

EFFECTIVENESS OF COMMUNICATION STRATEGIES FOR TOBACCO INTERVENTION: A
SYSTEMIC REVIEW AND FINDING THE RIGHT APPROACH

by

DR. SHRUTI BHARGAVA, (BDS, PGDCR, MBA IN HOSPITAL ADMINISTRATION)

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by

DR.SHRUTI BHARGAVA

Supervised by

Dr. Atul Pati Tripathi

APPROVED BY



Dissertation chair

RECEIVED/APPROVED BY:

Admissions Director

Dedication

I dedicate my dissertation work to my father, Mr. Ram Kumar and mother Mrs. Ashu with feeling of gratitude, whom words of encouragement and push for tenacity of rings in my ears. My kids Adya and Adyant who never left me alone and are very special to me.

I also dedicate this work to my family members and friends & give my special thanks who have supported me in entire journey and were my true cheerleaders.

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ABSTRACT

EFFECTIVENESS OF COMMUNICATION STRATEGIES FOR TOBACCO INTERVENTION: A SYSTEMIC REVIEW AND FINDING THE RIGHT APPROACH

DR. SHRUTI BHARGAVA

2024

Dissertation Chair: <Chair's Name>

Co-Chair: <If applicable. Co-Chair's Name>

Communication is one of the most important tool that aid to connect to the people. The Concept which is used in this research is a mixed method, combines qualitative and quantitative approaches to provide a more holistic understanding of research questions, the result of this research shows the positive approach towards the development of the effective communication strategy for the Tobacco intervention. The tool used in this research is google form in view of Simple Seven Questionnaire. According to the World Health Organization (WHO) Tobacco is the single greatest cause of preventable death across globe. Awareness is required regarding the ill effects of Tobacco use so that with the correct knowledge and attitude, gradual but marked difference can be made and appreciated.

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CHAPTER I:
INTRODUCTION

1.1 Introduction

Health communication encompasses both written and spoken tactics to empower and encourage people, groups, and communities to make healthy decisions. The creation of treatments and activities aimed at modifying behavior is a component of health communication. The goal of health communication tactics is to alter people’s beliefs, attitudes, and actions in this study using communication strategy for tobacco intervention initiation. It was evident that to start solving any problem, one should first starting communicate about it with right approach to right audience; for example :

- **Increase risk prevention:-** Increasing risk prevention communication in tobacco intervention is crucial for raising awareness and promoting behavior change.

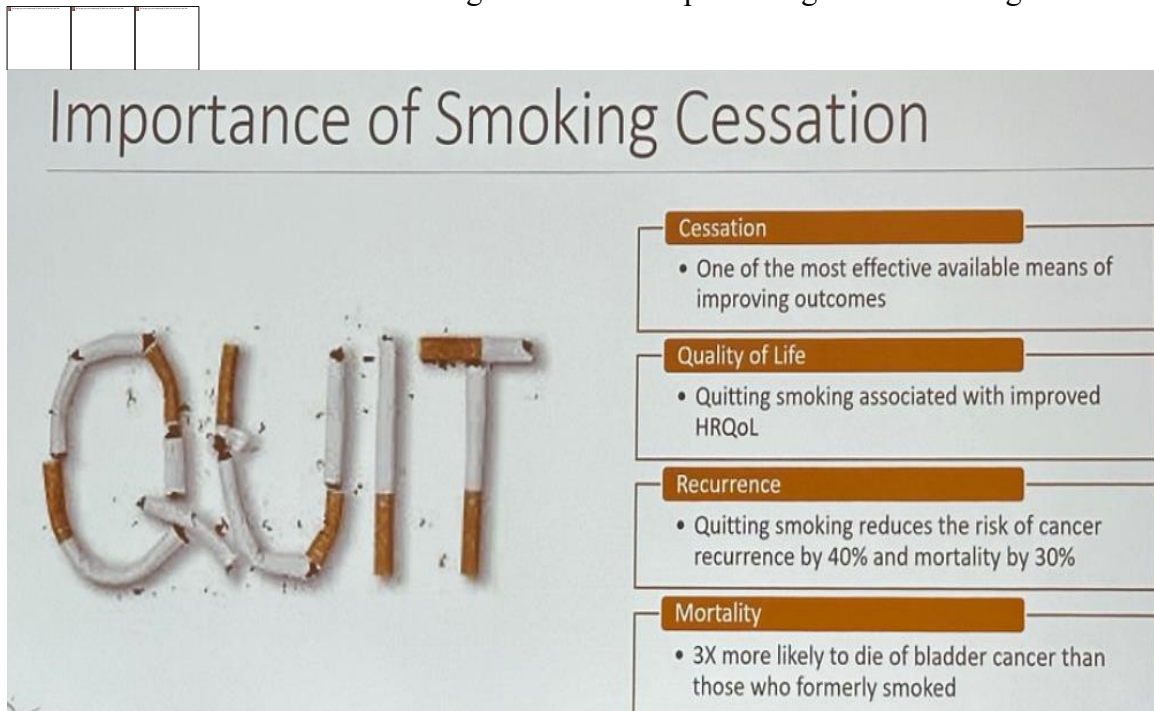


Figure 1 Source Kay et al.(2024)

As shown in figure 1, importance of smoking cessation has 4 most important factors, with reference to that here are some strategies to enhance the effectiveness of communication in this area:

1. Targeted Messaging

- a) **Personalized Risk Information:** Tailor messages to different populations (e.g., teens, pregnant women, chronic smokers) using specific health risks that resonate with their demographics and experiences.
- b) **Cultural Sensitivity:** Adjust communication to fit the cultural, social, and linguistic contexts of the audience, ensuring it's relatable and comprehensible.

2. Utilize Multiple Platforms

- a) **Social Media Campaigns:** Develop engaging content across social media platforms (videos, info graphics, testimonials) that highlights the risks of tobacco use and the benefits of quitting. [Wong, L.P. and Mohamad Shakir, S. (2019)125]
- b) **Text Message Interventions:** Send regular text messages to remind smokers about the dangers of tobacco use, offer motivational support, and provide quit line resources.
- c) **Public Service Announcements (PSAs):** Broadcast impact messages via radio, TV, or podcasts to reach broader audiences, including non-digital users.

3. Interactive and Engaging Education

- a) **Mobile Apps:** Offer mobile applications that provide educational content, progress tracking, and motivational reminders to reduce tobacco use.
- b) **Interactive Webinars:** Conduct webinars with healthcare professionals where individuals can ask questions and discuss health risks and cessation strategies in real-time.
- c) **Gratification:** Incorporate elements like quizzes or challenges related to tobacco risks and quitting benefits in digital tools or interventions to maintain user engagement.

4. Involve Healthcare Providers

a) Consistent Messaging from Healthcare Providers: Train healthcare professionals to communicate the risks of tobacco use effectively and provide brief, consistent interventions at every opportunity.

b) Patient-Centered Discussions: Focus on collaborative conversations, using motivational interviewing techniques to help patients explore their reasons for quitting and highlight the risks that are most meaningful to them.

5. Leverage Testimonials and Peer Support

a) Survivor Stories: Share stories from individuals who have experienced serious health issues due to tobacco use, creating emotional connections with the audience.

b) Peer Support Networks: Create or encourage participation in peer support groups, where people can share their experiences and successes in reducing or quitting tobacco use.

6. Visual Warnings

a) Graphic Warning Labels: Use compelling images on cigarette packages to graphically depict the risks of smoking.

b) Virtual Reality (VR) Experiences: Allow users to experience simulations of the long-term health effects of tobacco use, helping them visualize the risks in a visceral way.

7. Collaborate with Schools and Communities

a) School-Based Interventions: Integrate tobacco risk education into health curricula for young people, focusing on both short- and long-term risks. [(Bhalerao A. et al) (2020)121]

b) Community Workshops and Seminars: Organize workshops in community centers, particularly in high-risk areas, to educate and provide cessation resources.

8. Highlight Immediate and Long-Term Benefits

a) Focus on Immediate Health Improvements: Emphasize the short-term benefits of quitting, such as improved breathing, energy levels, and taste, alongside long-term benefits to health.

b) Financial Incentives: Showcase how much money people can save by quitting smoking, linking financial benefits to reduced tobacco use.

9. Use Data and Statistics

a) Localized Statistics: Provide data relevant to the audience's community or demographic group, which might make the risks feel more immediate and real.

b) Info graphics and Easy-to-Digest Formats: Present key statistics on smoking-related diseases and deaths in a visually engaging format that can be easily shared and understood.

- **Reinforce positive behaviour:-** Reinforcing positive behavior in tobacco intervention communication is essential to encourage and support individuals in their journey to quit smoking or reduce tobacco use. To reinforce tobacco cessation one should know the harmful components of it (reference Figure 2)

Cigarette component

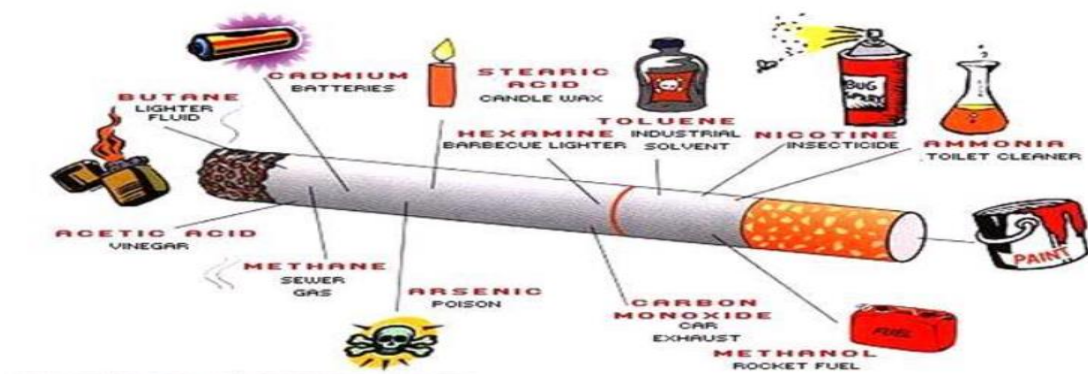


Figure 2 :DO YOU STILL WANT TO SMOKE? (Source Smokefreeforsthe.Org)

Here are several strategies to reinforce positive behavior effectively:

1. Positive Framing of Messages

Highlight any progress, such as reducing smoking frequency or duration of abstinence, to maintain motivation. Acknowledge even small steps as important achievements. Focus should be on progress, not on perfection.

Use encouraging language that reinforces each milestone (e.g., “Great job! You’ve made it one week smoke-free!”). Celebrating small wins builds confidence and reinforces positive behavior.

While it’s important to discuss the risks of smoking, balance it by emphasizing the rewards of quitting, such as improved health, energy, and financial savings. In short shift from risk to reward.

2. Encourage Self-Efficacy

Reinforce the idea that quitting is within the person’s control ensure and empower them for decision making. Use affirming language like, “You have the power to choose a healthier future,” which strengthens their sense of self-efficacy.

Regularly send messages that motivate and remind individuals of their ability to succeed in quitting or reducing tobacco use, such as, “You’ve already come so far—keep going!”

Provide access to resources (e.g., quitline support, apps, or health coaches) and reinforce how using these tools increases their chances of success.

3. Provide Positive Feedback

Give immediate and specific feedback when someone demonstrates positive behavior, such as completing a day smoke-free or attending a support group. Positive feedback strengthens the desire to maintain the behavior.

Reinforce physical improvements from quitting or reducing tobacco use (e.g., “Your lung function improves after just 48 hours of quitting!”). This helps to link behavior change to immediate health benefits.

4. Leverage Social Support

Encourage supportive friends and family members to reinforce the positive behavior of the person quitting tobacco. Messages like, “Your family is proud of your progress,” can have a powerful emotional impact.

Create peer support groups where members can celebrate each other’s successes, share coping strategies, and reinforce positive behavior through collective encouragement.

5. Use Behavioral Reinforcement Techniques

Implement a reward system where individuals earn incentives for maintaining smoke-free milestones. For example, they could receive gift cards or health-related items for staying tobacco-free for a certain period.

Introduce elements like challenges, badges, or progress bars in smoking cessation apps to visually represent progress, reinforcing positive behavior with every step forward, this is called as gratification.

6. Normalize the Change

Share stories of others who have successfully quit smoking, reinforcing that quitting is achievable and normalizing it as a positive life decision. Setting role models as example can make a great difference.

Frame quitting tobacco as something many others are doing, creating a sense of belonging for those making similar health choices. This is known as positive peer process.

7. Focus on Long-Term Benefits

Regularly remind individuals of their long-term goals, such as better health, extended life expectancy, or being a good role model for children, which can motivate continued positive behavior.

Use imagery or stories that allow individuals to visualize a healthier, tobacco-free future. Messages such as “Imagine yourself running a marathon or playing with your kids without getting winded” can inspire long-term commitment.

8. Provide Ongoing Encouragement

Send periodic check-ins to remind people of their progress and offer encouragement to keep going. For example, “Just checking in—how are you feeling? Remember, every day smoke-free is a victory!”

Reinforce that setbacks are part of the process and provide encouragement to get back on track. Say things like, “A slip-up is not a failure. You’ve made great progress, and you can continue moving forward.”

9. Celebrate Milestones and Long-Term Abstinence

Celebrate key dates, such as 1 month, 6 months, or 1 year smoke-free, with congratulatory messages. Acknowledging these milestones boosts morale and reinforces the long-term goal. Survivor felt positive towards the act to know that someone is noticing the effort.

Anniversaries and Ongoing Support: Even after reaching long-term goals, continue to offer praise and support on anniversaries, reinforcing the idea that the achievement is significant and worth maintaining.

- **Influence social norms:-** Influencing social norms to create a positive impact in tobacco intervention requires shifting the collective attitudes and behaviors

surrounding tobacco use. Surroundings play an important role to build up the values and conscience of an individual to live their life, Picture 3 elaborates it.

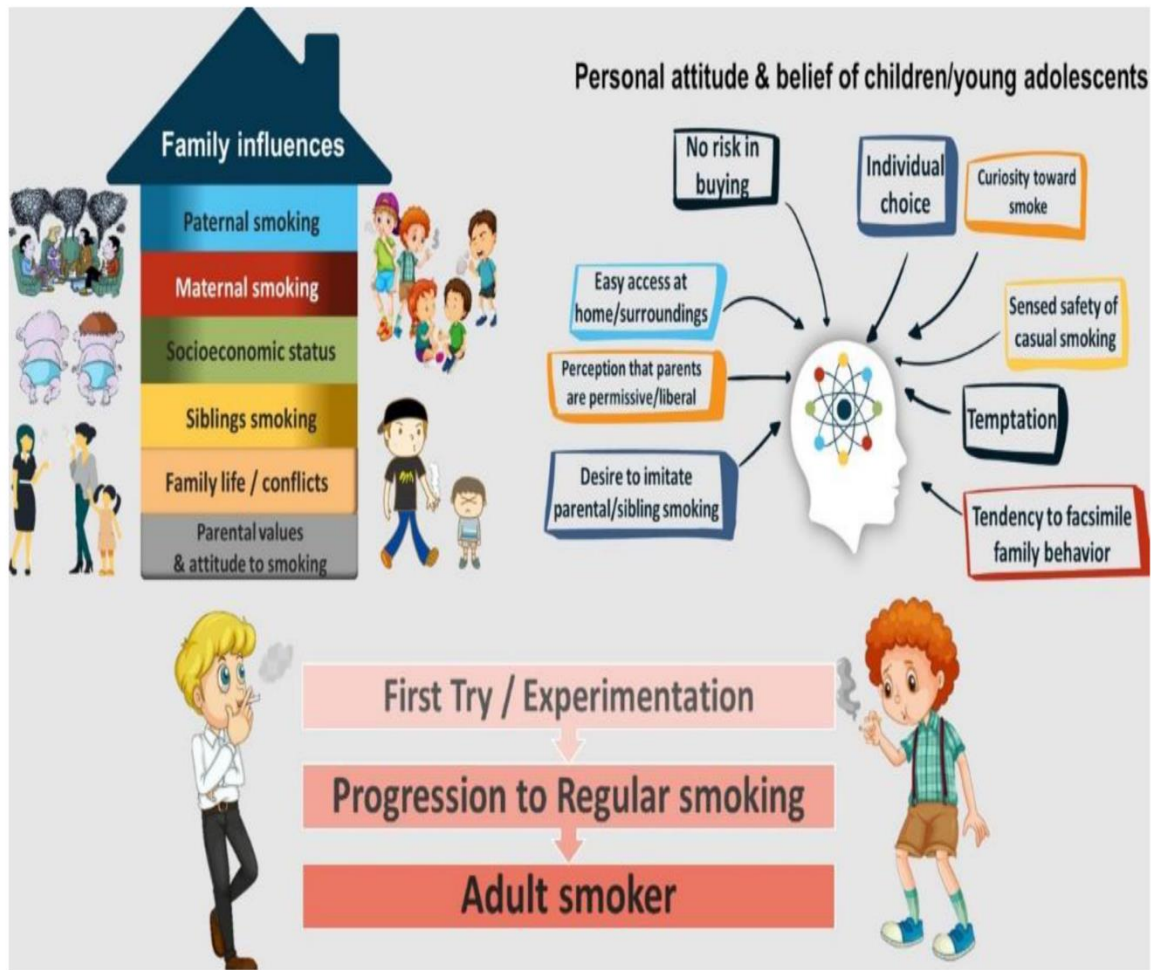


Figure 3 Family Influences (Source MDPI)

By using strategic communication, you can foster an environment where tobacco use becomes less socially acceptable, and quitting or reducing use is seen as the norm. Here are ways to positively influence social norms through communication:

1. Publicize Success Stories

By sharing stories of people who have successfully quit smoking, especially influencers, public figures, or respected community members. Highlighting their journey reinforces the message that quitting is achievable and socially valued.

By using real stories from everyday individuals who quit smoking to showcase the benefits and normalize quitting as a positive life decision.

2. Positive Peer Pressure

Emphasize that more people are choosing to quit smoking and fewer people are starting. Using statistics like "80% of adults don't smoke" shows that quitting or never starting is the majority behavior.

Using campaigns that showcase communities taking a stand against smoking, such as smoke-free public spaces or schools. This makes quitting part of a larger, socially responsible movement.

3. Leverage Media and Marketing

Launch of campaigns that promote a tobacco-free lifestyle using hashtags, challenges, or viral content. When quitting becomes part of popular conversations, it influences social norms.

Using TV ads, billboards, and radio spots to reinforce quitting as the new norm. Position tobacco cessation as something aspirational and desirable.

Involvement of social media influencers, celebrities, and athletes who are respected by target demographics to promote quitting as a positive and empowering decision.

4. Normalize Quitting in Everyday Life

Advocate for more smoke-free environments in public spaces like parks, restaurants, and workplaces. The more normalized non-smoking environments are, the less acceptable smoking becomes in social contexts.

Increase the visibility of support systems like quit lines, mobile apps, and counseling services in workplaces, schools, and healthcare settings, making it clear that seeking help to quit is normal and encouraged.

5. Re-frame Smoking as Socially Unacceptable

By framing smoking as not just a personal health risk but also as harmful to others through secondhand smoke, littering, and the impact on family and friends. Highlight the social responsibility of not smoking.

In youth-targeted campaigns, depict smoking as outdated or unattractive. Messages like "Smoking is not cool" or "Most people my age don't smoke" can discourage younger populations from adopting the habit.

6. Build Community-Led Initiatives

Encourage local communities to take ownership of anti-smoking campaigns by organizing events like tobacco-free fairs, public talks, or youth sports programs that advocate for healthy living without tobacco.

Promote peer support programs, such as quit-smoking groups where individuals can encourage each other. When quitting becomes a shared community goal, social norms start shifting.

7. Create Visible Celebrations of Quitting

To use public displays to celebrate individuals who have quit smoking, such as local recognition events, posters of ex-smokers, or digital campaigns. These public celebrations create a sense of pride around quitting.

Encourage workplaces, communities, or schools to offer social recognition, like awards or certificates, to individuals who have quit smoking. These rewards make quitting visible and aspirational.

8. Utilize Youth-Led Advocacy

Empower young people to lead campaigns against smoking in schools and communities. Youth-led initiatives, like peer education or creative anti-smoking videos, make quitting more relatable to younger audiences.

Present non-smoking as the future "cool" behavior. Create campaigns that show young people who choose a healthy, tobacco-free lifestyle as leaders and influencers in their communities.

9. Frame Smoking as a Barrier to Social Integration

Frame smoking as something that holds people back from fully enjoying life or participating in social activities (e.g., exercising with friends, attending non-smoking gatherings). Highlight how quitting leads to more full participation in life.

To use messaging that links quitting smoking to being a more active participant in social events, athletic activities, and community gatherings.

10. Collaborate with Healthcare and Public Institutions

Work with healthcare providers to deliver consistent, positive messages about quitting, positioning it as a sign of strength and intelligence rather than weakness.

Partner with schools, workplaces, and government agencies to promote tobacco-free policies and programs. When quitting becomes institutionally supported, it sends a message that society values non-smoking as a norm.

11. Data-Driven Communication

To use local and relatable data showing that most people in certain communities or demographics don't smoke. This can correct misconceptions and shift norms.

Regularly report the declining rates of tobacco use in media and public forums to create the impression that quitting is part of a broader societal trend. By consistently shaping the perception that quitting or avoiding tobacco use is a socially responsible, desirable, and increasingly common behavior, you can shift social norms towards a positive impact.

- **Increase availability of support and needed supports:-** Increasing the availability and visibility of support in tobacco intervention is crucial for helping individuals quit smoking or reduce their tobacco use.



Figure 4: Source American Cancer Foundation

Figure 4 shows different means of availability of support, also following are strategies to enhance communication and ensure people are aware of the support available, while also addressing their unique needs:

1. Expand Access to Quit lines and Digital Tools

Widely advertise national and local quit lines (like 1-800-QUIT-NOW) through posters, flyers, public service announcements, and social media. Emphasize that these services are free, confidential, and available 24/7.

Encourage the use of smoking cessation apps that offer personalized quitting plans, tracking tools, and motivational messages. Publicize these apps via digital platforms, healthcare providers, and community centers.

Offer and promote text-based support programs where individuals can sign up to receive regular messages with quitting tips, motivation, and check-ins.

2. Increase Awareness of Available Resources

Place tobacco cessation materials (brochures, flyers, etc.) in high-traffic areas like pharmacies, grocery stores, hospitals, and workplaces. This ensures that the public is constantly reminded of the support available to them.

Use paid social media campaigns to reach people at different stages of quitting, with direct links to online resources, support groups, or quit lines.

Host community events like health fairs or wellness days, where individuals can learn about tobacco cessation programs and receive free consultations on quitting strategies.

3. Tailor Support to Different Populations

Adapt resources to the cultural and linguistic needs of different communities, ensuring materials and communication are accessible to non-English speakers or culturally diverse groups.

Promote smoking cessation programs designed for young people, using channels and platforms they frequent, like social media, gaming apps, or youth-focused websites.

Offer targeted resources for pregnant women, individuals with mental health challenges, and people in low-income or under-served communities. Partner with social services, clinics, and non-profits to ensure these groups have access to personalized support.

