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REVIEW

Lifestyle Counseling in Primary Care: Effectiveness, Strategies, and Clinical Implications

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Abstract: Lifestyle counseling in primary care is a critical intervention for addressing chronic disease risk factors and promoting health behavior change. This review evaluated the effectiveness of lifestyle counseling and propose strategies to simplify its implementation in family medicine practices. A structured narrative synthesis approach was used, integrating evidence from diverse study designs and settings. A comprehensive search was conducted across PubMed, Cochrane Library, Scopus, and Psychological Information databases for studies published in English language were included. Thematic analyzed was performed under three domains: *Why? What?* and *How?* Findings showed that lifestyle counseling significantly improves patient outcomes, including reduced stress, enhanced treatment adherence, and better chronic disease management. Counseling also addresses psychosocial factors, promotes self-efficacy, and decreases health-risk behaviors. Practical solutions include brief interventions, shared decision-making, and leveraging self-monitoring tools. Systemic barriers, such as time constraints and inadequate physician training, limit widespread adoption. To overcome these challenges, healthcare providers can apply evidence-based frameworks, prioritize patient-centered care, and utilize standardized training. This review highlights the importance of integrating lifestyle counseling into routine primary care to address non-communicable diseases and improve patient outcomes. Future research should explore long-term outcomes, cultural adaptations, and cost-effectiveness to refine implementation strategies. By addressing these gaps, healthcare providers can enhance patient adherence and improve health outcomes, ultimately contributing to better population health. By making counseling a routine part of primary care, could results in reduced chronic disease burden and improve population health.

Keywords: counselling, lifestyle, chronic diseases, primary health care, efficacy, behaviour

Introduction

Chronic diseases accounted for 75% of non-pandemic-related deaths globally in 2021.[1] Much of this burden is driven by preventable risk factors such as tobacco use, physical inactivity, and unhealthy diets.[1] Termed a "silent epidemic", this crisis affects all age groups and is worsened by increasing comorbidities: 60% of individuals now report two or more chronic conditions, compared with 46% in 1988.[2] Contributing factors—including tobacco use, physical inactivity, excessive alcohol consumption, unhealthy diets, and air pollution—all of which raise mortality risk, underscore the urgency of scalable interventions.[1] The burden of noncommunicable diseases (NCDs) varies among countries, with a high prevalence in low- and middle-income countries (LMICs), where over 82% of premature NCD deaths occur.[3] In addition, NCDs, alongside infectious diseases, double the burden on the healthcare system in LMICs.[4] In high-income countries (HICs), literature suggests a high prevalence of NCD risk factors like high body mass index (BMI), overweight, and obesity.[4] However, due to their high socioeconomic status, HICs are often associated with a lower risk of NCDs. This is because in HICs, systems for preventive care are relatively well-established.[5] LMICs, on the other hand, face unique challenges such as limited infrastructure, competing priorities of infectious diseases, and a scarce health workforce capacity.[6] This contrast highlights the importance of tailoring lifestyle counseling strategies to resource availability and cultural context.

Primary care, as the frontline of health systems, is uniquely positioned to address these modifiable risks through cost-effective strategies such as early detection, screening, and lifestyle counseling. This review specifically focuses on

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lifestyle counseling within family medicine and primary care, where long-term patient–provider relationships provide unique opportunities for sustained behavior change. Chronic diseases result from complex interactions among genetic, behavioral, and environmental determinants, requiring holistic approaches that integrate clinical care with public health efforts.[1,3] Family physicians, through their ongoing relationships with patients, play a key role in encouraging behavior change, which is crucial in both HICs and LMICs.[7] Although many patients understand the importance of lifestyle changes—such as smoking cessation or improved nutrition—most lack practical knowledge about how to implement these changes effectively.[8] For example, structured counseling methods use as motivational interviewing combined with trans-theoretical model techniques can increase smoking cessation rates by 40–80%, demonstrating its effectiveness when systematically applied.[9] Despite its potential, counseling remains underutilized in primary care. Fewer than 16% of patients receive actionable guidance on physical activity, even in countries where physicians routinely assess health behaviors.[10] In the United States, only 10% of primary care patients receive general advice to reduce sedentary behavior, and only 2% received detailed counseling.[11] Systemic barriers include time constraints, inadequate training, and fragmented institutional support.[7,12] In low-resource settings, these challenges are compounded by shortages of trained providers and competing priorities, such as infectious disease management.[13] Paradoxically, patient satisfaction with counseling services remains high where they are offered,[14] suggesting unmet demand for personalized, and culturally relevant interventions. In addition, the effectiveness of counseling is also shaped by psychosocial and cultural determinants, including health literacy, social support, and cultural norms around diet, physical activity, and tobacco use.[15–17] Evidence suggests that culturally tailored counseling interventions not only improve patient engagement but also lead to better adherence and clinical outcomes.[17] Addressing these factors is essential to ensure lifestyle counseling translates into sustainable behavior change across diverse populations.

