcohol	1	5
Someone helping the blind people	1	5
Symptoms of diabetetics	1	5
Taking self insulin	1	5
What type of food should be taken.	1	5
Total	20	100

Question 4		
Answer by participants	Frequency	Percent
Advertisement	1	5
After diabetic , kidney,eye , heart problems may occure	1	5
All should be maintained according to this brochure	1	5
Be careful and aware	1	5
Care your own health	1	5
Create awareness	1	5
Don't be afraid	1	5
Don't drink and,don't do smoke	1	5
Give time for your health	1	5
Give time yourself	1	5
How to free from diabetics	1	5
Maintain right waye .	1	5
Maintain self awareness	1	5
Should be taken doctors consultation	1	5
To be aware	1	5
To be aware yourself	1	5
To be maintained	1	5
To be maintained, and do not smoke and avoid alcohol	1	5
What to do , what not to do	1	5
You can treat yourself	1	5
Total	20	100

Question 5		
Answer by participants	Frequency	Percent
Awareness and rules	1	5
Be aware	2	10
Care your own health, and be healthy	1	5
Care yourself	1	5
Diabetic patients should take food which indicates page no 3	1	5
Don't be afraid, take doctors consultation	1	5
Either, you can be suffered.	1	5
Follow the doctor's guidelines	1	5
Follow the rule	1	5
Give time yourself	1	5
How you maintain, if you are suffering from diabetes	1	5
If u do the material big , that could be good	1	5
Indicating way .	1	5
It's a advertisement of human being	1	5
Regular exercise, food habits to be updated	1	5
Targeting diabetic person	1	5
To be maintained	1	5
To maintain awareness	1	5
What to do	1	5
Total	20	100

Question 6		
Answer by participants	Frequency	Percent
All are ok	1	5
All are ok except foot ulcer	1	5
All are visible	1	5
Almost good	1	5
Almost visible	1	5
No	9	45
No, all are understandable	1	5
No, Everything is clear	1	5
Not much	1	5
That is ok ,I can understand all	1	5
That's clear in view	1	5
Understandable	1	5
Total	20	100

Question 7		
Answer by participants	Frequency	Percent
No	19	95
Yes	1	5
Total	20	100

Question 8		
Answer by participants	Frequency	Percent
All type of community can't any complaint	1	5
Hindu ,Muslim ,Buddhist will accept this	1	5
I don't know	2	10
May be	1	5
No	15	75
Total	20	100

Question 9		
Answer by participants	Frequency	Percent
Am suffering	1	5
Like my type people	1	5
Same	5	25
Same as me	2	10
Something different	2	10
Something different than me	1	5
They are like me	1	5
They are same	1	5
They are same , like me	1	5
They are same as like as me	1	5
They are under the serious situation ,but I am not	1	5
Yes as like as me	1	5
Yes same	1	5
Yes that's made of me	1	5
Total	20	100

Question 10		
Answer by participants	Frequency	Percent
30 to 80 aged man and women ,may be they are healthy	1	5
For diabetes patients ,	1	5
For the diabetes patients	1	5
Like my type people	1	5
Like, mine type people	1	5
My type people	1	5
Old aged people	1	5
They are like me	1	5
who are suffering from diabetes serious complications	1	5
Who are diabetic patients	1	5
Who are not serious about diabetes	1	5
Who are suffering from diabetes	2	10
Who are suffering from diabetes but they are not maintaining	1	5
Who is suffering from diabetes	2	10
Who is suffering from diabetics and who can suffer diabetes in future	1	5
Who is suffering from serious condition about diabetes	1	5
Who serious from diabetes	1	5
You got diabetes , but you are not maintaining yourself	1	5
Total	20	100

Question 11		
Answer by participants	Frequency	Percent
Care your own health	1	5
Do, Self management	1	5
Don't be afraid, you got treated and consultation	1	5
Follow rules and regulations from diabetes	1	5
Follow the doctor's guide lines	1	5
Free from diabetics	1	5
How to be careful from diabetes	1	5
If you are diabetic patients, you should maintain , you will be healthy	1	5
Maintain correct waye	1	5
Take right food and do regular exercise	1	5
Telling people to be good	1	5
To be aware	1	5
To be follow right waye	1	5
To be followed	1	5
To be followed rule and regulations	1	5
To be maintained right waye.	1	5
To be maintained, rules and regulations to prevent diabetes	1	5
To be self aware	1	5
What to do , what not to do	1	5
You can treat yourself.	1	5
Total	20	100

Question 12

Answer by participants	Frequency	Percent
Obviously	2	10
Sure	1	5
Yes	17	85
Total	20	100