4. Work with Healthcare Providers

Encourage healthcare providers to routinely screen for tobacco use during patient visits and provide on-the-spot counseling or refer patients to support services. Equip them with materials and resources to share.

Train physicians, nurses, and pharmacists to offer brief tobacco cessation interventions. Providing them with scripts, tools, and referral information for local cessation programs can increase the support available during routine check-ups.

Use tele-health services to provide counseling, follow-up appointments, and tobacco cessation support remotely, ensuring that individuals who cannot visit clinics still receive the necessary care.

5. Enhance Workplace Support Programs

Encourage employers to offer smoking cessation programs as part of their wellness benefits. Provide group counseling, smoking cessation workshops, or coverage for nicotine replacement therapies (NRT).

Promote and expand tobacco-free workplace initiatives. Offering incentives or health benefits for employees who participate in cessation programs can motivate more people to take advantage of the support available.

Make sure Employee Assistance Programs provide accessible, confidential counseling and quitting resources for employees trying to quit smoking.

6. Create Peer Support Networks

Organize in-person or virtual tobacco cessation support groups, which can be promoted through healthcare providers, local community centers, or online platforms. These groups offer emotional support, accountability, and shared experiences.

Direct individuals to online support groups or forums where they can connect with others going through the same challenges. These digital communities can provide a sense of camaraderie and encouragement.

Establish buddy systems within workplaces, schools, or communities where people pair up to support each other in quitting. Communicate these opportunities through newsletters, social media, or employer wellness programs.

7. Use Personalized Communication

Develop communication strategies that meet individuals where they are. For example, send personalized emails, texts, or app notifications that address their specific stage of readiness to quit (e.g., thinking about quitting, just started, facing a relapse).

Ensure individuals know they can access support through a variety of channels (e.g., phone, in-person, online, text), so they can choose the option that best suits their preferences and lifestyle.

8. Utilize Pharmacists and Community Health Workers

Train pharmacists to offer guidance on nicotine replacement therapy (NRT) and prescription medications for quitting smoking. Pharmacists are often the first point of contact for individuals looking for help, so empowering them can increase access to support.

Engage CHWs in tobacco cessation efforts, particularly in under-served communities. CHWs can provide education, guidance, and support, reaching people who might not otherwise seek help from traditional healthcare providers.

9. Increase Financial Support and Accessibility

Partner with local governments, healthcare organizations, or employers to subsidize the cost of Nicotine Replacement Therapy (NRT) products (e.g., patches, gum) or smoking cessation medications. Make sure people know where they can access these for free or at a reduced cost.

Ensure that counseling services, either in-person or online, are easily accessible and free or affordable. Promote sliding scale fees or free access to tobacco cessation counseling for low-income individuals.

10. Leverage Media and Public Awareness Campaigns

Use public service announcements (PSAs) across television, radio, and digital media to increase awareness of support resources like quit lines, apps, or local support programs. These campaigns can be especially effective if they highlight real stories of individuals who have successfully quit with help.

Partner with local radio stations, newspapers, and community influencers to share information about available cessation support. Highlight easy-to-access resources and emphasize that help is free and widely available.

11. Support in Public Policies

Encourage government-funded campaigns and policies that provide free or low-cost cessation services. Ensure these services are well-publicized, with clear instructions on how to access them.[*Jamison, D.T., Breman, J.G., Measham, A.R. et al. (2006)123 Jha, P. and Chaloupka, F.J. (2000)123*]

Advocate for policies that require tobacco cessation resources to be available at schools, universities, and workplaces, ensuring a widespread safety net for those trying to quit.

By making support easily accessible, personalized, and widely communicated, more people will be aware of the resources available to help them quit smoking. Clear communication about the variety of options — from quit lines to peer support — can lead to greater engagement and more successful quitting efforts.

- **Empower individuals to change or improve their health condition:-** Empowering tobacco users to improve their health and change their habits is essential for successful tobacco cessation. It involves fostering a sense of control, providing the right resources, and creating a supportive environment that encourages change.



Figure 5 (Source Indus Health Plus)

Here are several strategies to empower tobacco users to improve their health:

1. Provide Clear, Actionable Information

Clearly explain the immediate and long-term health improvements associated with quitting tobacco, such as better lung function, lower risk of heart disease, and improved mental well-being. Break this information into manageable steps to make it less overwhelming.

Offer detailed quit plans that break the process into smaller, achievable steps. Having a structured road map provides users with a sense of control and purpose.

Emphasize short-term benefits, like improved energy, taste, and breathing, which can be seen just days after quitting. This creates motivation to continue the process.

2. Foster Self-Efficacy and Confidence

Focus on encouraging language that builds confidence, such as “You have the strength to quit” and “Every effort you make brings you closer to your goal.”

Train healthcare providers to use motivational interviewing techniques that help tobacco users identify their own reasons for quitting and explore their readiness to change. This self-driven approach empowers users to take ownership of their health journey.

Encourage individuals by normalizing the challenges they may face during their quit attempts. Highlight that relapses are part of the quitting process, but they can still succeed.

3. Offer Personalized Support

Provide personalized quit strategies based on the individual’s smoking habits, triggers, and health status. Tailored interventions empower users by addressing their specific needs and circumstances.

Offer tobacco users the tools to create their own quit plan, factoring in their smoking history, support systems, and triggers. Having a personalized approach gives them a greater sense of control.

Ensure that cessation programs and communication strategies are culturally relevant and linguistically accessible. When individuals feel their unique backgrounds are understood and respected, they are more empowered to take action.

4. Provide Access to Tools and Resources

Make users aware of available NRT products (e.g., patches, gum, lozenges) and prescription medications that can reduce withdrawal symptoms. Having tangible tools to manage cravings empowers users to succeed.

Promote apps and online tools that provide personalized quit plans, progress tracking, and motivational tips. These tools offer users support and accountability at their fingertips, boosting their sense of empowerment.

Ensure that users know about free resources, such as quit lines, counseling, and support groups. Making these tools accessible gives them the practical means to succeed.

5. Encourage Goal Setting and Self-Monitoring

Encourage users to set small, specific goals, such as reducing the number of cigarettes smoked daily or going smoke-free for one day. Reaching these goals gives them confidence and a sense of accomplishment.

Encourage users to monitor their progress by keeping a quit journal or using apps that track milestones, such as days smoke-free or money saved. Seeing progress visually can provide a strong sense of empowerment and motivation.

Suggest that users reward themselves for reaching milestones (e.g., one week smoke-free). Self-reward reinforces positive behavior and motivates continued progress.

6. Build a Supportive Environment

Encourage individuals to involve friends, family, or support groups in their quitting journey. A supportive environment can increase accountability and reduce feelings of isolation.

Create or connect users with peer-led support groups where they can share experiences, strategies, and encouragement. Peer-to-peer support empowers individuals by showing them they are not alone.

Advocate for supportive environments in the workplace or community, such as tobacco-free zones, workplace cessation programs, and accessible resources. Knowing they are in an environment that supports their goals reinforces their ability to change.

7. Empowerment Through Education and Awareness

Organize workshops that educate tobacco users about the full range of health benefits of quitting, along with practical steps to take. Knowing the facts can inspire people to take action.

Equip users with comprehensive information about withdrawal symptoms, cravings, and effective coping mechanisms. The more they understand the process, the more empowered they will feel to overcome it.

8. Motivate with Financial and Social Incentives

Emphasize the money users can save by quitting tobacco. Present tools that calculate how much they can save over time by cutting out smoking. Financial empowerment can be a motivating factor.

Recognize quitters in public settings such as workplaces or communities. Celebrating their achievement in front of peers can provide social incentives and encourage others to follow suit.

9. Empathy and Emotional Support

Ensure that communication is empathetic, non-judgmental, and focused on the individual's needs. When users feel understood and supported, they are more likely to feel empowered to make a change.

Provide access to mental health resources, as quitting tobacco is often linked to managing stress and emotions. Offering therapy or counseling can empower users to address the emotional aspects of quitting.

10. Promote Long-Term Health as a Motivation

Encourage individuals to imagine the benefits of a tobacco-free life, including better health, more time with loved ones, and improved quality of life. This forward-thinking mindset empowers individuals to work toward a healthier future.

Share stories of people who successfully quit smoking and improved their health. Seeing relatable examples of success can inspire and empower others to believe they can do the same.

11. Normalize the Process of Quitting

Frame quitting smoking as a growing trend or a normal part of life that millions of others are also doing. This normalization removes stigma and empowers individuals to feel they are part of a broader health movement.

Let users know that gradual steps toward quitting are valid. For some, reducing the amount they smoke is an important part of the process, and every reduction is a step toward a healthier life.

By combining clear, supportive communication, practical resources, and a sense of personal empowerment, tobacco users can feel motivated and equipped to take control of their health and quit smoking. Empowerment comes from building confidence, providing accessible tools, and offering ongoing support through the quitting process.

A doctor or therapist talking to a smoker about his smoking habits and urging him to quit might be considered a personal smoking cessation communication technique. In India, the impact of doctor on the individual is so powerful and enforced that it can lead to drastic change in the life style of the individual.

A number of evidence-based tactics, such as smoke-free laws, price increases, and well publicised health education programs, can both promote and discourage tobacco usage. As shown in Figure 6 [(Aung, M.N., Yuasa, M., Moolphate, S. et al)(2019)], any strategy can work with enhanced motivation towards goal achievement likewise tobacco

intervention can be gained with continuous motivation followed by successful attempt. Previously used phenomena like 5 A(Ask, Advice, Assess, Assist and Arrange) and 5 R(Relevance, Risk, Reward, Roadblock, Repetition) are also supporting this fact. Enhancing motivation to quit tobacco can be a challenging but achievable goal. To boost the motivation for quitting, it's important to focus on both the emotional and practical aspects of change. Motivational interventions for tobacco use can help people consider quitting by highlighting the benefits of stopping and the potential negative consequences of continuing. Social Cognitive Theory (SCT), developed by Albert Bandura, emphasizes the interplay between behavior, cognition, and the environment in shaping human development. Unlike traditional behaviorist theories, which focus predominantly on external stimuli and responses, SCT suggests that people are active participants in their own learning process, and that learning occurs through observing others. This process is known as observational learning or modeling.

The theory proposes a reciprocal determinism model, where behavior, cognition (thoughts, beliefs, attitudes), and the environment all influence each other in a dynamic, ongoing cycle. In other words, individuals do not passively respond to their environment; rather, they actively shape it, and their behaviors and thoughts are influenced by their environment and the people around them. *[(Bandura A.)(1986)121]*



Figure 6 Motivational Approach (Source Research Gate)

At least 30 persons suffer from a major smoking-related disease for every smoking-related death. Diabetes, heart disease, lung disease, strokes, cancer, and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis, are all brought on by smoking. In India, it is among the leading causes of mortality each year. To make user quit attempt, his/her willingness and continuous motivation and support is appreciated.

Successful intervention begins with identifying users and appropriate intervention based upon the patient willingness to quit. During my dental practice I used to come across so many patients who got motivated and convinced to quit tobacco, all they need was proper guidance. Live example is one of my family member quitter the habit after 40 years in his early sixties, with his willingness, family support and acknowledged the ill effects of tobacco on his body. This motivated me to do more work for this study. Communication plays an important role in this process, this research will not only make improvement in oral health field but also gives a new way towards betterment of society; in view of financial crisis, health outcomes and family welfare.

1.2 Research Problem

A specific issue or gap identified in previous studies that can be addressed in future study is known as a research challenge.

The problem statement of this research is *“Effectiveness of communication strategies for tobacco interventions; a systematic review and finding the right approach.”* In India tobacco is much more complex problem other than the rest of the world, simply ask to quit tobacco is not the right approach to motivate the subject to take a attempt for quit. Effective and strategic communication with evidence base result may motivate for the positive approach towards tobacco intervention.

Aim of this research is to make healthcare communication for tobacco control an ease and effectiveness of communication strategies to achieve it. An effective communication strategy for tobacco intervention is crucial to influencing behavior change and promoting tobacco cessation.[Zhu, S.H., Lee, M. and Zhuang, Y.L. (2012) 126]. The goal is to raise awareness, motivate individuals to quit, and provide them with the tools and support needed for success. Here are key components of an effective communication strategy for tobacco intervention:

1. Understand the Target Audience

a) Segment the audience: Identify specific groups (e.g., young people, long-term smokers, occasional users) based on demographics, smoking habits, and readiness to quit.

b) Cultural sensitivity: Tailor messages to the cultural, social, and economic backgrounds of the audience to ensure relevance and engagement.

c) Behavioral insights: Understand the barriers to quitting, such as addiction, social pressure, or lack of knowledge, to craft impact messages.[West, R. and Brown, J.

(2013)125]

2. Develop Clear, Consistent Messaging

a) **Health Risks Awareness:** Highlight the dangers of smoking, including specific long-term health consequences (e.g., lung cancer, heart disease) in ways that resonate with different age groups.

b) **Benefits of Quitting:** Focus on the immediate and long-term benefits of quitting, such as improved health, better quality of life, and financial savings.

c) **Emphasize Control:** Empower individuals by communicating that quitting smoking is achievable and provide stories of successful quitters for motivation.

d) **Counter Myths:** Address common misconceptions, such as that quitting is impossible after years of smoking or that certain forms of tobacco are less harmful.

3. Use Multiple Communication Channels

a) **Mass Media Campaigns:** Utilize TV, radio, and online ads that are relatable, attention-grabbing, and informative.

b) **Social Media and Digital Platforms:** Engage younger and tech-savvy audiences through platforms like Instagram, Facebook, and YouTube. Use shareable content like short videos, info-graphics, and testimonials. *[National Cancer Institute (NCI) (2008)124]*

c) **Community Engagement:** Work with local health departments, clinics, schools, and workplaces to disseminate information through seminars, workshops, and health fairs.

d) **Health Apps and Text Messaging:** Use mobile health strategies to deliver quit tips, motivational messages, and progress trackers directly to users' phones.

4. Incorporate Visuals and Emotional Appeals

a) **Graphic Warnings:** Use visual imagery such as pictures of damaged lungs or other stark consequences to evoke a strong emotional reaction. *[Yong, H.H. and Borland, R. (2008)126]*

b) Testimonials: Feature real-life stories of smokers and their struggles with addiction, as well as positive stories of successful quit attempts. Peer testimonials tend to have a higher impact.

c) Positive Framing: Show the positive side of quitting, such as people spending more quality time with their families, or feeling healthier and more energetic.

5. Leverage Behavioral Science Techniques

a) Social Proof: Show how many people are quitting, and use influencers or popular public figures to endorse quitting, even the ones who had successful quit attempts can share their real stories and inspire to make quit attempt.

b) Commitment Devices: Encourage smokers to make public commitments to quit, which can increase accountability.

c) Nudges: Provide subtle reminders in places where smokers might be triggered (e.g., reminders in restaurants, bars, or convenience stores where tobacco is sold).

6. Offer Support and Resources

a) Quit-lines and Counseling: Promote tobacco quit-lines, online chat support, or in-person counseling as part of the communication strategy.

b) Nicotine Replacement Therapies (NRT): Inform smokers about the availability and effectiveness of NRT products (patches, gum, etc.) and how they can access them.

c) Mobile Apps: Recommend quit-smoking apps that help users track their progress, connect to support communities, or access tools to cope with cravings.

d) Tailored Support: Offer personalized plans based on an individual's stage in their quit journey.

7. Measure and Adapt the Strategy

a) Feedback Loops: Collect data on how well the messages are resonating with the audience through surveys, focus groups, or digital analytics (e.g., social media engagement).

b) Refinement: Adapt the communication strategies based on effectiveness, making changes to content, delivery methods, or targeting if needed.

8. Collaborate with Stakeholders

a) Healthcare Providers: Work with doctors, nurses, and pharmacists to disseminate messages about quitting and to refer smokers to cessation programs.

b) Nonprofits and Government: Partner with public health organizations, advocacy groups, and government agencies to amplify the reach and resources for quitting.

c) Workplaces and Schools: Establish tobacco-free environments and use educational programs to spread awareness in schools and workplaces.

9. Policy and Regulatory Support

a) Tobacco Control Policies: Include messages that support tobacco regulation (e.g., higher taxes on tobacco, smoke-free environments) and educate the public on why such measures are critical. [Wilkinson, T.M.A. and Strazdins, L. (2018)125]

b) Call to Action: Encourage smokers to take immediate steps to quit and direct them to free resources, services, and supportive communities that can help them along the way..

Whenever it is been talk about ill effects of tobacco, mostly it get associated with cancer, rather it impact adversely on every part of the body, right from brain , lungs, heart, skin, throat, kidneys,digestive system and so on. This research not only guide towards betterment of oral health, also it will show good and healthy effects to entire physical well being. This research enhance the motivation of the sufferers to inclined for survivors and keep connecting the others users to make quit attempt successful.

This research will cover the gap for the stake holders of tobacco intervention and finding the right approach for successful attempt.

Study objectives are:

1. To analyze status of healthcare communication for tobacco control in India.
2. To determine effectiveness of communication strategies for tobacco intervention in India.
3. To develop an appropriate communication strategy framework for tobacco intervention in India.

1.3 Purpose of Research

To identify the purpose of research, process should be followed in systematic manner as shown later in the section in figure 7.

1. Identifying the problem- In this research Tobacco is the problem and, to deal with it quantification of its ill effects with respect to physical, economical and social well being of the mankind. Addressing addiction complexity, behavioral change barrier, diverse population needs, engagement and adherence issues, limited access to effective interventions, e-cigarettes and new products, measuring outcomes and long term success, policy and regulatory barriers, co-morbidities, co-addictions, and sociopolitical factors. Problems requires more comprehensive, tailored, and multifaceted research approaches that integrate behavioral science, technology, cultural understanding, and policy change to effectively reduce smoking rates and support long-term cessation.
2. Reviewing Literature- This is among the most important part in the research process on which purpose of that particular research is directly proportionate, because by reviewing

the previous researches done in the field and its short comings, gaps guide the researcher to take the lead in right direction. In this research, focus will be on developing the communication strategies for tobacco intervention. Previous all research were focused on direct tobacco intervention. In India tobacco is among the serious problem and previous all studies were directly approached towards tobacco intervention which many a times leads to offence and could not make successful attempt towards intervention. To deal with this major gap, this research will define communication strategies to make the survivors understood the importance of ill effects caused by tobacco. This research will focus on the development of communication strategies. To deal with tobacco is not easy task. The first step towards the tobacco intervention to talk about in framed strategy to make them realize the need to quit the habit.

3.Setting Research Questions- The next step is to set the research question which need to be answered in it. Research questions should be easily understood and answered in structured manner through out the study. In this research, questions are framed keeping in mind that influential communication policies could be made to show impact on tobacco users.

4.Choosing the Research Design- Next step in research process is to make a design on which it works to achieve the goal. Research design of this study is a simple approach to develop effective communication which further leads to success in intervention for the survivors who were willing to quit the habit with combine approach of behavioral and pharmacological means to achieve the goal. Previous studies were customized and not linked personalized intervention and through this study this gap will be filled. A qualitative approach to studying a tobacco intervention focuses on understanding the experiences, perceptions, and behaviors of participants. This approach is useful for exploring the nuances of why an intervention works or doesn't work, how it can be

improved, and the social and cultural contexts that influence tobacco use and cessation. A quantitative approach to studying a tobacco intervention involves collecting and using numerical data to assess the intervention's efficacy. This approach can provide statistically significant results and generalizable findings.

5. Deciding the sample design- In this research mixed methodology will be used. To give a more thorough knowledge of the efficacy and processes of a tobacco intervention, a mixed-methods approach blends qualitative and quantitative research techniques. This approach leverages the strengths of both methods to address research questions from multiple perspectives.

6. Collecting Data- In this research, survey based sample collection will be done. By developing Simple Seven Questionnaire on the basis of PLANS. Tool used is google form in this research.

7. Processing and analyzing data- After the collection of data, which should further analysed and result orientation will be done. For In a mixed-methods research, both quantitative and qualitative data are processed and analysed, and the results are then integrated.

8. Writing the Report- The last step of research is to write the proven result after complete analysis of the data collected by the survey. Effective communication strategies are essential for motivating smokers to quit, increasing awareness of tobacco-related risks, and providing the necessary support to encourage long-term behavior change. Tobacco intervention strategies play a critical role in reducing smoking rates and promoting cessation, but the effectiveness of these interventions relies heavily on how they are communicated.

Worldwide, tobacco smoking continues to be a major avoidable cause of illness and death, contributing to numerous conditions such respiratory problems, heart disease, and

lung cancer. Despite widespread awareness of the dangers of tobacco use, millions of people continue to smoke, many of whom struggle with quitting due to nicotine addiction, behavioral habits, and social factors. Data that is both quantitative and qualitative from the studies were analyzed to identify patterns and trends in successful communication methods. The effective communication strategies in tobacco intervention, highlighting the need for a tailored, multi-channel approach to achieve better cessation outcomes.



Figure 7 Research Process

The goal of research is to investigate and analyse data systematically so that it can be tested or investigated further to add knowledge. Developing hypotheses, gathering information, evaluating findings, drawing conclusions, applying discoveries to practical situations, and formulating fresh research questions are all ways to achieve a research goal. With this research we intend to demonstrate that effective communication towards

tobacco intervention and prevention can be achieved slowly but successfully. As I mentioned earlier during my dental practice I have encountered the subjects whom are addictive to tobacco, sometimes just need an effective communication and motivation to leave the habit, to make them realize the importance of health and its benefits. In this research mixed method approach has been applied, that seeks to comprehend a research topic by gathering, evaluating, and “mixing” quantitative and qualitative research and methodologies in a single study.



Figure 8 Qualitative Research Methods (Source Question Pro)



Figure 9 Quantitative Research Methods (PenMyPaper)

Tobacco use is leading among the list of preventable cause of death worldwide.

With respect to the association between tobacco and education, the people who are highly educated may acquire more knowledge than the people with lesser education level; which leads to more prevalence of tobacco habits in those individuals. Need of hour is to promote tobacco use cessation among adults, youth; elimination of second-hand tobacco use as well as identification of tobacco related disparities. In this study mixed methodology is used, Combining the two forms of data allows you to gain from both the quantitative data's generalizable, externally valid insights and the qualitative data's contextualized, in-depth insights. One form of data's advantages frequently outweigh its disadvantages.

This research will be in two phases:

1. Systematic review of earlier researches and which will further leads to concrete the foundation of the right way for the healthcare communication for tobacco intervention.

2. Right approach towards the goal of this research will be taken with the involvement of all the stakeholders who are involved in tobacco intervention.

This research will focus on the communication, which plays an important part to deal with tobacco intervention, for survivor as well as for the moderator. Any task can be initiated with proper and effective explanation with its positive impact on the society and well being of the mankind. Previous all the studies were focused on the direct intervention, for some individuals it is difficult to continue the intervention as they were not explained about the importance of the issue. So in this study we will focus to explain the outcome as well will lead the engagement of the survivor on every step to give their perspective towards the study.