The growing global burden of noncommunicable diseases (NCDs) necessitates a paradigm shift in primary care—one that positions lifestyle counseling as a core medical intervention rather than a supplementary service. In family medicine, counseling transcends general advice, it is a structured, evidence-based practice rooted in behavioral science, preventive medicine, and patient-centered communication. Its primary objective is to address lifestyle-related risk factors—such as poor diet, physical inactivity, and smoking—by equipping patients with personalized, actionable strategies to modify behaviors and mitigate disease progression. Although the benefits of counseling are well established, most existing reviews focus narrowly on clinical outcomes or single behaviors. Few address the practical challenges faced by family physicians—such as time limitations, limited training, and cultural adaptability—or provide step-by-step strategies for implementation. To address this gap, this review synthesizes evidence on both the effectiveness of lifestyle counseling in reducing morbidity and the feasible, practice-based solutions that can support its integration into routine primary care. This review aims to evaluate the effectiveness of lifestyle counseling in primary care and propose practical strategies to make its implementation easier.

Methods

In this review, the researcher used a structured narrative synthesis approach to evaluate the effectiveness of lifestyle counseling in primary care and to identify strategies that simplify its implementation within family medicine practices. The methodology aimed to synthesize evidence from diverse study designs and contexts, providing a comprehensive understanding of both clinical outcomes and practical challenges associated with lifestyle counseling. Given the wide variation in study designs, populations, and intervention strategies, a narrative synthesis approach was chosen. This method allows integration of diverse evidence, including clinical trials, observational studies, and practice-based reports, to generate practical insights for family medicine. This review has been designed as a narrative review rather than a systematic or meta-analysis due to limitations in research team size, funding, and time constraint. Therefore, the researcher decided to conduct the literature review based primarily on keyword searches, without restricting the search to a specific period. All relevant study designs within the same scope and published in English were included.

To broaden the scope of the review, gray literature was included, and the reference lists of key articles were hand-searched to identify additional relevant studies. A systematic search was conducted across four major databases: PubMed, Cochrane Library, Scopus, and Psychological Information Database (PsycINFO). The search focused on peer-

reviewed articles published during periods marked by a significant increase in chronic disease comorbidities. A range of keywords was used, grouped into the following categories:

- Primary Terms: “lifestyle counselling”, “health behavior change”, “chronic disease management”, “primary care intervention”.
- Intervention-Specific Terms: “motivational interviewing”, “transtheoretical model”, “BATHE”, “5 A’s”, “behavioral therapy”.
- Outcome and Barrier Terms: “patient adherence”, “morbidity reduction”, “implementation challenges”, “physician training”, “health outcomes”.

Boolean operators (AND/OR) were used to refine and optimize the search results. The extracted data were thematically analyzed across three key domains aligned with the research objectives:

1. The rationale for counseling in medical practice:
   This domain explored the fundamental reasons for integrating counseling into medical practice, focusing on enhancing treatment adherence, promoting self-efficacy, addressing the psychosocial dimensions of health, reducing health-risk behaviors, and improving health outcomes.
2. Definitions and concepts of counselling in medical practice:
   This domain clarified the evolving understanding of counseling within healthcare, including definitions of counseling—from ambiguity to consensus—operational definitions in healthcare, and the core concepts of counseling in healthcare.
3. Practical considerations for conducting counselling in primary care settings:
   This domain provided actionable insights for effective implementation in primary care, covering: key steps and techniques for counseling, tools and resources tailored for primary care providers, and practical tips for managing common constraints in counseling delivery.

By systematically analyzing these domains, the review aimed to present a robust framework for understanding and implementing lifestyle counseling in primary care, addressing both theoretical foundations and real-world challenges.

Why is Counseling Important in Primary Health Care Practice?

Living with a chronic illness can lead to significant psychosocial challenges that reduce quality of life. Counseling is essential for individuals navigating the complexities of long-term health conditions, as it ultimately improves overall quality of life.[18] By integrating counseling into chronic disease management, healthcare providers can empower patients to adopt healthier behaviors, follow treatment plans, and enhance their quality of life.