Question 13

Answer by participants	Frequency	Percent
Am not suffering severe diabetes	1	5
Am suffering, and i do	1	5
Because ,I am suffering from diabetes, i should maintain	1	5
I already followed , because am suffering from diabetes	1	5
I am somewhat acceptable	1	5
I am suffering , i must do	1	5
I can't do , because am handicapped	1	5
I do , and maintain	1	5
I do , because am suffering	1	5
I do, and i will do	1	5
I do.	1	5
I obey , andI will obey	1	5
I obey , because am suffering	1	5
I promise,I will do	1	5
Ido	1	5
Obviously	1	5
That is made for me. Soi will do	1	5
That's made for my type people	1	5
Yahh ! Am suffering ,I will do	1	5
Yes ,I will maintain	1	5
Total	20	100

Question 14

Answer by participants	Frequency	Percent
All are attractive	1	5
Almost good	1	5
No	17	85
No0	1	5
Total	20	100

Question 15		
Answer by participants	Frequency	Percent
No	19	95
Nothing	1	5
Total	20	100

Question 16		
Answer by participants	Frequency	Percent
All are completed	1	5
Don't eat sweet ,it's not good for your health	1	5
No	12	60
No , material quality should be good	1	5
No! May be think	1	5
Not to do improvement	1	5
Nothing to say , am happy, brochure is so good	1	5
Picture of smoking and cigarette is eye catching, u can remove it	1	5
Sweet, rasgulla should be avoided	1	5
Total	20	100

V. RESULT

Out of 20 diabetic patients, 65%(13) are under (33-65) years old, and 35%(7) are (70-75) years old. 45%(9) are Male, and 55%(11) are Female. Out of 20 study participants, Cent per cent(20) of study participants voted that the IEC material is attractive. The message is interesting enough to attract and hold the attention of the target audience, participants like it. Several messages attract the most attention. 95%(19) clearly understand, almost comprehensible. Cent per cent(20) of participants accepted that IEC material is not offensive/inappropriate for the individuals or community. The brochure is perceived by the individuals in the target audience. They feel that the brochure is made for themselves or made for those who are suffering from diabetic mellitus. Cent per cent(20) of the IEC material is relevant. Cent per cent(20) target audience opined that call to action regarding pretesting IEC material. The target audience is those suffering from diabetic mellitus and complications. Cent per cent(20) of the brochure can convince the study participants to undertake the desired behaviour. 25%(5) target audience opined that brochures regarding diabetic mellitus should be improved.

VI. DISCUSSION

Overall, the participants expressed positive perceptions of the Diabetes IEC material. The brochure proves to be a valuable resource for diabetes self-management, raising awareness, and providing health education. It can be utilized effectively in various settings, whether on a one-on-one basis or within community groups and local organizations. Specifically, this material is particularly beneficial for individuals aged 30 to 80 years old who are dealing with

diabetes mellitus and its complications in a selected ward, in South Kolkata, West Bengal.

By offering accessible information and practical guidance, the brochure can empower these individuals to take control of their health, make informed decisions, and engage in discussions about their condition with peers and healthcare providers. Moreover, the positive feedback from participants indicates that such IEC materials can play a crucial role in fostering a supportive community around diabetes management, ultimately leading to better health outcomes for those affected.

VII. CONCLUSION

In this short study, we discovered that the use of (Brochure)IEC materials was affected by a variety of factors. Therefore, essential to focus on these IEC materials and strive for enhancements in their quality. Improving the quality of brochures can lead to better comprehension and engagement among the target audience. By addressing the many specific qualitative variables that influence their effectiveness, we can ensure that these materials serve their intended purpose more effectively. This will not only facilitate better communication but also promote a deeper understanding of the information being conveyed. This brochure(IEC) material could be implemented after improving quality in a selected ward, South Kolkata, West Bengal.

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ANNEXURE

A predesigned pretested semi-structured questionnaire

➤ *Question Answer*

- What is your name?
- What is your age?
- What is your sex?
- What is your location?

➤ *Attractiveness*

- What do you like about these messages/material?
- What do you not like about this message/material?
- What was the first thing that caught your eye?

➤ *Comprehension*

- What does the message/material say?
- What do you think the message/material is speaking to?
- What words /sentences/images are difficult for you to understand?

➤ *Acceptance*

- Is there anything about this message/material that you find offensive or inappropriate?
- Is there anything about this message/material that someone in your community may find offensive or inappropriate?

➤ *Relevance*

- In what way are those people different from you or the same as you?
- What type of people do you think should read /watch this message/material?

➤ *Call to Action*

- What does the message/material ask the audience to do?

➤ *Persuasion*

- What do you think you should do what the message /material asks you to do?
- How likely are you to do that and why?

➤ *Improvement*

- What would you change in this material/ message to make it more appealing to you?
- What information do you think is missing?
- What else, if anything, would you like to include in this message/material?

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