1.4 Significance of the Study



Figure 10 Stay Away from Tobacco (Source WHO)

There are lot of reasons to quit tobacco:

1. Money – tobacco costs money as well as affecting the health of individual, tobacco (smoke/nonsmoking) is expensive and quitting the habit can save money for now, as well as saving on future health costs.
2. Family / relationships – it may also impact personal relationship, it could incite disagreement among couples; home environment get spoiled.
3. Health – quitting tobacco lowers the risk of cancer like stomach cancer, head and neck cancer, AML (a type of blood cancer), lung cancer; also benefits the heart and lungs, improves blood vessel function, and reduces the risk of diabetes.
4. Children –Asthma, respiratory infections, ear infections, and SIDS are just a few of the health issues that secondhand smoking causes in newborns and kids. The longer a person smokes or is around smoke, the higher their risk of developing respiratory conditions

including emphysema, bronchitis, and COPD; lung, mouth, and throat cancer; and cardiac problems like heart attacks and strokes.

There are following benefits of quitting tobacco:

- Enhances both life quality and health condition.
- Lowers the chance of dying young.
- Reduces the risk of many diseases for example cardiovascular disorders, respiratory problems, poor reproductive health outcomes, COPD and cancer.
- Reduces the financial burden.
- Benefits the health of pregnant woman and the fetus.
- Benefits in treatment of cardiovascular diseases and cancer.
- Protecting family and friends from second hand smoking.

Quitting smoking/ tobacco is always beneficial at any age and its cumulative benefits can be seen over time. The chances of dying due to tobacco-related diseases reduced by 90%,if a person quit the habit at the age of 40 years.

1.5 Research Purpose and Questions

Improving behavioral tobacco cessation treatment's accessibility and efficacy for both high-risk groups and the overall tobacco user population is a major research objective. Communication plays the most important role to motivate people to make attempt to quit tobacco. As per old school thought also the first step to ASK to quit in every visit. Regular follow ups are needed to remind patient his goal, to be healthy, to DE-addict himself/herself, to get successful quit attempt. Effective communication and motivation from family and friends can make a mark towards the success.

In my opinion, there are different ways of communication to different tobacco users to make them quit the habit and regular follow ups and motivation make them successful for the same.

The tobacco users who are chronic users, after make a successful quit can connect to other users and motivate them to attempt the next move successful. There is great importance of tobacco intervention in research area, as it is evident that interventions were primary care-relevant behaviour counselling Medications, such as nicotine replacement treatment, text messaging, interactive websites, print materials, in-person or group counselling, or all, are examples of technology-based or telephone-based counselling. Research finding about smoking states that about 90% smokers develops cancer, In addition to raising the risk of coronary heart disease, 80% of them acquire chronic obstructive pulmonary disease (COPD). For both men and women, smoking raises the chance of dying from any reason. [Sharma M, Khubchandani J, Nahar VK.(2017)]

W.H.O. accepted 5 A's model, which is well known and been practiced by the clinician and tobacco intervention centers to accelerate the process of intervention

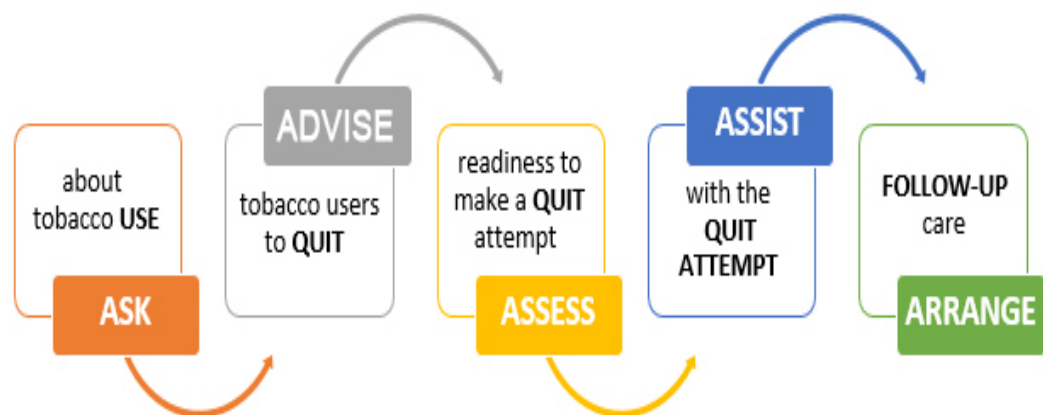


Figure 11 5A Concept (Source ICMR)

The leading avoidable cause of mortality worldwide is tobacco usage. Interventions to prevent tobacco use, addiction, and secondhand smoke lower the burden of disease, mortality, and economic implications.[Wang, H., Naghavi, M. and Allen, C. (2017)125] The basis for implementing and managing tobacco control is provided by the WHO (2004)125. Framework Convention on Tobacco Control (WHO FCTC) and its recommendations. WHO introduced the MPOWER initiatives to assist make this a reality. According to the WHO FCTC, these actions are meant to support the implementation of successful country-level initiatives aimed at lowering tobacco demand. MPOWER is currently a globally applicable and well-known description of the key components of tobacco control strategy, having been introduced by WHO in New York City on February 7, 2008. “MPOWER is the only document of a somewhat strategic nature that is a source of information on the spread of tobacco epidemic, as well as of suggestions concerning specific actions for supporting the fight against this epidemic.”



Figure 12 MPOWER by W.H.O.(2008)

The research purpose of this study to focus on the development of effective communication strategies for tobacco intervention along with to review and find the right approach. People need right motivation and systematic communication to quit tobacco, pin point communication can lead to make a thought or even quit the habit.

All the previous research about tobacco intervention deals with tobacco cessation and focused on quitting of the habit rather than the communication; hence my research will cover the gaps for all the stake holders of tobacco intervention and finding right approach for every individual and group. It will also enhance the motivation among the tobacco users to make next quit attempt success.

The research questions are as follows:

- 1. How effective the communication strategies for tobacco intervention?**
- 2. What is the right approach to frame communication strategies for tobacco intervention?**



Figure 13(Source Consumer Voice)

This will first lead to systemic review of the earlier researches and activity towards tobacco prevention and intervention. Simultaneously further concrete the foundation of the right way for the healthcare communication for tobacco intervention. In the second stage of this study, right approach towards the goal of this research will be taken with involvement of all the stake holders who are involved in Tobacco Intervention (age groups, cultures, genders, religions); etc...

By understanding the key elements of successful communication strategies, this research aims to inform public health campaigns and interventions that can better motivate individuals to quit smoking, overcome barriers, and sustain tobacco-free lifestyles. The purpose of this research is to examine the effectiveness of communication strategies in tobacco intervention programs aimed at reducing smoking rates and promoting long-term cessation. Specifically, the research seeks to identify how different messaging techniques, media channels, and support systems influence smokers' behavior and decision-making. Communication strategies that use emotional and social appeals, such as fear-based imagery and success stories, will be more effective in motivating smokers to quit than purely informational messages.

Tailored interventions that account for cultural and demographic differences will result in higher cessation rates and better long-term outcomes compared to generic campaigns. Ongoing support through accessible communication channels, such as quitlines and counseling, will significantly reduce relapse rates.

Digital platforms, especially social media and mobile health tools, will be more effective in engaging younger smokers compared to traditional media.

this study aims to provide actionable insights that can enhance the design and delivery of tobacco intervention programs, ultimately leading to more effective public health

communication and higher rates of smoking cessation.[*Goel, S., Kar, S.S., Verma, M. et al. (2021)*].The retail environment, through widespread tobacco marketing and the availability of flavored products, plays a key role in targeting youth. Tobacco advertising in stores, along with the normalization of tobacco products in these settings, increases the likelihood that young people will initiate smoking or vaping. Given the significant health risks associated with tobacco use, particularly for young people, addressing the influence of tobacco marketing at the point of sale and across media platforms remains a critical priority in the fight against youth tobacco use.

Public health advocates and policymakers continue to push for stronger regulations and restrictions on tobacco advertising and product availability in retail environments to mitigate these risks and protect young people from the harmful effects of tobacco.[*Dube, S.R., Arrazola, R.A. and Lee, J. (2013)*121]



Figure 14 Multi-stakeholder partnership (Source Sciencedirect.com)

CHAPTER II: REVIEW OF LITERATURE

2.1 Theoretical Framework

Worldwide, tobacco usage and cigarette smoking represent a significant avoidable public health issue. In 2012, the World Health Organisation (WHO) reported that 21% of people over the age of 15 smoked tobacco. Numerous adverse consequences are linked to tobacco use and smoking. They are linked to cardiovascular conditions such as abdominal aortic aneurysm, atherosclerosis, cerebrovascular disease, and coronary heart disease. Acute myeloid leukaemia, lung, lip, mouth, pharynx, oesophagus, stomach, pancreas, larynx, trachea, cervix, kidney, and bladder cancers are among the malignancies that tobacco use can cause. Chronic obstructive pulmonary disease (COPD), pneumonia, decreased lung function, and symptoms related to asthma are among the respiratory diseases that are linked to tobacco use. Reproductive issues include low birth weight, stillbirth, foetal death, and pregnancy complications; and other illnesses include SIDS, cataracts, poor surgical outcomes, low bone density, and hip fractures.

Counselling, nicotine replacement treatment, bupropion therapy, and varenicline therapy are among the smoking cessation methods. Numerous techniques are widely used in counselling, such as interactive computer programs, telephone counselling, educating medical professionals like doctors or chemists, and counselling by lay health volunteers.

Previous studies and theories for tobacco intervention were focused on 5 A's concept, small portion consumption, behavioral change, warning about ill effects and so on. This research is focused on to develop effective communication strategies and involving all the stake holders in positive manner to make a difference towards the goal and achieving success for tobacco intervention.

During my dental practice, I found people just need right guidance and systemic communication to get motivate to quit tobacco. Communication plays distinct role in tobacco intervention and is very first step towards the goal. Right approach and pin point communication skills can influence the subject to try and even quit the habit.

As I mentioned previously also that I get inspiration for this research from one of my family member who has quit the habit after 40 years of practice of tobacco chewing, all with his willingness, family support and understanding the ill effects of tobacco on his body. This event forced me to think in this direction for developing effective communication for the survivors of tobacco use, it only directs them to think and choose intervention over habit.

2.2 Theory of Reasoned Action

The goal of the theory of reasoned action (TRA or ToRA) is to clarify how attitudes and actions relate to one another in human behaviour. Based on a person's past attitudes and behavioural intents, it is mostly used to forecast how they will act.

According to TRA, people's attitudes and norms are the two fundamental factors that determine behavioral intention, which in turn is the primary motivator of behaviour.

Belief, Attitude, Intention, and Behaviour [(Fishbein, Martin, and Icek Ajzen). (1975)]

The TRA's main goal is to comprehend a person's voluntary behaviour by looking at the fundamental reasons behind their actions. According to TRA, more effort is required to carry out the behaviour when one has greater intentions, which also raises the possibility that the behaviour will be carried out.

For this study, communication is also plays an important role, effective communication towards tobacco intervention and prevention can be achieved slowly but successfully.

During practicing dental practice, I have interacted such patients who just need a formatted and effective communication to step towards quitting their habit. This research will not only make improvement in oral health field but also gives a new way towards betterment of society; in view of financial crisis, health outcomes and family welfare. Continuous motivation and regular follow up from both the sides survivor and practitioner should be maintained.

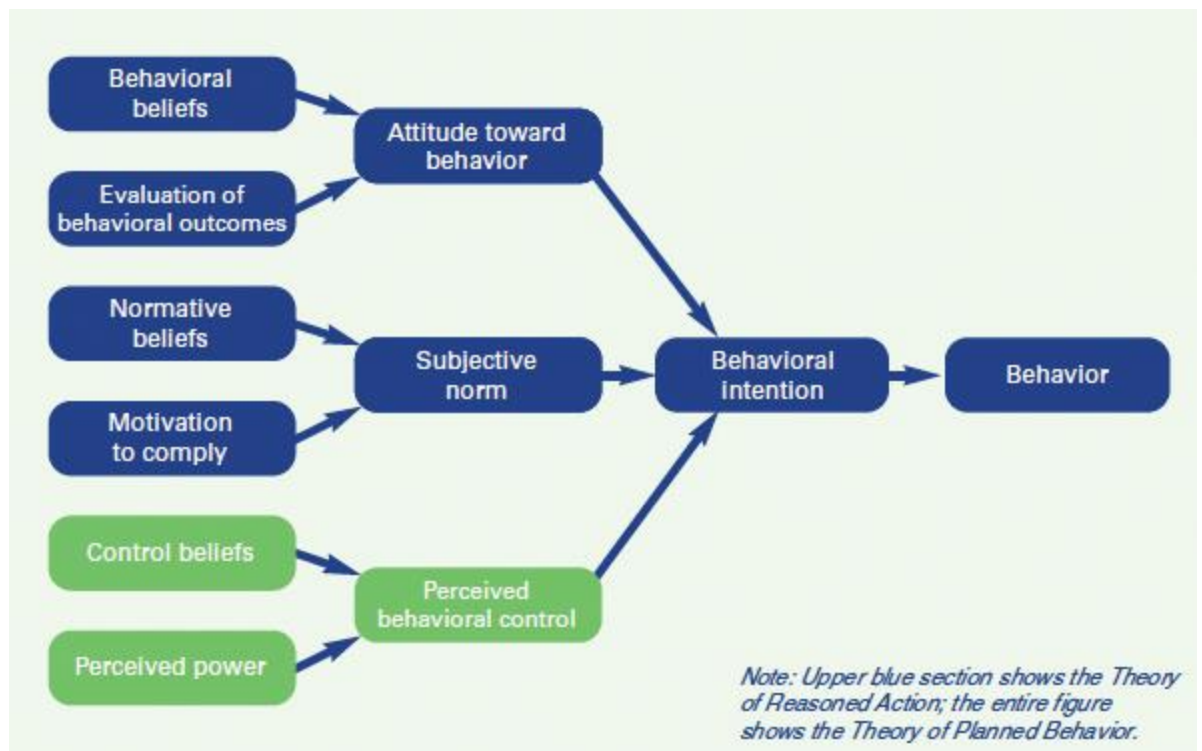


Figure 15 Theory of Planned Behaviour (Source howcommunicationwroksout.com)

The greatest avoidable cause of illness, disability, and death is tobacco smoking; giving it up provides both short-term and long-term advantages in terms of health, wealth, families, and communities.

Quitting smoking/ tobacco is always beneficial at any age and its cumulative benefits can be seen over time. The chances of dying due to tobacco-related diseases reduced by 90%, if a person quit the habit at the age of 40 years.

The key trends and perspectives for tobacco intervention [(Francis A Stillman, 2006)] are

:

- Public education
- Intervention at the individual.
- Group, and community levels.
- intervention at the population level.
- involvement at the system level.

KEY TRENDS	PERSPECTIVES
Public Education	With respect to the association between tobacco and education, the people who are highly educated may acquire more knowledge than the people with lesser education level; which leads to more prevalence of tobacco habits in those individuals. Need of hour is to promote tobacco use cessation among adults, youth; elimination of second-hand tobacco use as well as identification of tobacco related disparities.
Individual Level Intervention	Quitting tobacco may be a challenge but sooner or later shows many benefits to the individuals. It may lead to many health benefits to both men and women. [Nancy A Rigotti (Literature review; 2022 Sep.; last updated Jan 21, 2021)] coined that quitting smoking may reduce your risk of diseases like cardiovascular problems, lung diseases, cancer, peptic ulcer, osteoporosis and also reduces the risk of diseases for family and friends due

	to second hand smoking for example in adults lung cancer, coronary heart disease and stroke; sudden infant death syndrome, development of cancer in later stage of life, asthma and ear infection in children.
Community Level Intervention	According to [<i>Glorian Sorensen et al. (2013 November)</i>], the Tobacco Free Teachers / Tobacco Free Society intervention doubled the number of survey participants quitting, and the quit rates among those present throughout the intervention period quadrupled. Mass media campaigns, increased tobacco costs, smoke-free laws and policies, evidence-based school programs, and persistent community-wide initiatives are some of the tactics that make up an effective comprehensive tobacco control program. Policy-level measures to prevent tobacco use include higher tobacco product taxes, more stringent regulations on who may buy tobacco products, how and where they can be bought, and where and when they can be consumed.[<i>Wakefield, M.A., Loken, B. and Hornik, R.C. (2010)125</i>]
Population Level Intervention	It is evidence based that pharmacotherapy, physician advice to quit, nursing intervention, hospital based intervention, proactive telephonic counselling are effective and cost effective for short term.
System Level Intervention	System change intervention for tobacco cessation are policies and practices designed by organization to integrate the identification of all the tobacco users and the subsequent offerings of evidence based cessation treatments into the routine delivery of healthcare.

Table 1

Tobacco use and secondhand smoke exposure can be avoided with the support of a number of evidence-based measures. These include price hikes, smoke-free regulations, and public health education initiatives.

The tobacco users who are chronic users, after make a successful quit can connect to other users and motivate them to attempt the next move successful.

In schools, early exposure to harmful effects of tobacco and its products will help to build a true image for the same and kids can easily make out the difference to the society towards the Tobacco Cessation.

To add Tobacco Cessation & Intervention as a subject in medical and dental college curriculum, so that the future doctors get formal training to make a difference in the noble cause; it will help to reduce risk factors of others diseases (NCDs) [(T.R.Yamini et al;2015)]

To educate the Lady of the house about harmful effects of tobacco, intervention and cessation make a huge difference to motivate elders as well as youngsters of the family.

To do counselling and make it effective by involving the survivors of tobacco cessation which makes the communication more meaningful. The shortcoming will be faced if the Lady herself not educated and convinced enough for the same.

To influence the tobacco users, be in strong connections with them by regular follow-ups and continuous motivations. This can be done by increasing focus on commutative interest on their hobbies and helps in diversion at the time of trigger for the tobacco urge. Pharmacotherapy plays significant role at the time of quit attempt in some specific cases to facilitate the same and smoother the entire process by reducing the side effects.

The only disagreement, it is not a boon and one cannot completely rely on it to make the attempt successful.

2.3 Human Society Theory

India has the highest tobacco-related death rate worldwide and is the world's second-largest producer and user of tobacco.

The goal of tobacco cessation and preventive initiatives is to lower tobacco-related morbidity and death, which is a worldwide health concern.

Globally research indicates by increase of 1% in long term cessation rate will show great impact on public health. Awareness about tobacco cessation and intervention through various approaches via school programme, medical colleges, community programme, counselling, and pharmacotherapy can lead to achieve the goal.

There were distinct theoretical considerations as well different strategies for intervention. The intervention strategies based on positive reinforcement, social support, modelling, problem solving, practical skills and techniques for quitting.

Interventions aimed at boosting general health and preventing illness are successful. Well approached intervention are healthy eating, exercising, avoid alcohol, tobacco cessation, and healthy sexual behavior. These all reduces burden of disease, however not always these fits in all populations of all the countries.

All these interventions can be widely spread via different modes of communication like internet, mobiles, print media, social media, newspaper and electronic media; These methods might reach a variety of individuals, such as members of under-represented groups and those from cultural backgrounds that the current healthcare systems do not adequately serve. Health promotion interventions could be created from the ground up with cultural sensitivity to provide acceptable and pertinent health services to individuals from a specific cultural background, or a less resource-intensive approach could be customizing an existing intervention for particular cultural groups. We call this process cultural adaptation. Tobacco advocacy, whether by the industry, harm reduction

proponents, or consumers, is a complex and controversial topic. While public health initiatives largely focus on reducing tobacco use, there are arguments made for personal freedoms, economic concerns, and harm reduction alternatives.[*Satcher, D. (2001) 124*]

The ongoing debate over regulation, taxation, and marketing continues to be a contentious issue in global public health and policy. Tobacco advocacy refers to efforts, organizations, or movements that promote the use, legalization, or deregulation of tobacco products. These efforts can come from a variety of stakeholders, including tobacco industry groups, certain political lobbyists, and public interest organizations, and can focus on a variety of issues ranging from the regulation of tobacco products to the rights of individuals to use tobacco.

While the vast majority of public health organizations (such as the World Health Organization, the Centers for Disease Control and Prevention, and the American Cancer Society) advocate against tobacco use due to its well-documented health risks, tobacco advocacy in its more supportive forms often emphasizes personal freedoms, economic interests, or harm reduction strategies. Simon Chapman is one of the world's leading advocates for tobacco control, having won the coveted Luther Terry and WHO medals. His experience straddles 30 years of activism, highly original research and analysis, having run advocacy training on every continent and editing the British Medical Journal's Tobacco Control research journal.[*Chapman S (2007)121*]

2.4 Summary

India is among the largest producer as well as consumer of tobacco, both male and females are consuming it. This habit prevails in family and leads to disaster, to reduce this lady of the family can play an important role. In villages children get exposure to tobacco at very early age, their own family members told them to lit the hooka or bidi.

By adding topic to curriculum in medical/dental courses and motivate about quitting habits. Separate subject will lead to precise and focused training and awareness among the professionals.

Using social media, print media and internet to make good positive effects about tobacco intervention and cessation.

Old school thought of 5 A plays an important role in it but there are some disagreements persuade should be such strong and evident that one should feel to take a move; Ask can be done when there is correct approach towards the needy; one will take the Advice seriously when family will be also involved in the whole process and Advice should be given at school level & college level also; Assess will be truly make justice when the person should feel his/her comfort while talking with counsellor; Assist can be done via pharmacotherapy but at the same it should be conveyed that this is not a miracle and one cannot completely rely on it to make quit attempt successful and last Arrange is to be in regular follow up, which should be both ways in between counsellor and survivor.

Intervention can be done at individual, community, population and society level.

Communication plays vital role in Tobacco Intervention and programme at school level, college etc. We may infer from the literature analysis that tobacco intervention and cessation is beneficial in every means like physiologically, financial improvement, to reduce risk of NCDs, growth of community and reducing burden on society.

In figure 11 the ill effects of tobacco on various organs are illustrated, not head and neck region, lungs, heart, brain, digestive system even genitourinary system can get ill affected.