Enhance Treatment Adherence

A key contribution of counseling is its ability to enhance medication adherence, a critical factor in the successful management of chronic diseases. Studies consistently identify patient counseling as a major factor in better drug adherence, particularly for chronic illnesses.[19] Through personalized education and motivational strategies, counselors help patients understand the importance of their medications and overcome barriers to adherence, such as forgetfulness or misconceptions about treatment.

Promoting Self-Efficacy

Counseling also fosters behavioral change that supports long-term disease management. A client-centered, goal-oriented approach ensures that interventions address each patient’s unique needs, promoting self-efficacy and empowering individuals to take an active role in their care.[20] For example, in asthma management, patient-centered counseling improves adherence to self-care and health promotion, with most patients reporting positive experiences and valuing the personalized nature of these sessions.[21]

Addressing the Psychosocial Dimensions

Living with a chronic health condition often imposes a significant emotional burden.[22] Counseling empowers individuals to be able to alleviate stress and improve their emotional well-being.[23] Beyond clinical outcomes, counseling addresses the psychosocial impact of chronic illness. It helps patients manage the emotional burden of living with long-term conditions, reducing feelings of isolation and enhancing coping mechanisms.[24] This holistic approach aligns with the growing recognition of the need to integrate mental health counseling into chronic disease care, as recent studies have emphasized the benefits of such integration.[25] Talking-based treatments, including counseling and advice, are essential for identifying and managing mental disorders in primary care, particularly in regions where specialist mental health services are limited.[26]

Reducing Health Risk Behaviors

Health-risk behaviors—such as smoking, excessive alcohol consumption, and poor dietary habits—contribute significantly to global morbidity and mortality. Counseling plays a key role in educating patients about these risks and motivating them to adopt healthier lifestyles. Studies indicate that counseling on health-risk behaviors occurs in approximately 18% of all primary care visits, highlighting its relevance and reach.[27] Techniques such as motivational interviewing and cognitive-behavioral strategies effectively help patients overcome ambivalence and commit to positive behavioral changes. By empowering patients with actionable strategies and personalized support, counseling enhances self-efficacy and fosters sustainable behavioral change.

Improving Health Outcomes

Chronic diseases—such as type 2 diabetes and cardiovascular conditions—require long-term behavioral changes, including dietary modifications, increased physical activity, and medication adherence. Counseling supports patients in making and maintaining these lifestyle changes. Evidence suggests that repeated counseling on weight loss and physical activity can prevent or delay the onset of type 2 diabetes in high-risk individuals.[28] Similarly, physical activity counseling in primary health care has been associated with significant improvements in the treatment outcomes of type 2 diabetes, highlighting its role in disease management.[29]

One study found that patients who received counseling experienced modest but statistically significant symptom reductions compared with those receiving standard care.[30] Furthermore, integrating counseling into primary care not only improves mood and resilience but also reduces medical costs by addressing mental health concerns early and effectively.[31,32] These findings underscore counseling's critical role in promoting holistic, patient-centered care.

What Does Counselling Mean in Primary Health Care Practice

Counseling Definitions: From Ambiguity to Consensus

In healthcare, counseling is often perceived as informal conversational support. However, professional counseling transcends this simplicity; it is defined by intentionality, structure, and goal-directed interaction. Nupponen[33] describes counseling as a systematic framework that facilitates personal growth and problem-solving through tailored, effective interventions. This structured approach underscores its role as more than generic advice, emphasizing collaboration between practitioner and patient.

Despite its importance, the term "counseling" is plagued by definitional ambiguity, particularly in psychological interventions. Barkham et al[34] highlight the variability in counseling applications, stressing the need to differentiate general support from specialized therapeutic practices requiring distinct competencies. This ambiguity perpetuates misconceptions, such as Suman's[35] observation that counseling is often reduced to merely "talking things out", neglecting its complexity and the expertise required. Such oversimplification risks unrealistic patient expectations, necessitating clearer guidelines for evidence-based practice.

A consensus among 29 counseling organizations defines counseling as: "A professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals".[36] This definition is often associated with mental health; however, counseling can also extend to other contexts, including health

behavior change and lifestyle modifications in medical settings.[34] This definition anchors counseling in empowerment through structured, knowledge-driven processes.