DANGERS OF SMOKING

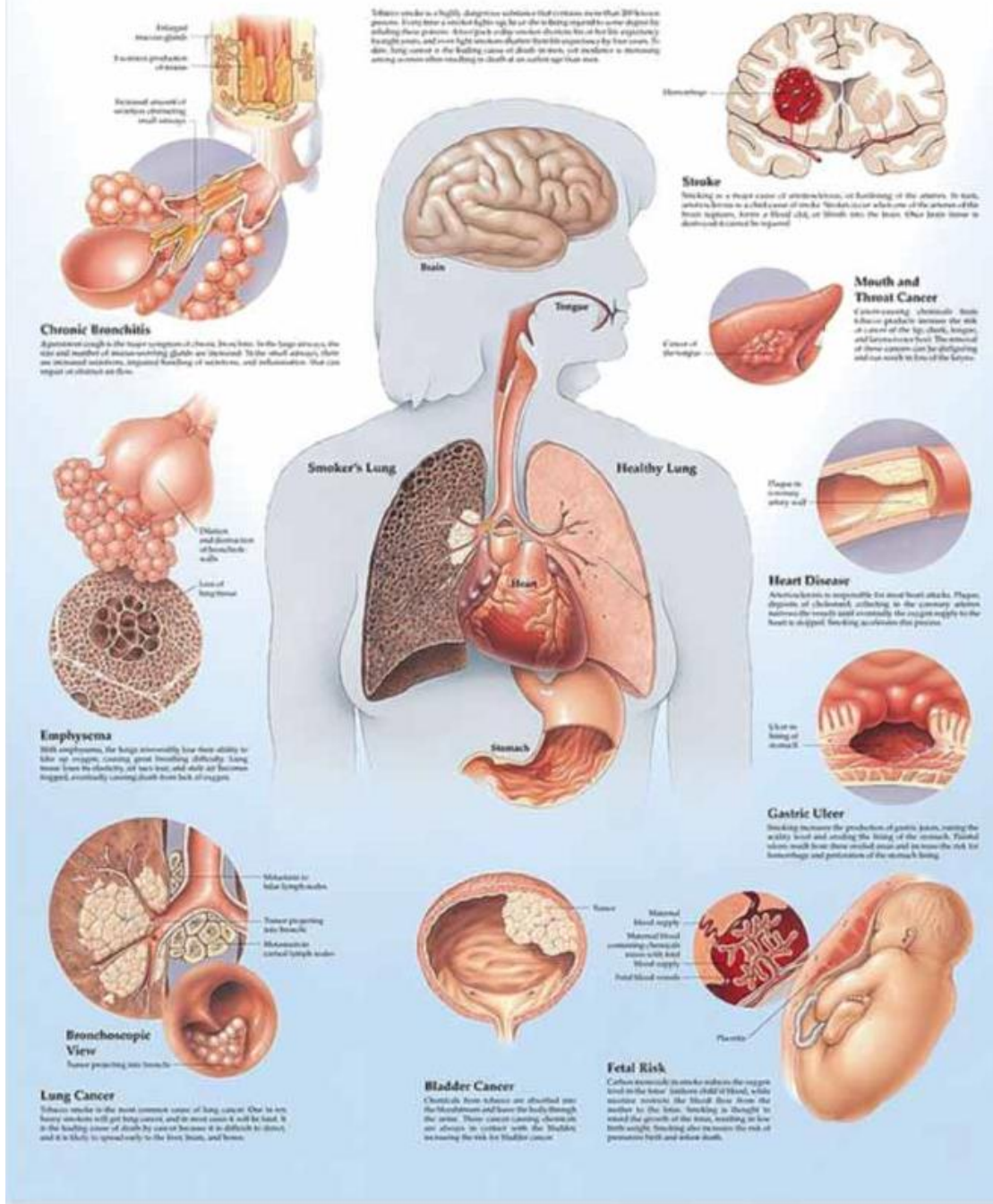


Figure 16 Danger of Smoking on various Parts of Body (Source anatomical Chart Company)

CHAPTER III: METHODOLOGY

3.1 Overview of the Research Problem

A research problem is a statement that arises in academic literature, theory, or practice that highlights a need for meaningful knowledge and purposeful exploration. It might be about a problem to be solved, a condition to be improved, a challenge to be overcome, or a worrisome topic. A mixed methodology approach in researching tobacco intervention communication strategies offers a comprehensive understanding of both the effectiveness (quantitative) and the perceptions and emotional impact (qualitative) of the interventions. The following outlines how **mixed methodology** can be applied to research the effectiveness of communication strategies in tobacco interventions:

1. Quantitative Component

The quantitative component focuses on measuring the effectiveness of different communication strategies in influencing smoking cessation behaviors. *[U.S. Department of Health and Human Services (USDHHS) (2020) 125]* In this research quantitative components lead by simple seven questionnaire based on term PLANS to collect data to make further analysis to improve communication for tobacco intervention.

2. Qualitative Component

The qualitative component provides in-depth insights into how smokers perceive, interpret, and respond to various communication strategies, exploring the underlying reasons for their behavior changes. By implementing tobacco intervention through lady of the house, medical and dental curriculum and by involving the success stories of the individual having successful quit attempts.

Triangulation in research refers to the use of multiple data sources, methods, researchers, or theoretical perspectives to enhance the credibility, validity, and richness of the findings. In the context of tobacco intervention research, triangulation can be a valuable strategy for understanding complex behaviors, attitudes, and outcomes related to tobacco use and cessation efforts. By using different angles to explore the same research question, triangulation helps to confirm findings, identify inconsistencies, and provide a more comprehensive understanding of the phenomena being studied.

This involves using different research methods to gather data on the same issue, which helps to counterbalance the weaknesses of any one method. Qualitative data might reveal personal barriers to quitting smoking, while quantitative data could provide statistical insights into the effectiveness of certain interventions. As it was mentioned that lady of the house play crucial role to build a strong foundation of the family, many such ladies get interviewed while sharing the simple seven questionnaire with them for their family.

The effectiveness of tobacco cessation interventions in different contexts, such as rural vs. urban settings, or across different demographic groups. Different environments may have different cultural, social, or economic factors that affect how people perceive and respond to tobacco control programs. *[(CDC, 2022)121]*

Medical and dental students have their entire curriculum about health of the body, by adding tobacco intervention in course and specialization in it may enhance the patient care.

Triangulation in research for tobacco intervention helps to create a more robust, credible, and comprehensive understanding of the factors influencing tobacco use and cessation. It is especially valuable in the context of complex health behaviors like

smoking, where multiple factors (psychological, social, environmental) interact. By using triangulation, researchers can develop more effective, context-sensitive interventions that address the diverse needs of tobacco users and improve public health outcomes. There are many people who tried to quit the tobacco and became successful in it, by incorporating their success stories and interviewing them strong impact on the survivors to motivate them to make quit successful. The conceptual model of the ITC Project draws on the psychosocial and health communication literature and assumes that tobacco control policies influence tobacco related behaviours through a causal chain of psychological events, with some variables more closely related to the policy itself (policy-specific variables) and other variables that are more downstream from the policy, which have been identified by health behaviour and social psychological theories as being important causal precursors of behaviour (psychosocial mediators). [*Fong, G.T., Cummings, K.M. and Borland, R. (2006) 121*]

As it was discussed that problem statement of this research is “Effectiveness of communication strategies for tobacco interventions; a systematic review and finding the right approach.” The objectives of the research are clearly according to the problem statement, as this study was based on India and entire focus of this study is to develop the communication strategy in form PLANS, which will be explained in details in research purpose and questions.

In this research, enlightenment will be focused on the above mentioned problem statement. Effective communication is a broad issue that will be address through this research in tobacco intervention. Old school thought of 5 A plays an important role in it but there are some disagreements persuade should be such strong and evident that one should feel to take a move; Ask can be done when there is correct approach towards the needy; one will take the Advice seriously when family will be also involved in the whole

process and Advice should be given at school level; college level also; Assess will be truly make justice when the person should feel his/her comfort while talking with counsellor; Assist can be done via pharmacotherapy but at the same it should be conveyed that this is not a miracle and one cannot completely rely on it to make quit attempt successful and last Arrange is to be in regular follow up, which should be both ways in between counsellor and survivor.

There is great importance of tobacco intervention in research area, as it is evident that interventions were primary care-relevant behaviour counselling Examples of technology-based psychotherapy include text messages, interactive websites, print materials, medication (such as nicotine replacement treatment), in-person individual counselling, group counselling, or both. According to research, smoking raises the risk of coronary heart disease and causes 80% of smokers to get chronic obstructive pulmonary disease (COPD) and 90% of smokers to develop cancer. For both men and women, smoking raises the chance of dying from any reason.

3.2 Operationalization of Theoretical Constructs

Operationalisation is the process of using quantifiable facts and observable observations to define abstract notions. It entails determining which key ideas are worth examining, picking variables to symbolise each idea, and picking indicators to gauge those variables.

Gaps in tobacco intervention research, particularly concerning communication barriers, highlight several areas where more attention is needed. These **gaps** hinder the effectiveness of public health messaging, interventions, and the overall success of tobacco cessation efforts. Some of the main communication barriers and research gaps include:

1. Cultural and Linguistic Barriers

a) **Lack of Culturally Tailored Interventions:** Tobacco interventions often fail to address the cultural nuances of various populations. Minority groups, particularly non-English speakers, may not receive targeted messages or interventions that resonate with their cultural beliefs, norms, and practices.

b) **Limited Research on Multilingual Communication:** Research is sparse on how tobacco cessation messages are perceived by people who speak languages other than English. Most interventions are developed in English, leading to an exclusion of non-native speakers who may not fully understand or engage with these messages.

2. Health Literacy and Communication Clarity

a) **Inadequate Focus on Low Health Literacy Populations:** Many tobacco cessation materials are written at a reading level that may be too high for individuals with low health literacy, leading to miscommunication or misunderstanding of key messages. Research is limited on how to effectively communicate complex health risks to populations with varying literacy levels.

b) **Technical Jargon and Complex Messaging:** Scientific language in public health interventions can be overwhelming for the general public. There's a gap in understanding how to simplify and convey tobacco-related risks and cessation benefits in ways that are easily digestible across different education levels.

3. Digital Divide and Access to Information

a) **Limited Focus on Digital Accessibility:** While digital interventions (websites, apps, social media) have become a popular way to deliver tobacco cessation programs, there is little research on how accessible these digital tools are to marginalized populations, including older adults, rural communities, and those without internet access.

b) **Underrepresentation of Low-Income Populations:** Many tobacco intervention studies focus on populations that have regular access to healthcare and technology. However,

those in low-income or rural settings, who may have fewer communication resources (like internet access or smartphones), are often underrepresented in research.

4. Mental Health and Substance Use

a) **Communication Barriers in Dual Diagnosis Populations:** Research on tobacco cessation interventions for individuals with mental health issues or substance use disorders is lacking. There is a need for tailored communication strategies that consider the cognitive and emotional barriers this population may face in understanding cessation messages.

b) **Stigma and Sensitivity in Messaging:** People with co-occurring disorders often face stigma, and tobacco cessation messaging may not be sensitive to their unique needs. There's limited research on how to design interventions that effectively engage these individuals without reinforcing stigma or alienating them.

5. Misinformation and Trust Issues

a) **Trust in Healthcare Providers:** In some populations, especially among marginalized groups, there is a lack of trust in healthcare systems. This communication barrier is underexplored in tobacco intervention research, limiting our understanding of how to design interventions that address mistrust and foster better communication between healthcare providers and patients.

6. Personalization and Engagement

a) **Limited Use of Personalized Communication:** Tobacco cessation efforts that use a one-size-fits-all approach often overlook the need for personalized interventions. Research on how to use personalized communication methods (e.g., through AI, tailored messaging) is lacking, though these could improve engagement and cessation success.

b) **Failure to Leverage Social Networks:** Social networks play a critical role in communication and health behavior change, yet there is a lack of research on how to

leverage peer support and social influence effectively in tobacco interventions.[*Sallis, J.F., Owen, N. and Fisher, E.B. (2015)124*]

7. Barriers in Clinical Communication

a) Lack of Provider Training on Tobacco Cessation: Healthcare providers are often not trained adequately to communicate tobacco cessation strategies, especially when dealing with patients who face additional barriers such as mental health issues, low literacy, or language differences.

b) Time Constraints in Healthcare Settings: Time constraints in clinical settings can prevent effective communication around tobacco cessation. More research is needed on how to efficiently deliver cessation advice within the limited time available during clinical consultations.

Addressing these communication barriers in tobacco intervention research is crucial to improving the reach and efficacy of cessation efforts. More targeted studies focusing on cultural, linguistic, technological, and social dimensions of communication can help create more inclusive and effective interventions that meet the needs of diverse populations.

All the previous research about tobacco intervention deals with tobacco cessation and focused on quitting of the habit rather than the communication; hence my research will cover the **gaps** for all the stake holders of tobacco intervention and finding right approach for every individual and group. It will also enhance the motivation among the tobacco users to make next quit attempt success. **Gaps correction** in this research can be granted in this study is as follows:

1. Identification of target population- Previous all intervention are vague and not focused, in this research individual and group base study and intervention is planned, to focus on the requirement of need of the subject by involving them in simple seven questionnaire.

2. Message clarity and accessibility- In this research the clear message is that communication is regarding the tobacco intervention and its need and equal participation of the survivor along with their need.
3. Behavioural and emotional approach- Questionnaire is typically based on the need of the subject, also by involving lady of the house, adding emotional touch and mental support to the communication definitely lead to successful stories.
4. Digital and social media gaps- Engage more with social media, apps, and mobile messaging. Develop interactive sessions, online support groups, and real-time chat services to encourage quitting.
5. Cultural Sensitivity and Inclusivity- Involving community leader and influencers and the people who have high importance in the lives of subjects in means of diversity of culture.
6. Peer Influence and Social Norms- Incorporate social norm strategies, showing that quitting is common and supported by peers.
7. Mental Health Integration- Address how quitting smoking can improve mental well-being and provide resources for mental health care.
8. Feedback Mechanism- In this research two way communication between the subject and counsellor is been supported and appreciated to get in depth of the difficulties faced by the subjects and supported unbiased.
9. Tailored Quit Support Information- Offer more tailored advice and support based on individual circumstances (e.g., use of nicotine replacement therapy, counseling services). Provide personalized follow-ups via text or email.
10. Monitoring and evaluation- Regular and time base observatio, monitoring and follow-up can play vital role in subject life which leads to successful attempt.

The specific problem which needs to be addressed in this research is structured

and specialized communication skills and it should coined as:

P: PATIENCE

L: LISTEN

A: APPRECIATE

N: NOTICE

S: SUPPORT

PATIENCE : Lot of patience is needed to communicate with the tobacco user, due to their habitual activity they will not be readily agree to quit it. One or two episodes will not be sufficient to make successful quit. One should be easily available to help them at every step for quit.

LISTEN: In all previous researches, there were ASK and ADVICE approach towards the tobacco user, this research will focus on listening the user. How they have started the habit? What circumstances push them towards this habit? Why they are continuing the habit?

APPRECIATE: Every move towards the tobacco cessation by the tobacco user must be appreciated. As per human psychology, the one who get appreciated and get complimented for their work grab the goal unanimously. Previous studies focus on **ASSESS**, which includes the assessment of the user about the willingness to quit the habit,he/she is ready to make quit attempt or not? This research focus ahead, if the user make a step forward towards the intervention than appreciation for the action is must.

NOTICE: Notice stands for the little differences made towards the next attempt for quit, this is an addition in ASSIST which stands for aids to quit tobacco. It will help the user as well as moderator to take the next step firmly and effortlessly. Every small step is counted for successful next quit attempt.

SUPPORT: Any addiction is bad for physical, mental and economical health of the being. Firm support is expected from family, friends, community and professionals by every tobacco user who is in progress for quit attempt. Continuous motivation is strongly recommended for the users.

3.3 Research Purpose and Questions

The esteem purpose of this research is to constantly make effective communication for tobacco intervention and prevention for the well being of the survivor in every means, physiological, psychologically, financially and in every possible means of healthy well being. Old thoughts were focused on strategies of tobacco intervention and this research is pin point focused on the very first step of intervention that is to generate the effective communication strategies for tobacco intervention and finding the right approach to deal with every single survivor. As it was stated earlier also, that effective communication is key to deal with any problem, being such crucial and delusional thought to approach a tobacco user and make their attempt to quit tobacco successful, effective communication strategies will be needed, to make them understand the harmful effects which may lead them to bigger problem.

The objective section explained the **PLANS** and **Simple Seven Questionnaire** Concept which is a mixed method, integrates qualitative and quantitative methods to provide research topics a more comprehensive understanding:

1. How effective the communication strategies for tobacco intervention?
2. What is the right approach to frame communication strategies for tobacco intervention?

To develop **PLANS** as an appropriate communication strategy for tobacco intervention and cessation, it will be further followed by Simple Seven questionnaire with

options YES/NO. The following questionnaire is developed while keeping simplicity so that results will be easily assessed and used to make out the mind set of the subject to help him/her in making successful quit attempt :

Simple Seven Questionnaire -

- 1. Do you love yourself? (YES/ NO)**
- 2. Are you ready to attempt quit tobacco? (YES/ NO, Reason if the answer is NO...)**
- 3. Will you be patiently able to deal with the consequences?(YES/ NO)**
- 4. Are you willing to listen and discuss, either ways,with the expert about the habit?(YES/ NO)**
- 5. Do you have positive approach towards self analysis and appreciation?(YES/ NO)**
- 6. Have you noticed any changes either good or bad in your body due to tobacco habit?(YES/ NO, Coined them)**
- 7. Are you willing to take support and help from the care giver / expert?(YES/ NO)**

Cancer, heart disease, stroke, lung conditions, diabetes, and chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, are all brought on by smoking. Previous all researches were focused and concentrated on the straight way of tobacco intervention, as per human psychological means, for every person it is not motivated or directed to leave the tobacco very instantly, it needs correct approach, effective communication and to make them realize the need of the intervention. By following the above mentioned coined approach, survivor can initiate the process of tobacco intervention and leads to experts opinion to get rid the habit simultaneously.

3.4 Research Design

The general approach taken to address research issues is referred to as research design. The theories and models that underpin a project, the research question, a plan for

obtaining information and data, and a plan for drawing conclusions from the data are all usually described in a research design.

As it was stated earlier also, that the research questions of this research are as follows:

1. How effective the communication strategies for tobacco intervention?
2. What is the right approach to frame communication strategies for tobacco intervention?

For answering the above mentioned research questions, design has been split-~~ted~~ in two simultaneous parts; which are PLANS & SIMPLE SEVEN QUESTIONNAIRE. These two will be framed in such manner so that the research questions get their answers. By following PLANS as a communication strategy and the SIMPLE SEVEN QUESTIONNAIRE as right approach to justify the strategy, together answering both the questions fruitfully. Research designs can be categorized in a variety of ways. In this research DESCRIPTIVE design is chosen and implemented. One study technique used to attempt and ascertain the features of a population or specific phenomena is descriptive research. You may basically determine all you need to know, apart from the reason behind an event, by using descriptive research to find patterns in a group's traits. Researchers often employ descriptive study design as a form of research methodology to examine and record the traits and behaviours of a certain population. It provides a thorough examination of a scenario in order to investigate the relationship between two factors. A descriptive case study examines individuals or objects in their natural habitat by combining survey and observation methods.

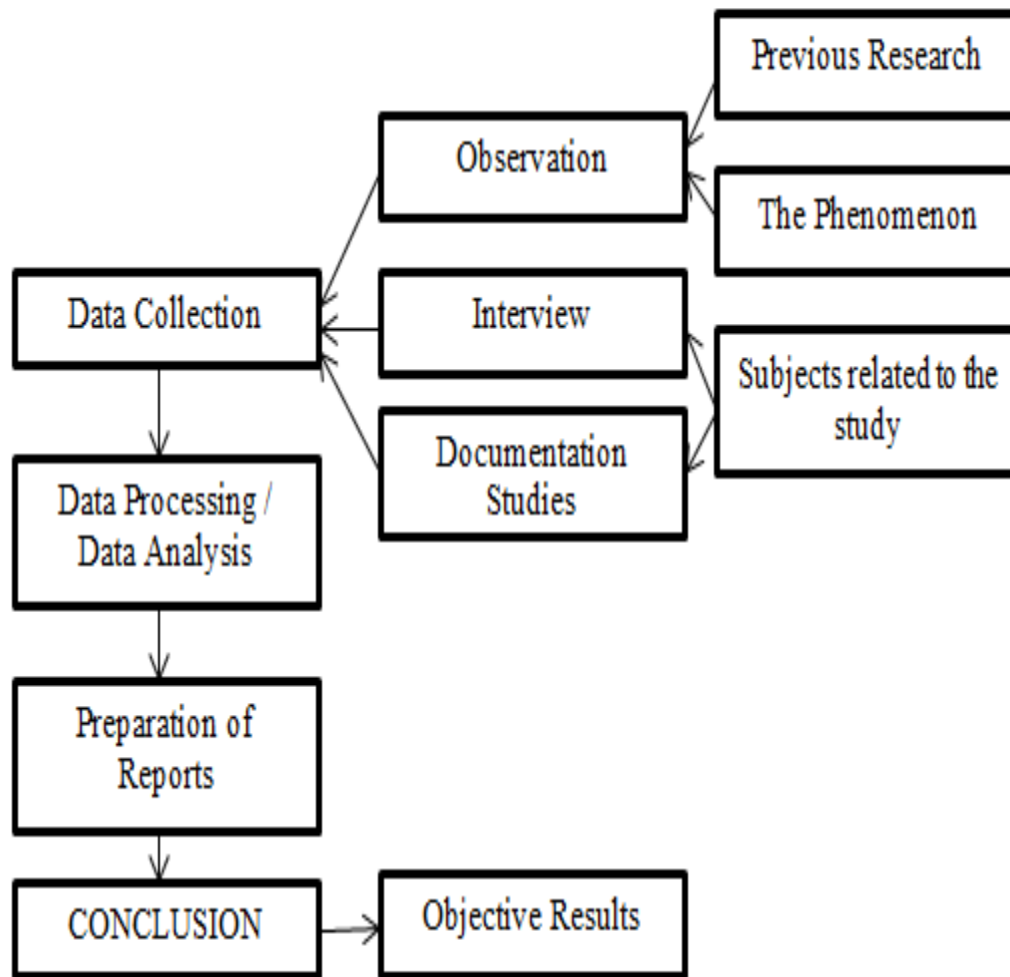


Figure 17 Descriptive Research Design (Source Research Gate)

Surveys, observational studies, and case studies are examples of descriptive research techniques, and both qualitative and quantitative data may be gathered. Although they don't prove cause-and-effect links, descriptive study findings offer insightful information that guides future studies.



Fig 18 Advantages of Descriptive Research (Source Question pro)

In this research, **survey method** has been followed with specific sample size by using google form as a primary tool. I have created a google form and its link has been shared to the targeted population, tobacco intervention is a process and result can be achieved with patience and time with focused approach. In India, habit of tobacco is prevalent and many a people use it in various forms.

3.5 Population and Sample

In this research the study was conducted on the people about tobacco intervention communication, the very first step towards intervention of any habit is to communicate about it. The whole group about whom you wish to make inferences is called a population. The particular group from which you will gather data is known as a sample. The sample size is always less than the population's overall size.

A population in research may not always mean individuals. It can refer to a group that includes components of everything that is desired to be studied, including things, occasions, organisations, nations, species, animals, etc.

As per requirement of research questions populations are used; data collected from entire population when it is small and a sample must be used when the population is big, spread out geographically, or hard to reach. Sample data may be used to test hypotheses or create estimates about population data using statistical analysis. Indian tobacco smokers make up the population in this study, and there are two methods of sampling: probability and non-probability. Every unit in the target population has a different chance of being included in non-probability sampling. Other factors, including convenience or a specific feature, are used in this sample.

Every unit in the target population must have an equal chance of being selected in probability sampling.

The majority of statisticians concur that a sample size of 100 is required to provide any relevant results. It is necessary to poll every member of the population if there are less than 100. The large group of people that researchers are looking at is known as the study's target population. In this research the target population are the tobacco users, this research is focused on the development of communication strategies for tobacco intervention, the results will be applied on them after analysis.

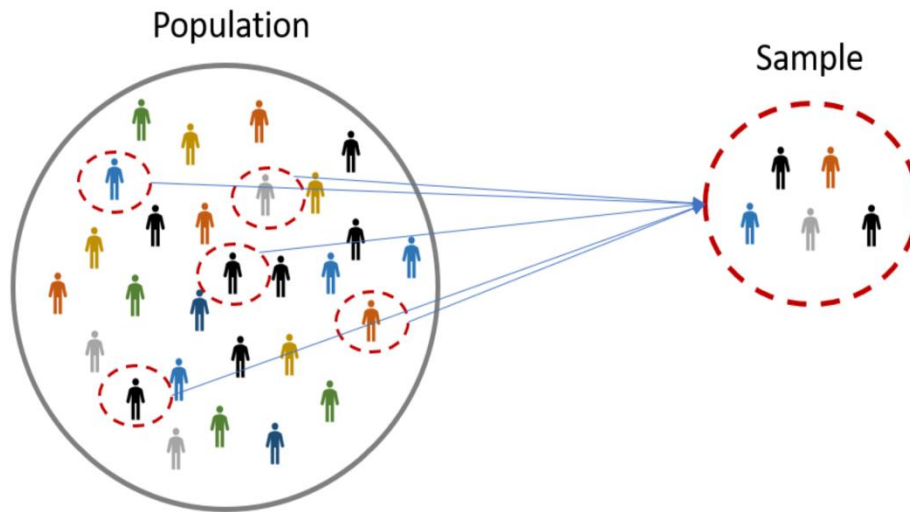


Figure 19 Population & Sample (Source Starlight Analytics)

3.6 Participant Selection

Researchers must make an effort to find possible participants who are qualified to respond to the scientific inquiry in order to ensure equitable participant selection. The intended subject population should have to be included according to the nature of the study. The research's benefits ought to be shared equitably.

There are several ways to find research study volunteers:

1. Leveraging the personal network.

As the statement itself indicates; family, friends, colleagues and relatives can be involved to help in the research, but at the same time it should be compulsorily added that it should not be biased because friends and relatives have a personal interest in the study's success, asking them for research insights may result in biased responses.

In this research, I have used my personal contacts at the same time keeping the fact in their mind that only the relevant tobacco users sample can be collected. Also, to reach out

their friend circle and colleagues whom are tobacco users and can give valuable input to the study.

2. To reach out via online communities.

Instead of posting and then vanishing, a community engagement method is an excellent way to get individuals to participate in research. Tobacco users are present in every group and community of people, this can be used to engage those who are perfect subjects for the research. The google link of simple seven questionnaire is been posted on the different online platforms.

3. Research participants can be found over social media.

Nowadays, there are several social media platforms for eg. Facebook, WhatsApp, twitter and so on. Following a brief explanation of the reason for reaching out, the setting, introduction, and goal of the research are shared. Next, describe why they are a good fit. Google link of the simple seven questionnaire has been posted on above mentioned social platforms to gather the data.

4. To get internal feedback.

Giving students the chance to evaluate and reflect on themselves before giving them external performance criticism is known as internal feedback. An excellent way to get preliminary advice on a research subject is through internal feedback. Internal input alone, however, is insufficient; in order to evaluate the product later on, the precise target group must be identified.

5. Curate a pool of enthusiastic individuals.

Building a participant pool involves gathering information from a group of people through screened surveys, data analytic, or database filters internally or by an independent recruiter. Target population must have group of people who must be having

enthusiasm to be part of the survey, just right approach to make them understand and attract towards the requirement of the research.

6. Conduct guerrilla testing.

Locating test participants in public areas and inviting them to take part in the study is known as “guerrilla usability testing.” Therefore, selecting volunteers who accurately reflect your target audience is a crucial first step in running a successful test. Coffee shops, for instance, are frequently used for guerrilla testing. Consider your target audience: where would they spend their time? Observe folks leaving the gym if you’re testing a fitness smartphone app. An airport café would be the perfect location for a travel app. In light of this, the majority of participants in this study were patients and their families who were admitted to one of the cancer hospitals.

7. Use tools that find test participants.

The capacity to pinpoint the details, including demographics and geography, is a major advantage of employing participant recruiting technologies. For instance, you will want medical professionals in New Zealand between the ages of 24 and 35 as study participants if you are developing a medical software that assists youthful physicians in the nation in locating obtainable medications. Google Form was selected as a tool in this study since it was simple to use.

3.7 Instrumentation

Checklists, examinations, surveys, and interviews are examples of research instruments. The researcher often chooses the research instrument, which is linked to the study technique. In this research the instrumentation used is google form containing questionnaire to collect the data.

Google Forms is a widely used tool in research due to its accessibility, ease of use, and cost-effectiveness. Researchers across various fields leverage Google Forms for

surveys, data collection, and experimental studies. Below are key ways in which Google Forms can be utilized in research, along with its advantages and limitations.

Uses of Google Forms in Research:

1. Surveys and Questionnaires

a) Data Collection: Google Forms is commonly used to create surveys for gathering quantitative and qualitative data from participants. It supports a variety of question types (multiple-choice, open-ended, Likert scales, etc.), making it versatile for different kinds of research.

b) Cross-sectional and Longitudinal Studies: Researchers can use it to conduct one-time surveys (cross-sectional) or track responses over time (longitudinal). The form can be sent to participants multiple times for longitudinal studies.

2. Experiments and Behavioral Studies

a) Controlled Experiments: Google Forms can be used to present participants with experimental scenarios or tasks, followed by questions to assess their responses. This is particularly useful in psychology, marketing, and behavioral sciences.

b) Randomization: By integrating branching logic (e.g., "go to section based on answer"), Google Forms allows for random assignment of participants to different conditions or interventions, a common requirement in experimental research.

3. Pre-Test/Post-Test Designs

Evaluating Interventions: Researchers can create forms for both pre-tests and post-tests to assess the impact of interventions. Participants complete the form before and after an intervention, and the data is used to measure changes in knowledge, attitudes, or behaviors.

4. Field Studies and Remote Data Collection

a) Mobile-Friendly Surveys: Since Google Forms is accessible via smartphones, tablets, and computers, it is ideal for field research where participants may be on the go. This makes it easy for participants in remote or underserved areas to provide responses without needing specialized hardware. *Malik, M., Sharma, A. and Kaur, H. (2021)123*

b) Global Reach: It can be used to collect data from geographically dispersed participants, enabling large-scale studies that span different regions or countries.

5. Ethical Research and Informed Consent

Consent Forms: Google Forms can also be used to obtain informed consent from participants before they engage in the research study. A section at the beginning of the form can outline the purpose of the study, risks, and benefits, and ask participants to agree before proceeding to the actual survey.

6. Collaborative Research

Sharing and Collaboration: Google Forms allows multiple collaborators to access and edit the form in real time. This feature is particularly useful for research teams working across different locations. Researchers can review and modify the form collaboratively before and during data collection.

7. Real-Time Data Analysis

a) Google Sheets Integration: Responses from Google Forms are automatically collected in a Google Sheet, allowing for real-time data analysis. This enables researchers to monitor response rates and trends as they emerge.

b) Basic Analytics: Google Forms provides basic data analysis tools such as summary charts and response counts, giving researchers a quick overview of trends before performing more in-depth analysis.

Advantages of Using Google Forms

a) Free to Use: Google Forms is a free tool, making it highly accessible for researchers, especially those with limited budgets.

b) Ease of Use: The platform is user-friendly, requiring minimal technical skills to create and distribute forms. It also provides real-time response collection and analysis.

c) Customizability: Researchers can easily design questions using various formats (e.g., multiple choice, checkboxes, text), include branching logic, and control the flow of the survey.

d) Accessibility: Since Google Forms can be accessed via any device with internet access, it is highly accessible to participants regardless of location or device.

e) Anonymous Data Collection: Google Forms allows for anonymous data collection, which is essential for maintaining participant confidentiality in many research designs.

f) Automated Organization: Responses are automatically organized and saved in a Google Sheet, reducing the need for manual data entry and minimizing errors in data collection.

Limitations of Using Google Forms

1. Limited Customization of Appearance

While Google Forms allows for some customization (e.g., adding images or changing background colors), it lacks advanced design options compared to other survey platforms

(e.g., Qualtrics, SurveyMonkey). This can be a limitation if the aesthetics of the form are important for participant engagement.

2. Response Bias and Accessibility Issues

Google Forms relies on internet access, which may exclude certain populations (e.g., people in areas with poor internet connectivity) from participating in research, introducing selection bias.

Without built-in mechanisms to control who accesses the survey, researchers may struggle with duplicate responses or participants not part of the target population accessing the form. [McGuire, W.J. (1989)124]

3. Data Privacy Concerns

Google Forms does not offer advanced data security features, making it less suitable for research involving sensitive data. Data stored in Google Sheets may be subject to Google's terms of service, which may not comply with strict privacy laws (e.g., GDPR in Europe).

Responses are not end-to-end encrypted, which could be a concern for researchers working with confidential or sensitive information.

4. Limited Randomization and Advanced Features

While Google Forms supports basic branching logic, it is not well-suited for complex randomization, adaptive testing, or advanced experimental designs that require more sophisticated control over question flow.

Unlike some paid survey platforms, Google Forms does not have an offline mode, which may be a limitation when conducting research in areas with intermittent internet access.

5. Limited Response Scale

For large-scale research projects, the response limit of Google Forms (though quite high) may become a concern, as there are limits on the number of responses Google Forms can handle efficiently without crashing.

Google Forms is a valuable tool for researchers, especially for initial data collection, surveys, and simple experiments. It offers a range of features that make it accessible and easy to use, though it does have limitations in terms of customization, data privacy, and handling more complex research designs. For studies requiring robust data security or advanced features, researchers may need to combine Google Forms with other tools or consider alternative platforms. Google Forms is a versatile and powerful tool for researchers, educators, and organizations looking to collect data easily and efficiently. Its user-friendly interface, customization options, and integration with other Google Workspace tools make it an excellent choice for both small-scale and large-scale research projects. Whether for surveys, quizzes, feedback forms, or registration, Google Forms can streamline the process of collecting and analyzing data, saving time and effort for researchers.

This had been used simply by sharing the link of the google form with the subjects and make them understand the format and tell them to submit it after filling it Below shared pictures (Figure 20 - Figure 24). are the screen shots of google form the tool used to collect the data for this research.

The screenshot shows a survey editor interface. At the top, there is a navigation bar with icons for a document, chat, undo, play, and a red circle with the letter 'S'. Below this, the title 'SIMPLE SEVEN QUESTIONNAIRE' is displayed. A navigation menu includes 'Questions', 'Responses' (with a badge showing '524'), 'Settings', and 'Total points: 0'. The main content area is titled 'Section 1 of 2' and contains a text editor for the question. The text editor has a title 'Simple Seven Questionnaire' and a rich text toolbar with icons for bold (B), italic (I), underline (U), link, and unlink. The text being edited is 'For "TOBACCO USERS" ONLY'. Below the text editor, there is a 'Question *' field with a date picker icon and the placeholder text 'Day, month, year'. At the bottom, there is a 'Write initials of your name. *' field with a 'Short-answer text' label and a dotted line indicating the input area.

Figure 20 Screen shot (1)

The screenshot shows a survey interface with a top navigation bar containing icons for a menu, chat, undo, play, and a profile icon with the letter 'S'. Below the navigation bar, the survey title 'SIMPLE SEVEN QUESTIONNAIRE' is displayed. A secondary navigation bar includes 'Questions' (underlined), 'Responses' (with a count of 524), 'Settings', and 'Total points: 0'. The main content area contains three question cards. The first card is for 'MOBILE NUMBER *' with a 'Short-answer text' input field. The second card is for '1. Do you love yourself? *' with radio button options for 'Yes' and 'No'. The third card is for '2. Are you a Tobacco User and ready to quit TOBACCO? *' with radio button options for 'Yes' and 'No'.

MOBILE NUMBER *

Short-answer text

1. Do you love yourself? *

Yes

No

2. Are you a Tobacco User and ready to quit TOBACCO? *

Yes

No

Figure 21 Screen shot (2)

The screenshot shows a survey interface with a top navigation bar containing icons for a menu, a palette, a back arrow, a play button, a vertical ellipsis, and a red circle with the letter 'S'. Below the navigation bar, the title 'SIMPLE SEVEN QUESTIONNAIRE' is displayed. A secondary navigation bar includes 'Questions', 'Responses' (with a count of 524), 'Settings', and 'Total points: 0'. The main content area is divided into sections. The first section is titled '2a. Reason, if the answer is No...' and contains a 'Short-answer text' input field. Below this is a section titled 'After section 1' with a dropdown menu set to 'Go to section 2 (Simple Seven Questionnaire)'. A purple bar indicates 'Section 2 of 2'. The next section is titled 'Simple Seven Questionnaire' and contains the text 'Tobacco Intervention Questionnaire based on **PLANS**'. The final section is titled '3. Will you be **patiently** able to deal with consequences?' and includes two radio button options: 'Yes' and 'No'. A red asterisk is positioned to the right of the question text.

Figure 22 Screen shot (3)



SIMPLE SEVEN QUESTIONNAIRE

Questions

Responses **524**

Settings

Total points: 0

4.Are you willing to **listen** and discuss, either ways, with the expert about the habit? *

Yes

No

5.Do you have positive approach towards self analysis and **appreciation**? *

B *I* U ↻ ✕

Yes

No

Figure 23Screen shot (4)

SIMPLE SEVEN QUESTIONNAIRE

Questions Responses **524** Settings Total points: 0

6. Have you **noticed** any changes either good or bad in your body due to tobacco habit? *

Yes

No

If Yes, coined them *

Long-answer text

7. Are you willing to take **support** and help from the care giver / expert? *

Yes

No

Figure 24 Screen shot (5)

3.8 Data Collection Procedures

In order to answer research questions, test hypotheses, and assess results, data collection is the act of obtaining and measuring information on variables of interest in a predetermined, methodical manner.

Observation, **questionnaires**, interviews, and focus groups are the four methods used to gather data, and their applicability in various situations is assessed. Reliability estimates are based on the data collected. Therefore, to guarantee that the dependability estimate is reliable, a sound data gathering process is essential. The questionnaire used to gather the data for this study, which is shared in the previous section. Data collection of this research done by using the google form in which there are 7 questions by answering those questions subject at the end submit the response and collectively the responses later analyzed and result shows the positive approach towards the idea of development of communication strategy. Questionnaires, either digital or analogue, are used in surveys to collect quantitative and qualitative information from participants. For instance, a business uses social media monitoring and online surveys to get input from customers in order to enhance its goods and services.

Likewise, in this study survey questionnaire has been used and several tobacco users attempted the survey, data was collected and further analyzed to fulfil and answer the research questions of this study.

The sample size calculation has been done by using Raosoft software, as this research is survey based. A robust set of over 15 tools for database and file administration of survey data collected using Raosoft online survey software is called Raosoft Survey Tools.



Sample size calculator

What margin of error can you accept? 5% is a common choice	<input type="text" value="5"/> %	The margin of error is the amount of error that you can tolerate. If 90% of respondents answer <i>yes</i> , while 10% answer <i>no</i> , you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size.
What confidence level do you need? Typical choices are 90%, 95%, or 99%	<input type="text" value="95"/> %	The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer <i>yes</i> would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size.
What is the population size? If you don't know, use 20000	<input type="text" value="20000"/>	How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.
What is the response distribution? Leave this as 50%	<input type="text" value="50"/> %	For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under More information if this is confusing.
Your recommended sample size is	377	This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

Online surveys with Vovici have completion rates of 66%!

Alternate scenarios

With a sample size of	<input type="text" value="100"/>	<input type="text" value="200"/>	<input type="text" value="300"/>	With a confidence level of	<input type="text" value="90"/>	<input type="text" value="95"/>	<input type="text" value="99"/>
Your margin of error would be	9.78%	6.89%	5.62%	Your sample size would need to be	267	377	643

Save effort, save time. Conduct your survey online with Vovici.

Figure 25 Raosoft Sample size calculator (Source Research Gate)

More information

If 50% of all the people in a population of 20000 people drink coffee in the morning, and if you were repeat the survey of 377 people ("Did you drink coffee this morning?") many times, then 95% of the time, your survey would find that between 45% and 55% of the people in your sample answered "Yes".

The remaining 5% of the time, or for 1 in 20 survey questions, you would expect the survey response to more than the margin of error away from the true answer.

When you survey a sample of the population, you don't know that you've found the correct answer, but you do know that there's a 95% chance that you're within the margin of error of the correct answer.

Try changing your sample size and watch what happens to the *alternate scenarios*. That tells you what happens if you don't use the recommended sample size, and how M.O.E. and confidence level (that 95%) are related.

To learn more if you're a beginner, read *Basic Statistics: A Modern Approach* and *The Cartoon Guide to Statistics*. Otherwise, look at the **more advanced books**.

In terms of the numbers you selected above, the sample size n and margin of error E are given by

$$x = Z(c/100)^2 r(100-r)$$

$$n = N x / ((N-1)E^2 + x)$$

$$E = \text{Sqrt}[(N-n)x / n(N-1)]$$

where N is the population size, r is the fraction of responses that you are interested in, and $Z(c/100)$ is the critical value for the confidence level c .

If you'd like to see how we perform the calculation, view the page source. This calculation is based on the Normal distribution, and assumes you have more than about 30 samples.

About **Response distribution**: If you ask a random sample of 10 people if they like donuts, and 9 of them say "Yes", then the prediction that you make about the general population is different than it would be if 5 had said "Yes" and 5 had said "No". Setting the response distribution to 50% is the most conservative assumption. So just leave it at 50% unless you know what you're doing. The sample size calculator computes the critical value for the normal distribution. Wikipedia has good articles on statistics.

Figure 26

The Raosoft sample size calculator is a valuable tool for the appropriate sample size for surveys based on key statistical parameters. The breakdown of the elements mentioned:

Population Size: The population size refers to the total number of individuals or items in the entire group which is being studying. When conducting research or sampling, this number is crucial for determining sample is in relation to the entire population.

Margin of Error: The margin of error (MoE) is a critical component in survey research and sampling. It tells you how much the results from your sample are expected to differ from the true population value. A smaller margin of error means more precision, but it also requires a larger sample size.

Confidence Level: This indicates how confident reseacher can be that the sample accurately reflects the population. Common confidence levels are 90%, 95%, and 99%. A higher confidence level requires a larger sample size.

Response Distribution: Response distribution refers to the expected proportions of different answers (or responses) which is anticipate in survey. For example, if it was asked a yes/no question, the response distribution could be 50% for "yes" and 50% for "no," or it could be different based on what you expect from your respondents.

Key Assumptions:

Normal Distribution: The Raosoft calculator assumes a normal distribution, which is appropriate when sample sizes exceed 30. The normal distribution assumption means that most responses will cluster around the average, with fewer responses at the extremes.

Minimum Sample Size: The calculator helps determine the minimum number of responses needed to achieve the desired confidence level and margin of error. For instance, if you have a small population, you may need a larger proportion of the population to achieve a desired level of precision.

When to Use the Calculator:

When you need precision: If you want to ensure that the sample you collect will give you an accurate representation of the population within a specified margin of error.

When the population is large: If the population size is large or unknown, the calculator helps ensure that your sample size is sufficient for accurate survey results.

By taking all these factors into account, the Raosoft sample size calculator provides a statistical method to help researchers collect valid data that can be generalized to the larger population with a known level of confidence.

3.9 Data Analysis

The process of methodically using statistical and/or logical methods to characterise and depict, summarise and summarise, and assess data is known as data analysis. In this study, data has been collected by simple seven questionnaire based on concept of term PLANS. Following are figure 27, figure 28, figure 29, figure 30, figure 31, figure 32 and figure 33 which shows the result of questionnaire in pie form, to make the data easily understandable. In patient to patient counselling these pictures do make impact, as it is proven that visual representation make greater impact for better understanding. After the data collection the responses gathered clearly shows that this communication strategy on

which the questionnaire based is up to the mark and facilitate the effective communication strategy which answers both the research questions of this study.

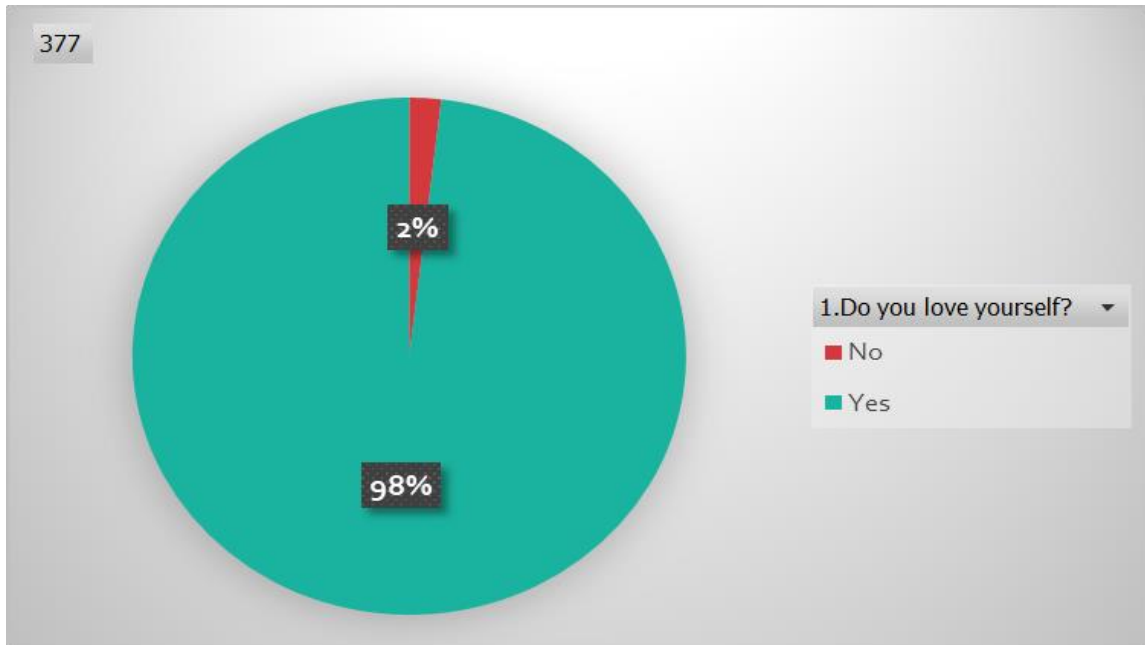


Figure 27: Do you love yourself?