Simplification vs Complexity in Medical Counseling

In medical practice, simplifying counseling definitions enhances accessibility. For example, maternal health counseling is framed as an interactive process between providers and families to promote informed decision-making.[37] However, simplification risks undervaluing the nuanced skills are required, such as active listening and cultural sensitivity. While patient empowerment is critical, the ongoing training for healthcare workers is essential to maintain quality.

Counseling serves as a mutual educational dialogue and negotiation process.[38] Its primary aim is to address short-term, situational issues, such as unhealthy behaviors and stress, through practical strategies (active listening, psychoeducation, and brief cognitive-behavioral techniques). Ultimately, the goal is to empower patients to adeptly navigate their immediate challenges. In contrast, psychotherapy delves into chronic and complex conditions, such as major depression and personality disorders, requiring in-depth emotional exploration and specialized long-term care.[39–42] Collaboration between disciplines fosters holistic care, providing support to individual circumstances. Counseling is a sophisticated, intentional practice requiring clarity in definition and rigorous training. By addressing misconceptions, standardizing competencies, and fostering interdisciplinary collaboration, healthcare systems can leverage counseling as a vital tool for improving patient outcomes. Recognizing its structured nature and distinct role from psychotherapy ensures effective, patient-centered care across diverse populations.

Operational Definition of Counseling in Healthcare

Practicality of counseling in daily medical practice enhancement can be defined as a systematic, collaborative process grounded in evidence-based practices.[36] In this context, healthcare providers and patients engage in a therapeutic alliance[43] to explore and address the individual's unique biopsychosocial needs[44] values, and preferences. By adopting a patient-centered approach,[45] this process empowers patients to actively manage their health.[37]

Core Concepts of Counseling in Healthcare

Patient-Centered Care

A core principle of medical counseling is patient-centered care, which emphasizes individualized approaches that consider each patients' unique circumstances, beliefs, and expectations.[45] This principle is particularly critical in areas such as lifestyle modification, where health decisions are deeply personal and culturally influenced.[37] By emphasizing client-centeredness, health care providers build trust and encourage openness, enabling patients to actively participate in their care.[46]

Holistic Communication

Effective counseling requires addressing the "thinking, feeling, and behaving dimensions" of health[44] which aligns with the biopsychosocial model of care. This model integrates biological, psychological, and social factors to tailor interventions to the patient's experiences.[47] Patient-centered communication further prioritizes understanding patients' concerns, preferences, and values to ensure alignment between care plans and goals.[48]

Goal-Oriented Framework

Counseling in medical settings is inherently goal oriented, focusing on resolving specific issues, such as treatment adherence or lifestyle changes, through structured, collaborative dialogue.[33] Techniques such as motivational interviewing and shared decision-making are employed to break down barriers, build self-efficacy, and achieve measurable outcomes.[49]

Building Rapport and Trust

Establishing rapport is fundamental to effective medical counseling, as it fosters trust and connection between healthcare providers and patients.[50] Techniques such as active listening, empathy, and strict confidentiality form the basis of this therapeutic alliance.[51] Empathy, in particular, reflects the counselor's ability to understand and validate the patient's

experiences, promoting a humanistic approach that enhances trust and satisfaction.[52] Furthermore, creating a safe, respectful environment is also essential to promote open dialogue and meaningful collaboration.[53]

Comprehensive Assessments

Medical counseling involves conducting comprehensive assessments that encompass medical history, lifestyle factors, and psychosocial determinants of health.[54] These assessments ensure that care plans are holistic and tailored to address the root causes of health challenges, aligning with the principle of patient care benefits.[55] By integrating these dimensions, counselors can better understand the unique needs of each patient and develop interventions that maximize their well-being and adherence to treatment.[56]

Cultural Competence and Sensitivity

Counseling must be responsive to diverse cultural contexts, respecting patients' beliefs, values and expectations to avoid misunderstandings and ensure that care plans are acceptable This principle emphasizes equity and justice by promoting respectful, personalized care for all patients, regardless of their background. Addressing cultural factors, such as a patient's occupation, familial roles, or community norms, can strengthen rapport and improve clinical outcomes.[54] By prioritizing cultural competence, healthcare providers uphold ethical standards and foster inclusivity and trust within the therapeutic relationship.[57]

How is Counseling Conducted in Primary Health Care?