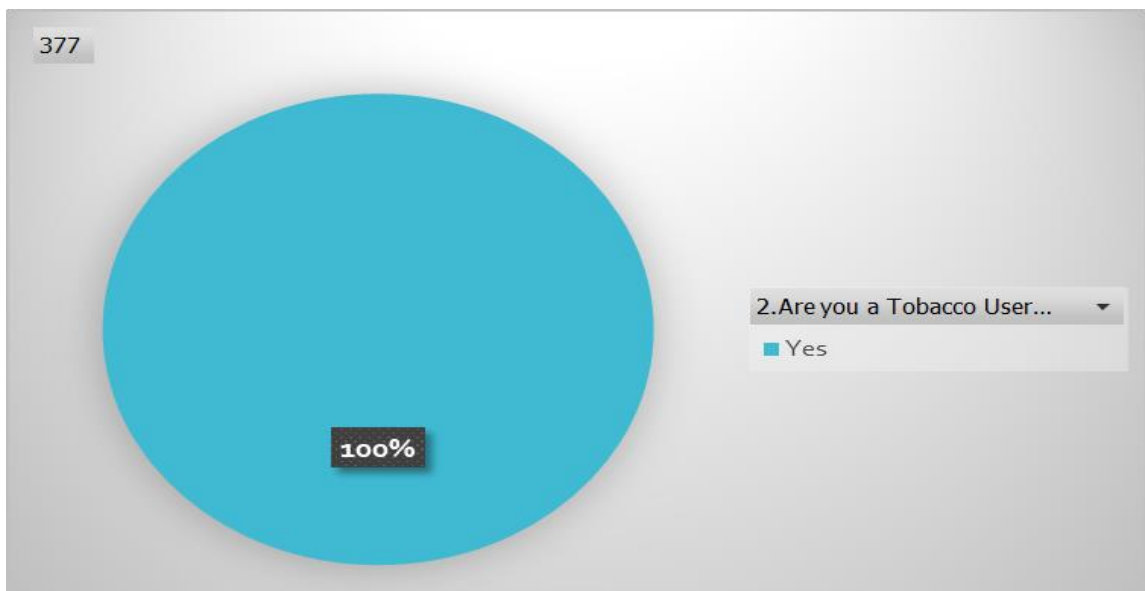


Figure 28: Are you a tobacco user and ready to quit tobacco?

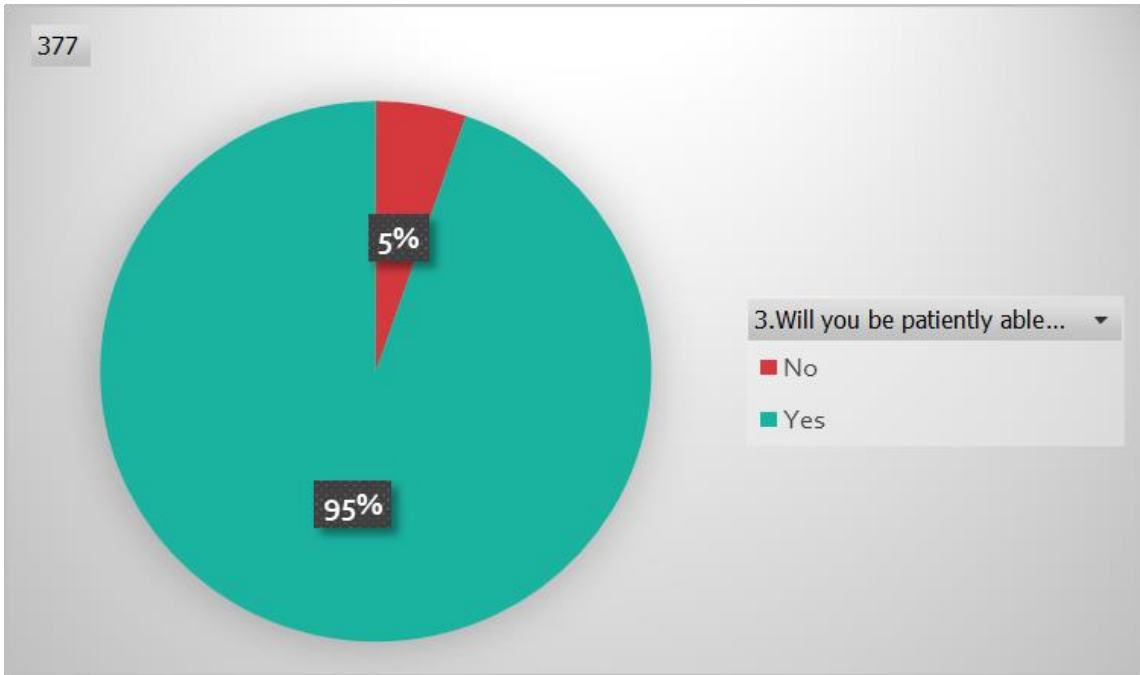


Figure 29: Will you patiently able to deal with the consequences?

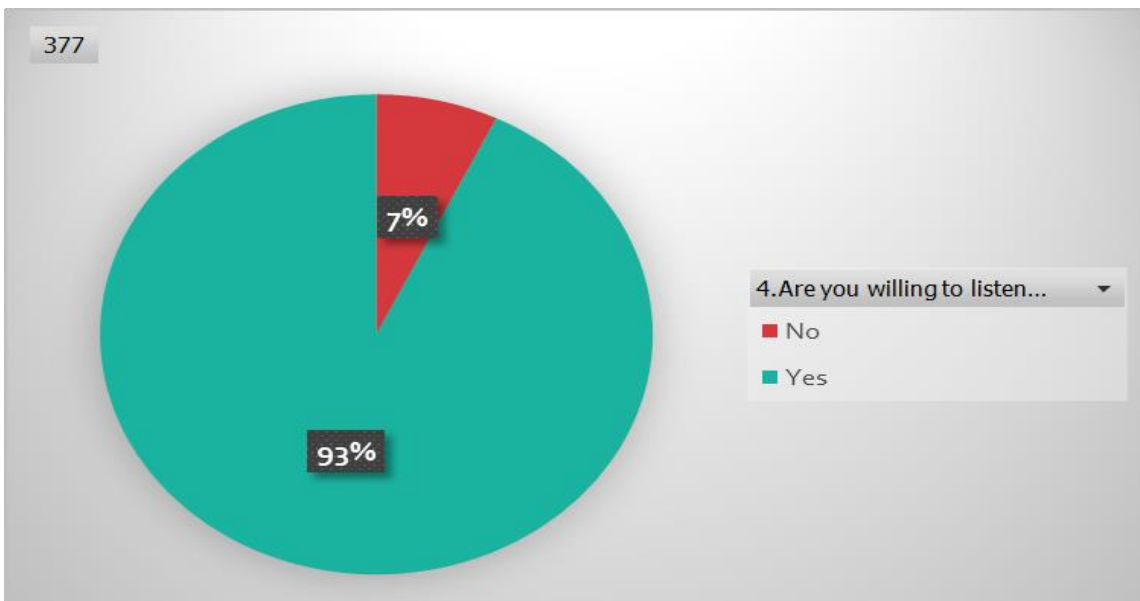


Figure 30: Are you willing to listen and discuss, either ways, with the expert about the habit?

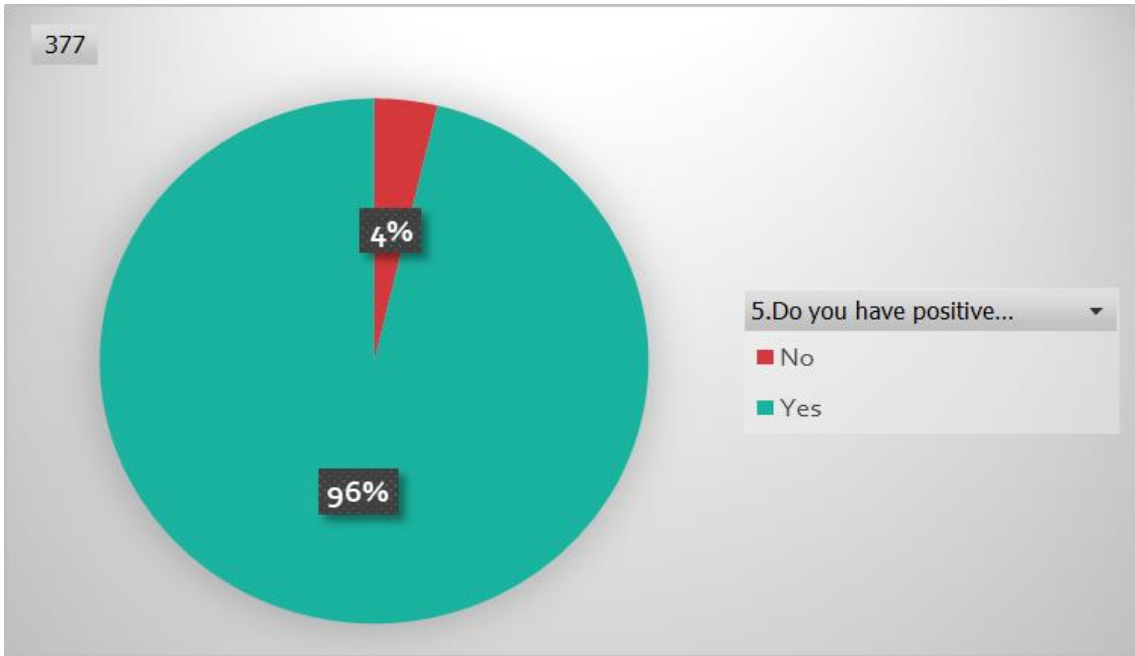


Figure 31 : Do you have positive approach towards self analysis and appreciation?

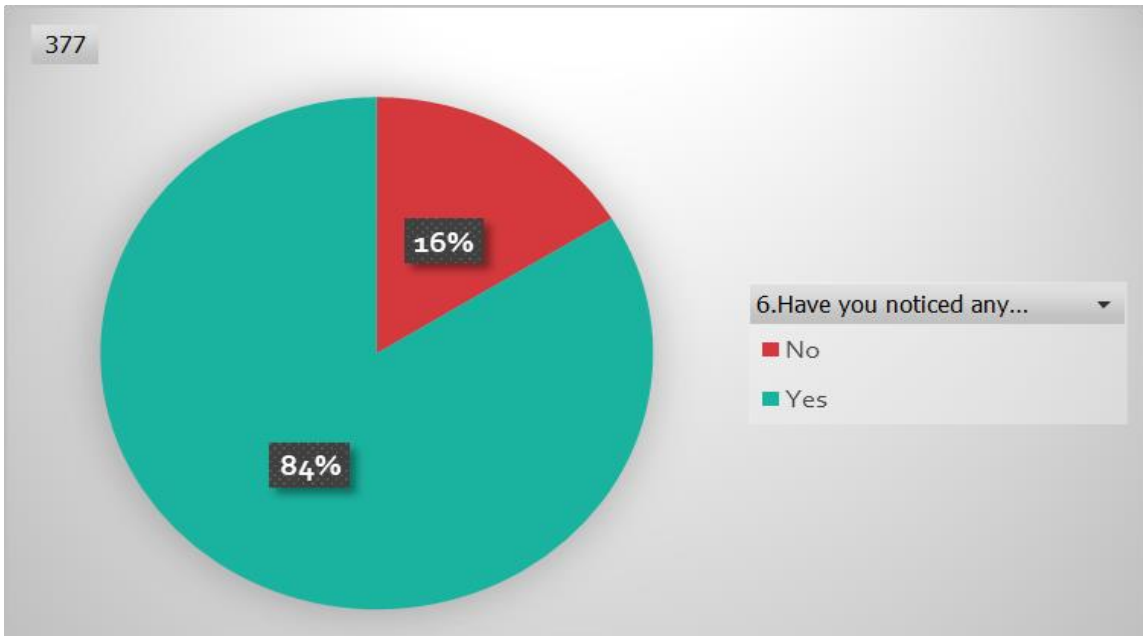


Figure 32 : Have you noticed any changes either good or bad in your body due to tobacco habit?

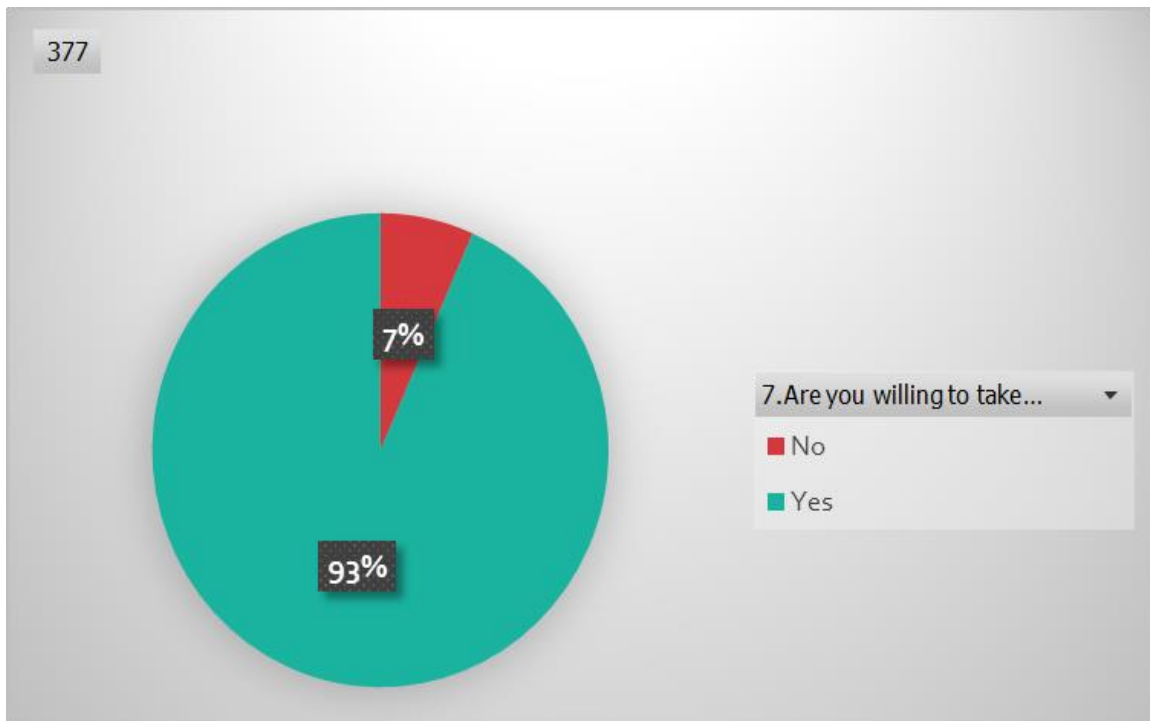


Figure 33 : Are you willing to take support and help from the care giver / expert?

3.10 Research Design Limitations

Research limitation is the effect of a constraint on the study's overall research design. These are the study's shortcomings or problems that might affect the research's conclusion. In this study, survey has been conducted for quitting tobacco habit. In India, Tobacco Habit is very common and people are reluctant not to talk over it. It is very difficult to communicate with the tobacco users to ask them about quitting the habit. This research is to develop communication strategies, for tobacco intervention; while developing the same, simple seven questionnaire had been developed and offered to the tobacco users to participate. The research design which is been developed is focused towards communication for tobacco intervention, but the major limitation of this design is that it is survey based and can not be discriminate between the tobacco users and non tobacco users. The other limitation is that even tobacco users can answer as non tobacco

users. Whenever there is survey based questionnaire, there were some advantages as well as disadvantages. A limitation of survey research is that participants may be dishonest in their answers. Individuals may misremember, deceive, or give answers to questions that they believe would make them appear good. This can lead to inaccuracies in the data collected. Another limitation is that participants often drop out of the research.

To overcome these limitation, questions were made simple and easy to understand, all the questions are objective and nor they require any explanation. Also, the questionnaire is designed in such a way that after 2nd question if the participant chooses answer 'NO' for not continuing the communication either he/she is not a consumer of tobacco or don't want to quit the habit; it will end and get submitted than and there.

3.11 Conclusion

With this research we intend to demonstrate that effective communication towards tobacco intervention and prevention can be achieved slowly but successfully. While performing the survey many people were reluctant to participate, to enhance that lot of patience, time and motivation was worked by different modalities, like involving their family members, friends, colleagues etc. Tobacco is most preventable cause of disease, disability and death; quitting tobacco has immediate as well as long term benefits in every means and improves health, wealth, families and community. India is among the largest producer as well as consumer of tobacco, both male and females are consuming it. This habit prevails in family and leads to disaster, to reduce this lady of the family can play an important role. Communication plays vital role in Tobacco Intervention and programme at school level, college etc. By adding topic to curriculum in medical/dental courses and motivate about quitting habits. Using social media, print media and internet

to make good positive effects about tobacco intervention and cessation. [Kotler, P. and Lee, N. (2011) 123]. Outcomes of my research will be beneficial to environment and society as follows:

□1. Improves health status and improves quality of life. Tobacco intervention programs have a significant impact on improving health status and enhancing the quality of life for individuals, families, and communities. By helping people quit smoking and reducing tobacco use, these interventions prevent or reverse a wide range of smoking-related health problems, leading to longer, healthier lives and better overall well-being. They prevent the onset of debilitating and fatal diseases, enhance physical and mental well-being, save money, and protect the health of families and communities. The benefits of quitting smoking are evident almost immediately and continue to grow over time, making tobacco interventions a vital public health strategy for improving overall well-being and longevity.

□2. Reduces the risk of premature death. Tobacco intervention programs reduce the risk of premature death by helping individuals quit smoking and avoid the many life-threatening diseases and conditions associated with tobacco use. Smoking is the leading preventable cause of death worldwide, contributing to millions of premature deaths each year. By promoting cessation, tobacco interventions directly lower the chances of dying prematurely from smoking-related illnesses. By helping individuals quit smoking, these interventions decrease the likelihood of life-threatening diseases, such as cancer, heart disease, stroke, and respiratory conditions, while also improving overall well-being and extending life expectancy. The benefits of quitting smoking are profound, making tobacco interventions a key public health strategy for saving lives and promoting healthier, longer lives.

3. Reduces the risk of many diseases for example cardiovascular disorders, respiratory

problems, poor reproductive health outcomes, COPD and cancer. Smoking and tobacco use are major contributors to these diseases, but quitting can significantly lower the risk and prevent the progression of many conditions.

□4. Reduces the financial burden. Smoking and tobacco use result in substantial direct and indirect costs, including medical expenses, lost productivity, and other societal impacts. By helping individuals quit smoking, tobacco interventions can lead to significant cost savings and economic benefits. The financial benefits of quitting smoking are substantial and continue to grow over time, making tobacco interventions an important strategy for reducing both health and economic burdens.

□5. Benefits the health of pregnant woman and the fetus. Tobacco intervention during pregnancy is vital for the health and well-being of both the pregnant woman and her fetus. Smoking during pregnancy poses serious risks, leading to complications for the mother and developmental issues for the baby. By quitting smoking through tobacco interventions, pregnant women can significantly reduce these risks and improve outcomes for themselves and their children. Additionally, tobacco interventions protect the long-term respiratory and overall health of the baby, while also benefiting the mother's health by lowering the risk of smoking-related diseases and improving her pregnancy experience. These interventions are critical for ensuring a healthier pregnancy and a healthier future for both mother and child.

□6. Benefits in treatment of cardiovascular diseases and cancer. Tobacco intervention plays a crucial role in the treatment of cardiovascular diseases (CVD) and cancer, two of the most significant health issues caused or exacerbated by smoking. Smoking is a leading risk factor for both conditions, contributing to their development, progression, and severity. Quitting smoking, aided by tobacco intervention programs, brings substantial benefits to individuals suffering from these diseases by improving treatment

outcomes, enhancing overall health, and reducing the risk of disease recurrence and mortality.[*Thun, M.J., Carter, B.D. and Feskanich, D. (2013)125*]

□7. Protecting family and friends from second hand smoking. Environmental tobacco smoke or passive smoke are other names for secondhand smoking, contains harmful chemicals that can cause serious health issues even for nonsmokers. When people inhale secondhand smoke, they are exposed to the same toxic substances as smokers, including nicotine, carbon monoxide, and more than 7,000 other chemicals, many of which are carcinogenic. Tobacco interventions and lifestyle changes can play a significant role in reducing exposure to secondhand smoke and protecting the health of loved ones.

Intervention can be done at individual, community, population and society level. The World Health Organization (WHO) states that tobacco smoking is the leading avoidable cause of death worldwide. Awareness is required regarding the ill effects of Tobacco use so that with the correct knowledge and attitude, gradual but marked difference can be made and appreciated.

This research and its objectives will benefits the society by financial, social and physical well being. This will not only make improvement in oral health rather gives a new way of betterment of society.My objective is to enhance the motivation among the tobacco users to quit the habit,keep connecting the other addicted to themselves to help make the next quit attempt a success.Previous related researches were generalized and focused on tobacco quitting rather than communication. Hence, my research is necessary to cover the gap for stake holders of tobacco intervention and finding the right approach for every individual as well as different group.



Figure 34 Stop Tobacco (Source iStock)

Quit Tobacco

CHAPTER IV:

RESULTS

4.1 Research Question One: How effective the communication strategies for tobacco intervention?

The effectiveness of communication strategies in tobacco intervention is crucial for reducing smoking rates, promoting cessation, and preventing initiation, especially among vulnerable populations. Various communication strategies have been employed in public health campaigns, clinical settings, and community-based interventions, with mixed success. Communication strategies in tobacco interventions are generally effective, but their success is influenced by how well they are designed, targeted, and sustained. Mass media campaigns, healthcare provider interventions, and personalized tools like quitlines and text messaging show strong results when implemented effectively. However, challenges such as desensitization, digital divides, misinformation, and lack of personalization can limit their impact. Tailoring strategies to the behavioral, cultural and demographic needs of specific populations and ensuring a multi-channel, sustained approach are key to enhancing the overall effectiveness of tobacco communication interventions. [Noar, S.M., Benac, C.N. and Harris, M.S. (2007)124]

Second-hand smoke exposure and tobacco usage can be prevented and reduced with the use of a number of evidence-based techniques. These include price hikes, smoke-free regulations, and well publicised health education initiatives. [Hammond, D. (2011) 121]. People can also quit using tobacco with the aid of techniques like medicine and counselling. In this research communication strategy has been developed by keeping it in consideration to kept it simple, and easily understandable. All the stake holders were involved with their defined roles. To make it more effective at various stages responsibility assigned to different stake holders, for example lady of house to

communicate with family, in medical and dental college tobacco intervention topics addition and even involvement of survivors to motivate the the other tobacco users from their own stories. The article “Prospect Theory: An Analysis of Decision under Risk” by Daniel Kahneman and Amos Tversky, published in *Econometrica* in 1979, is one of the seminal papers in the field of behavioral economics. It introduces prospect theory, which revolutionized the understanding of how people make decisions under uncertainty, challenging the traditional economic models that assumed rational behavior based on expected utility theory. These insights have been widely applied in economics, finance, psychology, and beyond, leading to a deeper understanding of how individuals and groups make decisions in real-world settings. *[Kahneman, D. and Tversky, A. (1979) 123]*
[Rao, V., Yang, G. and Hu, T. (2022)124]

4.2 Research Question Two: What is the right approach to frame communication strategies for tobacco intervention?

Framing effective communication strategies for tobacco intervention requires a comprehensive approach that considers the target audience, messaging, delivery channels, and the context in which the communication takes place. An effective strategy should not only raise awareness but also drive behavioral change, motivate cessation, and prevent tobacco use initiation. The right approach to framing communication strategies for tobacco intervention involves understanding audience, crafting compelling messages, selecting the appropriate channels, providing behavioral support, and constantly evaluating and refining the campaign. *[Michie, S., Atkins, L. and West, R. (2014)124]*. *[Stead, L.F., Carroll, A.J. and Lancaster, T. (2017)125]*

By targeting both individuals and the broader social environment, using multi-channel and culturally sensitive approaches, and offering sustained support, communication strategies can be highly effective in reducing tobacco use and promoting cessation.

The communication strategy formed in this research is coined as PLANS; this is elaborated as PATIENCE, LISTEN, APPRECIATE, NOTICE & SUPPORT. This is simple approach and can be easily communicated by all the stake holders. For tobacco intervention, communication is the first step to dealt with and in a formulated manner. To collect data there was some reluctance faced this is due loss of interest of public to participate in the survey. This research is for the tobacco users and in India, tobacco is more prevalent than awareness about ill effects of it. It was found tough to make people understand the cause of the research and its importance in well being of mankind.

4.3 Summary of Findings

In this research mixed methodology has been used both qualitative and quantitative methods were described couple of findings which shows positive and impact observations and findings towards achieving goal of this research. In India tobacco habit prevails in family so it is been proposed to involve lady of the family in tobacco intervention and proposed new addition in medical and dental college curriculum about the same, may enhance and help to achieve the target of tobacco intervention at the best. The questionnaire developed for this research shows the positive impact towards the tobacco intervention strategy developed in form of questionnaire based on PLAN, this research summarizes that the correct and right communication towards tobacco intervention may lead to successful result. All previous researches were directly dealt with the tobacco intervention, but this research completely focused on the very first step towards the tobacco intervention, and towards the initiation of communication towards it.

It is believed that in India tobacco is a great giant obstacle, to overcome multiple approaches and at the same time effective communication is needed to implement tobacco intervention. From 3rd to 7th question based on PLANS.

First question : do you love yourself answered 98% yes in the survey.

Second question: are you a tobacco user answered as 100% yes.

Third question: will you be patiently able to deal with the consequences answered 95% yes.

Fourth question: are you willing to listen and discuss either ways, with the expert about the habit, answered 93% yes.

Fifth question: do you have positive approach towards self analysis and appreciation, answered 96% yes.

Sixth question: have you noticed any changes either good or bad in your body due to tobacco habit, answered as 84% yes.

Seventh question: are you willing to take support and help from the care giver or expert, answered as 93% yes.

Above mentioned result proved that the communication strategy developed in this research is effective and can be used for well being of humanoid. All communication techniques that a) persuade a smoker to quit, or b) persuade a smoker to utilise a measure intended to assist them quit, are considered communication tactics. When quitting smoking, all smokers must go through the cessation process.

4.4 Conclusion

My objective is to enhance the motivation among the tobacco users to quit the habit, keep connecting the other addicted to themselves to help make the next quit attempt a success. Previous related researches were generalized and focused on tobacco quitting rather than communication. Hence, my research is necessary to cover the gap for stake holders of

tobacco intervention and finding the right approach for every individual as well as different group. Giving up tobacco use provides both short-term and long-term advantages, including lowering the chance of developing diseases and enhancing overall health. Tobacco damages almost every organ in the body, leading to numerous illnesses and lowering overall health. With this research we intend to demonstrate that effective communication towards tobacco intervention and prevention can be achieved slowly but successfully. The short coming of this study is that it is individual based, questionnaire can be wrongly answered; and although it has been designed keeping in mind that it will cover tobacco users but people can answer that they do not use tobacco, which may lead to error in collecting data. Communication plays vital role in Tobacco Intervention and programme at school level, college etc. Research on tobacco intervention is crucial since it has helped hundreds of thousands of individuals stop smoking, which has prevented countless deaths before their time.

In a communication strategy for tobacco intervention, the skills of **patience, listening, assessment, notice, and support** play crucial roles in fostering effective engagement with individuals who smoke or are at risk of smoking. These components are essential for ensuring that the intervention is compassionate, responsive, and tailored to the needs of the target population, ultimately leading to more successful outcomes.

CHAPTER V: DISCUSSION

5.1 Discussion of Results

Your research seems to have provided valuable insights into the effectiveness of a communication strategy, particularly in the context of tobacco intervention in India.

The main conclusions and ramifications are summarized as follows:

Mixed Methodology Approach: By employing both qualitative and quantitative methods, your research was able to capture a comprehensive understanding of the issue and its impact. This allowed for a deeper exploration of the topic and provided robust evidence to support your findings.

Involvement of Women: Recognizing the prevalence of tobacco use within families in India, your research proposes involving women, specifically the lady of the family, in tobacco intervention efforts. This acknowledges the influential role that women often play in household dynamics and decision-making processes.

Curriculum Addition in Medical and Dental Colleges: Proposing the addition of tobacco intervention topics to the curriculum of medical and dental colleges is a proactive step towards equipping future healthcare professionals with the necessary knowledge and skills to address tobacco use effectively.

Positive Impact of Communication Strategy: The findings from your questionnaire, based on the PLANS communication strategy, indicate a high level of acceptance and willingness among tobacco users to engage in the intervention process. This suggests that a well-structured communication approach focusing on patience, active listening, appreciation, noticing changes, and providing support can effectively facilitate behavior change in tobacco users.

Focus on Initial Communication: Your research uniquely focuses on the initial step of communication in tobacco intervention efforts. By emphasizing the importance of establishing effective communication channels, your approach lays a strong foundation for subsequent intervention strategies and reinforces the idea that successful intervention begins with meaningful dialogue.

Challenges of Tobacco Use in India: Acknowledging tobacco use as a significant obstacle in India, your research underscores the need for multiple approaches and effective communication strategies to address this public health concern.

Overall, this research contributes valuable insights to the field of tobacco intervention by highlighting the importance of communication and proposing practical strategies to engage stakeholders effectively in addressing tobacco use in India.

5.2 Discussion of Research Question One

It involves a well-thought-out research communication strategy that prioritizes simplicity and accessibility. Involving stakeholders with defined roles ensures that everyone contributes effectively to the effort. For example:

Assigning the responsibility of communication within families to the lady of the house recognizes the influential role women often play in household decisions and communication dynamics.

In medical and dental colleges, incorporating tobacco intervention topics into the curriculum ensures that future healthcare professionals are equipped to address tobacco use with their patients.

Involving survivors of tobacco-related illnesses to share their stories can be a powerful way to motivate other tobacco users to quit by illustrating the real-life consequences of tobacco use.

By incorporating these elements, your approach maximizes effectiveness by leveraging both evidence-based strategies and community involvement.

5.3 Discussion of Research Question Two

The PLANS communication strategy you've outlined—Patience, Listen, Appreciate, Notice, and Support—provides a clear and structured approach for engaging stakeholders in tobacco intervention efforts. Let's explore each element:

Patience: Recognizing that behavior change takes time, patience is crucial. It acknowledges that individuals may not quit tobacco use immediately and require ongoing support and encouragement.

Listen: Effective communication starts with listening. Understanding the perspectives, concerns, and challenges of tobacco users allows for tailored support and interventions that address their specific needs.

Appreciate: Showing appreciation for small steps towards quitting tobacco can be incredibly motivating. Celebrating progress, no matter how small, reinforces positive behavior change and encourages continued efforts.

Notice: Being observant and recognizing signs of progress or setbacks is important. This involves paying attention to changes in behavior, attitudes, and circumstances related to tobacco use.

Support: Providing consistent and meaningful support is essential for successful tobacco intervention. This includes offering resources, encouragement, and assistance tailored to individual needs.[*Prochaska, J.O. and DiClemente, C.C. (1983)124*]

By adopting the PLANS communication strategy, stakeholders can effectively engage with tobacco users in a supportive and understanding manner. This structured

approach emphasizes empathy, active listening, and ongoing support, fostering a conducive environment for behavior change and tobacco cessation.

The questionnaire designed based on the PLANS communication strategy has demonstrated encouraging results. The high percentage of respondents affirming self-love coupled with the acknowledgment of tobacco use indicates a readiness for intervention. The positive responses to questions related to patience, willingness to listen and discuss, self-analysis, noticing changes in the body, and willingness to seek support further validate the effectiveness of the communication strategy. The results suggest that the developed communication strategy has the potential to positively impact the well-being of individuals. Further implementation and refinement of this strategy could contribute significantly to tobacco intervention efforts in India and beyond.

Tobacco use can have detrimental effects on nearly every organ and system in the body.

The following are the elaborated effects on every organ system is as follows:

1. Skin: Tobacco use accelerates skin aging and increases the risk of skin cancer, psoriasis, dryness and wrinkles so on.

Immune System: Smoking impairs immunity, increasing a person's vulnerability to infections and delaying the healing process.

2. Vision: Smoking raises the chance of cataracts, age-related macular degeneration (AMD), and other eye conditions that can cause vision loss.

3. Cancer: A number of malignancies, including those of the lung, mouth, throat, oesophagus, bladder, kidney, pancreas, and stomach, are mostly caused by tobacco smoking.

4. Oral Health: The risk of gum disease, tooth decay, tooth loss, and oral malignancies is increased by smoking and using smokeless tobacco. Poor oral health, may lead to halitosis, as well as social stigma can equally create bad stigma for the individual.

5. Respiratory System: Smoking damages the lungs, leading to conditions like chronic bronchitis, emphysema, and lung cancer. Additionally, it can raise the risk of respiratory infections and exacerbate the symptoms of asthma.

6. Cardiovascular System: Smoking is a significant risk factor for peripheral artery disease, heart disease, and stroke. Blood clots, elevated blood pressure, and blood vessel constriction can all result from it.

7. Reproductive Health: Both men and women's fertility may be impacted by tobacco use. Smoking increases the chance of problems during pregnancy, including low birth weight, premature birth, miscarriage, and SIDS. It may result in less sperm in males.

8. Digestive System: Smoking is linked to an increased risk of cancers of the digestive system, including the esophagus, stomach, pancreas, and colon. In day to day life daily bowel habit can also get affected. Stomach ulcers is also one among the effect caused due to smoking and tobacco eating habit.

9. Bone Health: One risk factor for osteoporosis, a disorder marked by weak and brittle bones, is smoking. Could result in finger discolouration.

These are just a few examples of the extensive harm tobacco use can cause to the body. Quitting tobacco use can significantly reduce these risks and improve overall health and well-being. Every research were strictly and directly approach the tobacco intervention but in this research I have focused towards developing the communication strategies to make a right approach to talk about, According to the Global Adult Tobacco Survey India, 2016–17, 29% of all adults in India, or about 267 million persons aged 15 and over, use tobacco. In India, smokeless tobacco is the most widely utilised type of tobacco usage. Products like zarda, gutkha, betel quid with tobacco, and khaini are also often used.[*Global Burden of Disease Study (2020)*121]

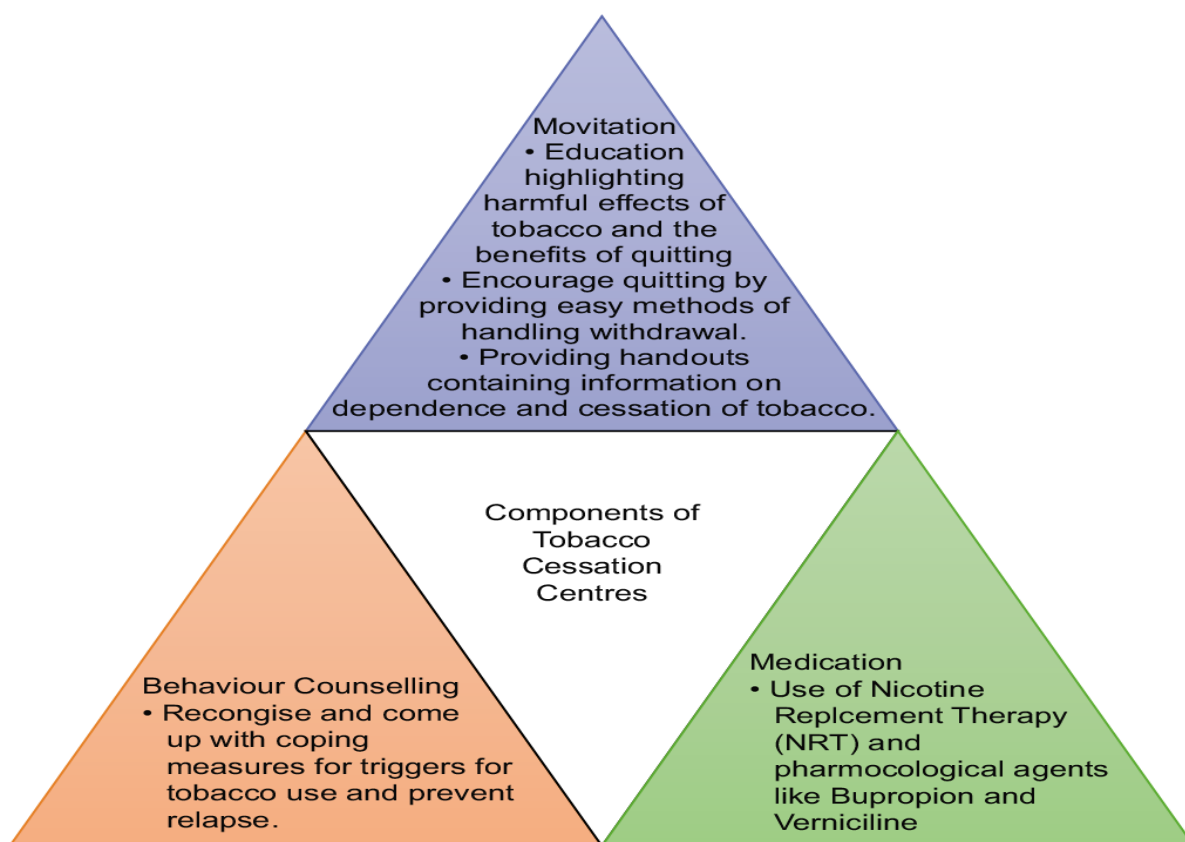


Figure 35 Components of TCC (Source Research Gate)

Here I had shared my favourite picture (figure 36) which I have posted at my clinic in full wall size image, this can be scary, but while counselling for tobacco intervention, it plays an important role. This picture is concise and shows every ill effect which can be caused by tobacco in different parts of body which were coined above also. This may cause visual impact and another way to make think the individual about quitting the habit. In short, to start with tobacco intervention, one should make the effective communication towards it and make the survivor understand the importance of it, in every means. As previously discussed, continuous effort towards the set goal can give better result with every attempt.[Yanbaeva, D.G., Dentener, M.A. and Creutzberg, E.C. (2007)125]

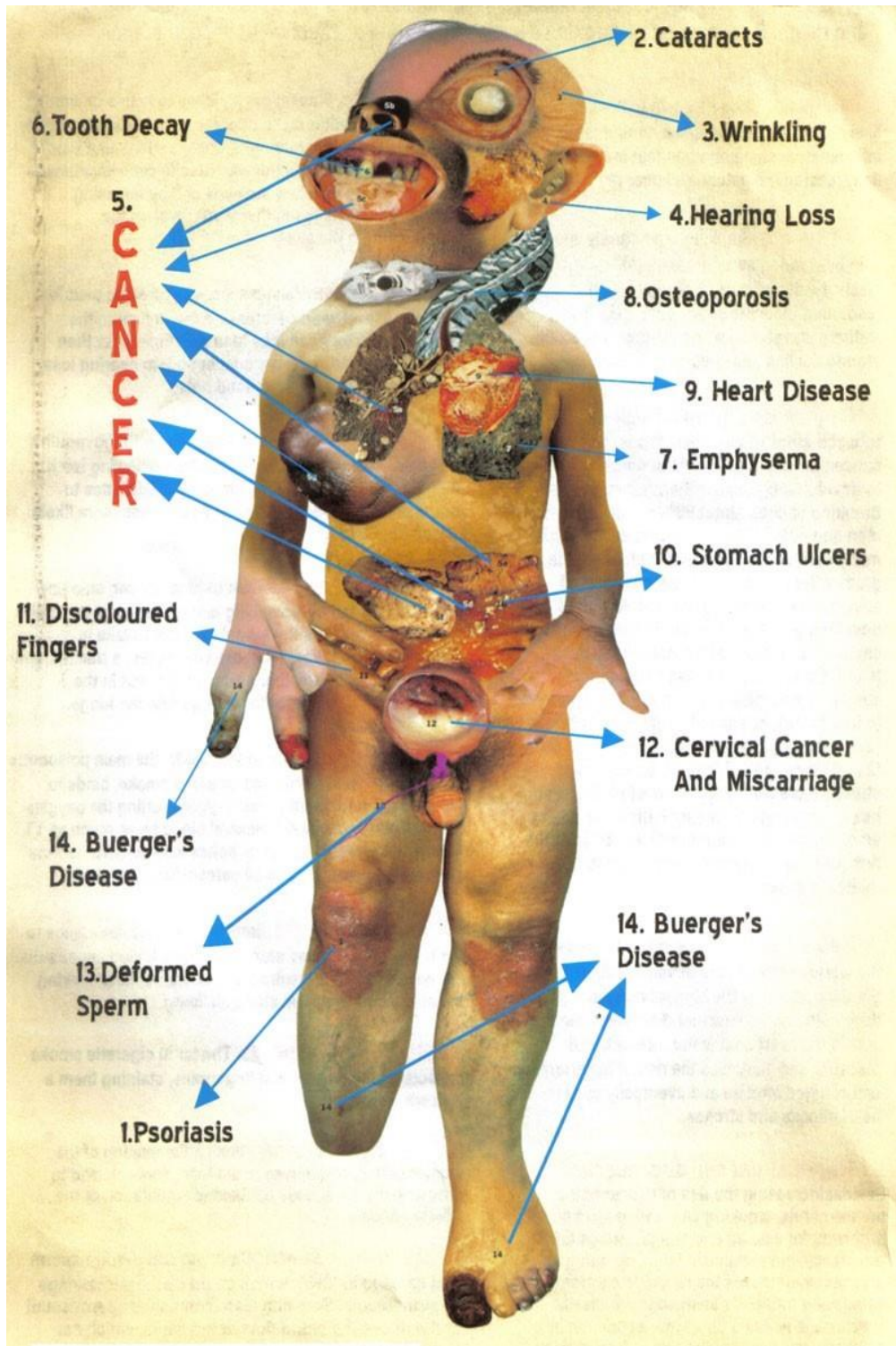


Figure 36 Ill Effects Of Tobacco (Source NACADA)

CHAPTER VI:
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

Reduced prevalence of tobacco use, higher rates of quitting and utilization of accessible cessation treatments, and lower tobacco usage were all linked to mass reach health communication programs. Together all these strategies might be effective to achieve the goal of tobacco intervention. Counselling and communication sessions must be in continuation with regular interval of time, to make the next attempt successful. For intervention communication is the very first and key step, towards tobacco cessation. The one who wants to attempt tobacco intervention and DE-addiction need to communicate about it with the experts and the care givers. Simultaneously, if there is one in the friend circle or in the family who needs help with the tobacco intervention and cessation, communication is required in systemic manner to make the first move towards it. Involvement of lady of the house, making changes in the curriculum of the medical and dental curriculum as well as taking support and motivation from the quitter/ survivors of tobacco intervention by sharing their personal stories and experiences.

PLANS—Patience, Listen, Appreciation, Notice, and Support—to tobacco intervention:

1. Patience: Recognize that quitting tobacco is a process that takes time. Encourage survivors to be patient with themselves as they navigate through the challenges of breaking free from tobacco addiction. Remind them that setbacks are normal and part of the journey toward success.
2. Listen: Practice active listening to understand the survivor experiences, concerns, and motivations related to tobacco use. Create a supportive environment where they feel heard and understood without judgment. Use open-ended questions to encourage them to share their thoughts and feelings. Survivor should feel safe and listened.

3. **Appreciation:** Acknowledge and celebrate every effort made towards reducing or quitting tobacco use. Recognize their progress, no matter how minor, and give them encouragement to increase their self-esteem and drive. Express gratitude for their commitment to improving their health. Every small effort taken by survivor will lead towards achieving the goal of tobacco quit.

4. **Notice:** Be observant and attentive to changes in behavior, attitudes, and circumstances related to tobacco use. Notice signs of progress, such as decreased cravings or increased confidence in quitting, and provide encouragement and support. Similarly, be alert to signs of relapse or difficulty and offer assistance promptly. As well as every effort made by the survivor should be noticed and coined, which can further enhance the motivation of the survivor.

5. **Support:** Offer continuous support throughout the tobacco intervention process. Provide access to resources, such as counseling services, support groups, or nicotine replacement therapies, to help survivor manage cravings and withdrawal symptoms. Offer emotional support, encouragement, and guidance to help them stay motivated and committed to their quit journey. For this the support can be taken from the one whom is emotionally more connected to the survivor .

6.2 Implications

Cancer, heart disease, stroke, lung conditions, diabetes, and chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, are all brought on by smoking. Additionally, smoking raises the chance of developing TB, several eye conditions, and immune system issues including rheumatoid arthritis. by involving lady of the house, for initial guidance to the entire family about the ill effects of the tobacco. Medical and dental curriculum should be introduced by tobacco intervention initiation programme which can further helps the medical and dental practitioners to

enhance the intervention at public level. Survivors of the tobacco can play important role for motivating the public by their own stories and experiences. By incorporating the PLANS framework into tobacco intervention efforts, practitioners can create a supportive and empowering environment that facilitates successful tobacco cessation and promotes overall well-being. Implication of this strategies can be done at different levels:

1. Healthcare professionals-

Effective communication about tobacco intervention is crucial for healthcare professionals for several reasons:

Patient Education: Healthcare professionals are in a unique position to educate patients about the risks of tobacco use and the benefits of quitting. Clear and compassionate communication can help patients understand the severe health consequences associated with tobacco use, as respiratory problems, heart disease, and cancer.

Motivation and Support: Effective communication can motivate patients to quit smoking. By discussing the immediate and long-term benefits of quitting, healthcare providers can encourage patients to make positive changes. Offering support and resources, such as counseling and smoking cessation programs, [Shiffman, S., Paty, J.A. and Rohay, J. (2000)125] , can increase the likelihood of success.

Identifying Barriers: Through open and non-judgmental dialogue, healthcare professionals can identify barriers that patients face when trying to quit smoking. Understanding these challenges allows providers to tailor interventions to meet individual needs, whether they involve stress, addiction, or social influences.

Building Trust: Consistent and empathetic communication builds trust between patients and healthcare providers. Patients are more likely to follow medical advice and engage in smoking cessation efforts if they feel their concerns are heard and understood.

Monitoring Progress: Regular follow-up conversations about smoking habits and cessation efforts enable healthcare providers to monitor progress, adjust treatment plans, and provide ongoing encouragement. This continuous support can be critical in preventing relapse.

Professional Responsibility: Healthcare professionals have an ethical obligation to promote health and prevent disease. Effective communication about tobacco use and cessation is a fundamental aspect of this responsibility, ensuring that patients receive comprehensive care.

Public Health Impact: On a broader scale, reducing tobacco use through effective interventions can significantly impact public health. Lower smoking rates lead to decreased healthcare costs, enhanced general population health and less strain on healthcare services.

By implicating PLANS communication strategy in their daily practice, healthcare professionals may reach above mentioned aspects, for better patient experience and health outcome.

2. Policy Makers-By fostering effective communication, policymakers can better understand the complexities of tobacco use, make informed decisions, and implement strategies that protect and improve public health.

Informed Decision-Making: Policymakers need accurate, evidence-based information to create effective tobacco control policies [Wilson, L.M., Avila Tang, E. and Chander, G. (2012) 125]. Clear communication from healthcare experts, researchers, and advocates ensures that policymakers understand the latest data on tobacco use, its health impacts, and successful intervention strategies.

Public Health Advocacy: Policymakers play a significant role in advocating for public health. Effective communication helps them champion tobacco control measures, such as

smoking bans, tobacco taxation, and advertising restrictions, which can significantly reduce smoking rates and improve community health.[*Pechmann, C. and Reibling, E.T. (2006)124*]

Resource Allocation: Understanding the economic burden of tobacco-related diseases allows policymakers to allocate resources more effectively. Clear communication about the expenses linked to tobacco usage, such as medical bills and missed productivity, can support the case for funding prevention and cessation programs.

Legislative Support: Effective communication can help build legislative support for tobacco control policies. By presenting compelling evidence and narratives, advocates can persuade policymakers to pass laws that protect public health, such as raising the legal smoking age or banning flavored tobacco products.

Public Awareness Campaigns: Policymakers often oversee public health campaigns. Effective communication strategies ensure that these campaigns convey the risks of tobacco use and the benefits of quitting in a way that resonates with diverse populations, leading to higher public engagement and behavior change.

Collaboration and Partnership: Clear communication fosters collaboration between policymakers and a range of stakeholders, including as community organisations, non-governmental organisations, and healthcare providers. This collaboration is essential for PLANS, the communication strategy and ensuring their successful implementation.

Monitoring and Evaluation: Policymakers need to understand the impact of tobacco control policies to make necessary adjustments. This strategy of communication give more emphasize monitoring and evaluation results helps them assess the success of current policies and identify areas for improvement.

Addressing Opposition: Policymakers often face opposition from the tobacco industry and other interest groups. Effective communication equips them with the knowledge and

arguments needed to counteract misinformation and lobby for public health-focused policies. Through this communication strategy direct data of tobacco users can be extracted which can further give more precision.

For both the lady of the house and college students, effective communication about tobacco intervention is a powerful tool. It promotes healthier behaviors, supports those trying to quit, and creates a culture of awareness and prevention. By understanding and utilizing effective communication strategies, these groups can play significant roles in reducing tobacco use and improving public health.[McGuire, W.J. (1989)124]

3. Lady of the House-

Family Health Advocacy: The lady of the house often plays a central role in managing the health and well-being of the family. Effective communication about the dangers of tobacco use can empower her to advocate for a smoke-free home environment, reducing exposure to secondhand smoke for children and other family members.

Role Modeling: As a role model, her stance against tobacco use can influence family members, especially children and adolescents. Clear communication about the harmful effects of tobacco and the benefits of quitting can set a positive example and encourage family members to avoid or quit smoking.

Support and Guidance: She can provide emotional support and practical guidance to family members who are trying to quit smoking. Understanding and communicating about the various cessation methods, such as nicotine replacement therapy or counseling, can help family members find the best approach for them.

Community Leadership: Effective communication skills can also enable her to be an advocate for tobacco control within the community. By sharing information and resources with neighbors and participating in community health initiatives, she can help promote a tobacco-free culture.

4.Implementation of PLANS strategy in College Curriculum-

Health Education: Including tobacco intervention in the college curriculum ensures that students are educated on the dangers smoking poses to one's health.

Effective communication strategies can help convey this information in an engaging and impact way, making students more likely to retain and act on the knowledge.

Peer Influence: College students are often influenced by their peers. Educating students about effective communication techniques can enable them to have meaningful conversations with their friends about the dangers of tobacco use and the benefits of quitting.

Professional Training: For students in healthcare, education, or social work programs, understanding how to communicate effectively about tobacco intervention is crucial for their future careers. Training in these skills prepares them to support individuals and communities in quitting smoking.

Research and Advocacy: Including tobacco intervention topics in the curriculum encourages students to engage in research and advocacy. Effective communication skills are essential for presenting research findings, advocating for policy changes, and participating in public health campaigns.

Personal Development: College is a time for personal growth and development. Learning about the impact of tobacco use and how to communicate effectively about it can help students make healthier choices for themselves and influence their peers to do the same.

Interdisciplinary Approach: Integrating tobacco intervention communication across various disciplines, such as public health, psychology, communications, and social sciences, can provide a comprehensive understanding and foster collaboration among students from different fields.

Campus Initiatives: Colleges often run anti-smoking campaigns and provide resources for smoking cessation. Educating students about effective communication techniques can enhance the impact of these initiatives, encouraging more students to participate and support each other in quitting smoking. [Frieden, T.R. (2014)121]

In all total, this strategy can give impact positive effect in well-being of society and health initiative for the public for betterment and good experience of quality life.

6.3 Recommendations for Future Research

Here are some recommendations for future research in tobacco intervention:

1. Effectiveness of Novel Intervention Strategies: Investigate the effectiveness of innovative intervention approaches, such as mindfulness-based therapies, mobile health applications, virtual reality interventions, and gamification techniques, in promoting tobacco cessation and preventing relapse.
2. Tailored Interventions for Specific Populations: Conduct research on tailored intervention strategies for specific population groups, such as teens, pregnant mothers, those with mental illnesses, and LGBTQ+ populations, and socioeconomically disadvantaged populations. Explore the unique needs, barriers, and facilitators to quitting within these populations and develop targeted interventions accordingly.
3. Integration of Tobacco Intervention into Healthcare Settings: Explore opportunities to integrate tobacco intervention services into routine healthcare settings, such as primary care clinics, hospitals, and community health centers. Evaluate the feasibility, acceptability, and effectiveness of integrating brief cessation counseling, pharmacotherapy, and referral to quitline services into standard clinical practice.
4. Digital Health Interventions: Examine the effectiveness of digital health treatments in providing assistance for quitting smoking, such as telehealth services, online support

groups, text messaging programs, and mobile applications. Assess the effectiveness of digital interventions in fostering behaviour change and maintaining tobacco abstinence in terms of reach, engagement, and long-term results.

5. Community-based Approaches: Explore the role of community-based interventions, such as workplace wellness programs, faith-based initiatives, and community health promotion campaigns, in reducing tobacco use prevalence and promoting smoke-free environments. Assess the effectiveness of community partnerships, peer support networks, and social marketing strategies in mobilizing community action against tobacco.

6. Policy Evaluation and Advocacy Research: Conduct research to evaluate the impact of tobacco control policies, such as tobacco taxation, smoke-free laws, advertising restrictions, and product regulation, on smoking behavior, tobacco-related health outcomes, and disparities in tobacco use. Advocate for evidence-based policy interventions and assess their implementation and enforcement at the local, national, and global levels.

7. Health Equity and Disparities Research: Prioritize research on tobacco intervention strategies that address health disparities and promote health equity. Investigate the social determinants of tobacco use, including poverty, education, race, ethnicity, and geographic location, and develop interventions that address structural barriers and inequities in access to cessation services.

8. Longitudinal Studies and Follow-up Research: To evaluate the long-term efficacy of tobacco intervention policies and initiatives, conduct longitudinal studies. Follow individuals over time to track changes in smoking behavior, relapse rates, and tobacco-related health outcomes, and identify factors associated with successful cessation and sustained abstinence.

9. By addressing these research priorities, we can advance our understanding of effective tobacco intervention strategies, reduce the burden of tobacco-related disease, and promote health equity for all individuals.

6.4 Conclusion



Figure 37 NO TOBACCO (Source Kauvery Hospital)



Communication plays an important role in each and every problem, rather is a first step to solve it. The right way to approach a problem is firstly to discuss it in systemic manner; all the stake holders should take equal participation.

In this research it is structured and specialized communication skills and it should coined as:

P: PATIENCE

L: LISTEN

A: APPRECIATE

N: NOTICE

S: SUPPORT

PATIENCE : Lot of patience is needed to communicate with the tobacco user, due to their habitual activity they will not be readily agree to quit it. One or two episodes

will not be sufficient to make successful quit. One should be easily available to help them at every step for quit.

LISTEN: In all previous researches, there were ASK and ADVICE approach towards the tobacco user, this research will focus on listening the user. How they have started the habit? What circumstances push them towards this habit? Why they are continuing the habit?

APPRECIATE: Every move towards the tobacco cessation by the tobacco user must be appreciated. As per human psychology, the one who get appreciated and get complimented for their work grab the goal unanimously. Previous studies focus on **ASSESS**, which includes the assessment of the user about the willingness to quit the habit,he/she is ready to make quit attempt or not? This research focus ahead, if the user make a step forward towards the intervention than appreciation for the action is must.

NOTICE: Notice stands for the little differences made towards the next attempt for quit, this is an addition in **ASSIST** which stands for aids to quit tobacco. It will help the user as well as moderator to take the next step firmly and effortlessly. Every small step is counted for successful next quit attempt.

SUPPORT: Any addiction is bad for physical, mental and economical health of the being. Firm support is expected from family, friends, community and professionals by every tobacco user who is in progress for quit attempt. Continuous motivation is strongly recommended for the users.

A well-designed communication strategy is essential for the success of tobacco intervention programs aimed at reducing smoking prevalence and preventing tobacco use, especially among vulnerable populations such as youth. Effective communication can raise awareness, shift social norms, and encourage behavior change, ultimately leading to improved public health outcomes

In this research it is been tested and proved that above mentioned term and based on it simple seven questionnaire is perfect communication strategy who answers both the research questions in focused and simpler manner, it is easy to implicate, yes has certain limitations which can be further studied , those limitations can lower down the effect of the strategy. This study is survey based, participants do not hesitate to participate in it, questions were easy to understand, limitation is that it can not stop the individual to answer the question incorrectly and non-smoker can also took the quiz. Result of this research shows good response and positive approach towards the goal of performing it. In the context of tobacco intervention, the skills of **patience, listening, assessment, notice, and support** are all interrelated and essential for fostering a successful communication strategy. **Patience** ensures that individuals have the time and space to process their readiness for change, while **listening** creates an empathetic and personalized approach. Through **assessment**, intervention strategies can be tailored to meet the specific needs and readiness levels of individuals, and **noticing** cues helps refine the approach based on real-time responses and challenges. Finally, **support** provides the ongoing encouragement and resources that individuals need to maintain their commitment to quitting smoking. Together, these elements enable tobacco intervention strategies to be more effective, compassionate, and ultimately successful in helping individuals achieve long-term smoking cessation.

Hence it can be used by the practitioner on day to day basis, to reach the actual purpose . as we all know tobacco prevails in India from generation to generation. It is the main contributor in NCDs like cancer, CHD and so on. By implementing this strategy in daily practice, can reduce the burden of NCD. Hence, it is proposed to use in the benefit of the humanity. *[(Alwan A,2011)121]*

APPENDIX A
SURVEY COVER LETTER

The purpose of this survey is to rule out the effectiveness of communication strategy PLANS. For this survey the sample size is 377. The right way to approach a problem is firstly to discuss it in systemic manner, this survey is based on simple seven questionnaire and which is designed in such manner not to disclose the identity of the participant, to authenticate the result mobile number has been asked which is unique for everyone. Tobacco intervention is a noble cause and successful survey results will further guide to make communication strategy for tobacco intervention which further contribute for mankind.

APPENDIX B
INFORMED CONSENT

You are being invited to participate in SIMPLE SEVEN QUESTIONNAIRE, based on communication strategy for TOBACCO INTERVENTION, this study is being done by Dr. Shruti Bhargava from SSBM, GENEVA.

The purpose of this study is to rule out the effectiveness of communication strategy coined as PLANS.

APPENDIX C
INTERVIEW GUIDE

Build Rapport: Establish a comfortable and trusting environment to encourage openness.

Active Listening: Pay close attention to the interviewee's responses and show empathy.

Non-Judgmental Approach: Avoid making the interviewee feel judged or guilty about their smoking habits.

Follow-Up: Offer information about resources and support for quitting smoking.

REFERENCES

1. Alwan, A. (2011) Global status report on noncommunicable diseases 2010. Geneva: World Health Organization (WHO).
2. Bandura, A. (1986) Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
3. Bhalerao, A., Sivandandam, S. and Eapen, K. (2020) 'Effectiveness of anti-tobacco campaigns in reducing consumption: A meta-analysis', *Tobacco Control*, 29(3), pp. 200-207.
4. Centers for Disease Control and Prevention (CDC) (2022) 'Best practices for comprehensive tobacco control programs—2022.' Atlanta: CDC.
5. Chapman, S. (2007) 'Public health advocacy and tobacco control: Making smoking history.' *Tobacco Control*, 16(4), pp. 300-307.
6. Dube, S.R., Arrazola, R.A. and Lee, J. (2013) 'Youth tobacco use: A review of prevention strategies,' *Journal of School Health*, 83(2), pp. 105-113.
7. Fong, G.T., Cummings, K.M. and Borland, R. (2006) 'The conceptual framework of the International Tobacco Control (ITC) Policy Evaluation Project', *Tobacco Control*, 15(3), pp. iii3–iii11.
8. Frieden, T.R. (2014) 'A framework for public health action: The health impact pyramid', *American Journal of Public Health*, 100(4), pp. 590-595.
9. Global Burden of Disease Study (2020) 'Global smoking prevalence and attributable disease burden from 1990 to 2020', *The Lancet*, 390(2), pp. 283-299.
10. Hammond, D. (2011) 'Health warning messages on tobacco products: A review', *Tobacco Control*, 20(5), pp. 327-337.
11. [Health Promot Perspect.](#) 2017; 7(2): 102–105.
12. <http://opening.download/view.php?pic=https://www.lakeforestanatomicals.com/images/detailed/2/39c8974dbb931926bef578b4ba3d72d8.jpg> (01/03/2024)
13. <http://www.raosoft.com/samplesize.html> (01/05/2024)
14. <https://americanindiancancer.org/aicaf-project/tobacco-messaging/> (22/09/2024)

15. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-11773-x> (08/12/2023)
16. https://en.wikipedia.org/wiki/Theory_of_reasoned_action (06/02/2024)
17. <https://iris.who.int/handle/10665/44579> (12/12/2024)
18. <https://jglobaloralhealth.org/tobacco-control-in-india-enforcement-strategies-and-challenges/> (19/05/2024)
19. <https://nacada.go.ke/fight-against-drugs-scare-tactics-do-not-work> (01/03/2024)
20. <https://nicpr.org/tobacco-cessation/> (03/12/2023)
21. <https://pubmed.ncbi.nlm.nih.gov/7749051/> (12/12/2024)
22. <https://substanceabusepolicy.biomedcentral.com/articles/10.1186/s13011-019-0197-2> (08/10/2023)
23. <https://tgmresearch.com/create-survey-sampling-plan-guide.html> (10/12/2024)
24. <https://tobaccocontrolgrants.org/About-the-BI-Grants-Program> (03/12/2023)
25. <https://www.facebook.com/WHO/photos/a.167668209945237/4336655919713091/?type=3> (30/11/2023)
26. <https://www.flowmapp.com/blog/qa/research-design-purpose> (27/11/23)
27. https://www.jmu.edu/humanresources/balanced-dukes/smoking_cessation.shtml (05/05/2024)
28. <https://www.mdpi.com/1660-4601/17/8/2868> (22/09/2024)
29. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5350547/> (10/12/2023)
30. https://www.nihb.org/public_health/tobacco_cessation.php (22/09/2024)
31. <https://www.plerdy.com/sample-size-calculator/> (10/12/2024)
32. <https://www.questionpro.com/blog/descriptive-research/> (24/03/2024)
33. <https://www.questionpro.com/blog/qualitative-research-methods/> (28/11/23)

34. https://www.researchgate.net/publication/272469429_Sample_size_and_power_calculations_made_simple#:~:text=The%20Raosoft%20online%20calculator%20was,the%20population's%20size%20%5B8%5D%20. (10/12/2024)
35. https://www.researchgate.net/publication/277307470_A_Methodology_for_Adapting_Sustainability_Tools/figures?lo=1 (10/12/2024)
36. <https://www.researchprojecttopics.com/2023/08/28/what-is-raosoft-sample-size-calculator/> (10/12/2024)
37. <https://www.ruralhealthinfo.org/toolkits/health-promotion/2/strategies/health-communication> (02/10/2023)
38. <https://www.scirp.org/reference/referencespapers?referenceid=1536371> (12/12/2024)
39. <https://www.scribbr.com/methodology/population-vs-sample/> (14/04/2024)
40. <https://www.urotoday.com/conference-highlights/bcantt-2024/154015-bcantt-2024-implementation-of-smoking-cessation-for-patients-with-bladder-cancer.html> (22/09/2024)
41. <https://www.who.int/initiatives/mpower> (03/12/2023)
42. https://www.wikilectures.eu/w/File:Some_Kills.jpg (22/09/2024)
43. Jamison, D.T., Breman, J.G., Measham, A.R. et al. (2006) Disease control priorities in developing countries. 2nd edn. Washington, DC: World Bank and Oxford University Press.
44. Jha, P. and Chaloupka, F.J. (2000) Curbing the epidemic: Governments and the economics of tobacco control. Washington, DC: The World Bank.
45. Kahneman, D. and Tversky, A. (1979) 'Prospect theory: An analysis of decision under risk', *Econometrica*, 47(2), pp. 263-291.
46. Kotler, P. and Lee, N. (2011) Social marketing: Influencing behaviors for good. 4th edn. Thousand Oaks: Sage Publications.
47. Malik, M., Sharma, A. and Kaur, H. (2021) 'Effectiveness of mobile health apps for smoking cessation: A review', *Journal of Healthcare Research*, 45(1), pp. 22-28.

48. McGuire, W.J. (1989) 'Theoretical foundations of campaigns', in Rice, R.E. and Atkin, C.K. (eds.) *Public communication campaigns*. Beverly Hills: Sage, pp. 43-65.
49. Michie, S., Atkins, L. and West, R. (2014) *The behaviour change wheel: A guide to designing interventions*. London: Silverback Publishing.
50. MPOWER (2008) *A policy package to reverse the tobacco epidemic*. Geneva: WHO.
51. National Cancer Institute (NCI) (2008) 'The role of the media in promoting and reducing tobacco use', *Tobacco Control Monograph*, 19, pp. 1-350.
52. Noar, S.M., Benac, C.N. and Harris, M.S. (2007) 'Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions', *Psychological Bulletin*, 133(4), pp. 673-693.
53. Pechmann, C. and Reibling, E.T. (2006) 'Antismoking advertising campaigns and effects on adolescent smoking rates', *American Journal of Public Health*, 96(2), pp. 200-206.
54. Prochaska, J.O. and DiClemente, C.C. (1983) 'Stages and processes of self-change of smoking: Toward an integrative model of change', *Journal of Consulting and Clinical Psychology*, 51(3), pp. 390-395.
55. Published online 2017 Mar 5. doi: [10.15171/hpp.2017.18](https://doi.org/10.15171/hpp.2017.18) . (2017)
56. Rao, V., Yang, G. and Hu, T. (2022) 'Economic impact of tobacco control interventions in developing countries,' *The Lancet Global Health*, 7(1), pp. e30–e40.
57. Sallis, J.F., Owen, N. and Fisher, E.B. (2015) 'Ecological models of health behavior', in Glanz, K., Rimer, B.K. and Viswanath, K. (eds.) *Health behavior: Theory, research, and practice*. 5th edn. San Francisco: Jossey-Bass, pp. 43-64.
58. Satcher, D. (2001) 'The Surgeon General's call to action to prevent and reduce tobacco use.' Washington, DC: U.S. Department of Health and Human Services.
59. Schwartz, J.L. (1992) 'Methods of smoking cessation counseling', *Journal of the National Cancer Institute*, 83(2), pp. 223-229.

60. Shiffman, S., Paty, J.A. and Rohay, J. (2000) 'Efficacy of tailored smoking cessation messages delivered by real-time ecological momentary assessment', *Addiction*, 95(7), pp. 957-968.
61. Stead, L.F., Carroll, A.J. and Lancaster, T. (2017) 'Group behaviour therapy programmes for smoking cessation', *Cochrane Database of Systematic Reviews*, 6, CD001007.
62. Thun, M.J., Carter, B.D. and Feskanich, D. (2013) '50-year trends in smoking-related mortality in the United States', *New England Journal of Medicine*, 368(4), pp. 351-364.
63. U.S. Department of Health and Human Services (USDHHS) (2020) *Smoking cessation: A report of the Surgeon General*. Atlanta: USDHHS.
64. Wakefield, M.A., Loken, B. and Hornik, R.C. (2010) 'Use of mass media campaigns to change health behavior', *The Lancet*, 376(9748), pp. 1261–1271.
65. Wang, H., Naghavi, M. and Allen, C. (2017) 'Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015', *The Lancet*, 390(10000), pp. 1084–1150.
66. West, R. and Brown, J. (2013) *Theory of addiction*. 2nd edn. London: Wiley-Blackwell.
67. WHO (2004) *Building blocks for tobacco control: A handbook*. Geneva: WHO.
68. WHO (2019) *Tobacco factsheet*. Available at: [<https://www.who.int/news-room/fact-sheets/detail/tobacco>] (Accessed: 10 December 2024).
69. Wilkinson, T.M.A. and Strazdins, L. (2018) 'The role of tobacco-free policies in promoting health,' *Journal of Public Health Policy*, 39(3), pp. 375–389.
70. Wilson, L.M., Avila Tang, E. and Chander, G. (2012) 'Impact of smoking cessation interventions', *Tobacco Control*, 21(1), pp. 123-129.
71. Wong, L.P. and Mohamad Shakir, S. (2019) 'The influence of social media on anti-smoking campaigns among Malaysian youth', *BMC Public Health*, 19(1), p. 112.
72. Yanbaeva, D.G., Dentener, M.A. and Creutzberg, E.C. (2007) 'Systemic effects of smoking', *Nature Reviews Immunology*, 7(5), pp. 405-416.

73. Yong, H.H. and Borland, R. (2008) 'Smokers' reactions to the new Australian graphic warnings on tobacco packages', *Tobacco Control*, 17(4), pp. 355-362.
74. Zhu, S.H., Lee, M. and Zhuang, Y.L. (2012) 'Interventions to increase smoking cessation at the population level: How much progress have we made?', *Annual Review of Public Health*, 33, pp. 287-306.

APPENDIX A:

FIRST APPENDIX TITLE

Link for the 377 sample with the pie diagram presentation :

https://mail.google.com/mail/u/0?ui=2&ik=0a6f8204ff&attid=0.1&permmsgid=msg-a:r-8606046845415871422&th=18f588c3b63b9145&view=att&disp=safe&realattid=f_lv_xwdvu00

Link for Google form for simple seven questionnaire :

https://docs.google.com/forms/d/e/1FAIpQLSdUjKKCAsi6UwhGn_9W_jvX7lrkGdlZMR4cet9KPMKErjMbA/viewform?usp=sf_link