Key Steps and Techniques for Implementing Effective Counseling in Primary Care Settings

Step 1: Establishing a Supportive Environment

A trusting, non-judgmental space is the foundation of effective counseling. Techniques such as active listening, empathy, and maintaining confidentiality help build a rapport, allowing patients to share their concerns openly. The following techniques are helpful:

- Creating a safe and confidential environment

Respecting autonomy, confidentiality, and privacy fosters trust and allows patients to express their concerns openly. Supportive environments that prioritize safety and reduce stress are linked to improved patient outcomes.[58]

- Communicating well

Active listening, which includes observing nonverbal cues and withholding judgment, is critical for effective counseling. Supportive communication practices enhance patient safety and adherence to treatment plans.[59]

- Demonstrating empathy, not sympathy

Empathy strengthens therapeutic alliances by validating patients' emotions and perspectives. A respectful and empathetic organizational climate fosters trust and collaboration in healthcare settings.[58,59]

Step 2: Comprehensive Assessment

Therapists conduct a comprehensive assessment that includes the patient's medical history, psychosocial factors, lifestyle behaviors, and readiness for change. This process aims to gather detailed information to understand the patient's unique context, which is critical for personalized care. The following techniques are employed:

- Exploring patients' concerns and needs

Exploring patients' concerns and needs enable healthcare providers to gain insight into their individual aspirations.[60] Actively involving patients in goal setting and developing personalized care that aligns with their values and preferences, leads to better treatment outcomes.

- Providing information and education

Providing patients with accurate and relevant information is crucial for understanding and active participation in healthcare. Offering clear explanations, answering questions, and providing educational resources, empower patients to make informed decisions and take ownership of their health.[61]

Step 3: Collaborative Goal Setting

Establish specific, achievable goals that reflect the patient's values and priorities. This approach ensures that interventions are specific, measurable, and aligned with the patient's priorities, thereby enhancing adherence and outcomes.[62,63] Collaborative goal setting is a crucial component of patient-centered care and involves techniques such as shared decision-making, goal setting, and action planning. These strategies enhance self-efficacy, promote patient engagement, and support self-management.

- Shared decision making (SDM)

SDM actively involves patients in discussions about their treatment options and integrates evidence-based medicine (EBM) with patient values and preferences. By engaging patients in decision-making, healthcare providers empower them to take ownership of their health outcomes.[62] Research has shown that SDM improves treatment outcomes by prioritizing patient-centered goals.[64]

- Setting realistic and measurable goals

Collaborative action plans that divide broader objectives into manageable, actionable steps enhance patient engagement and promote a sense of accountability.[65] Actively involving patients in this process fosters a sense of ownership.[62]

- Enhancing patient self-efficacy

Building patient confidence through positive reinforcement and acknowledging achievements strengthens patients' belief in their ability to manage their health. Collaborative goal setting within therapeutic relationships, particularly when patients identify their strengths, has been linked to improvements in self-efficacy.[66]

- Promoting patient engagement and self-management

Encouraging patients to ask questions and take responsibility for their health behaviors fosters long-term adherence to treatment plans. SDM and SDM-aligned goal setting are critical strategies for empowering patients to actively self-manage chronic conditions.[62,63]

Step 4: Assisting and Support

Goal-setting assistance empowers patients to adjust their objectives as required with clinicians providing encouragement and flexibility throughout the process. Effective assistance and support encompass practical, emotional, and goal-oriented resources to help patients navigate these challenges.

Practical and Goal-Oriented Support

Clinicians offer flexible goal-setting assistance, including the adjustment of objectives and coordination of

interdisciplinary care.[67,68] They also provide tangible resources such as prescribing medications, arranging interdisciplinary management, and offering instrumental aid, to address immediate needs and reduce stress.

Emotional and Community-Centered Support

Emotional validation, achieved through active listening, empathy, and nonverbal engagement, builds trust between clinicians and patients. Furthermore, support groups provide a platform for shared coping strategies and foster mutual understanding among individuals facing similar challenges.[69]

Step 5: Follow-Up and Evaluation

Regular monitoring of progress and outcomes is essential to ensure that interventions align with patient goals. This approach strengthens the therapeutic relationship and empowers patients to actively participate in their care. Research has shown that integrating routine progress monitoring (ROM)—particularly when therapists use real-time data—significantly enhances client outcomes and accelerates therapeutic progress.[70] As patients' needs evolve, refining goals, addressing barriers, and incorporating communal support systems become vital to maintain patient-centered and adaptive care.

Implementing Effective Monitoring and Evaluation Frameworks

Effective monitoring and evaluation frameworks underscore the importance of tracking outcomes and measuring their impact. This process often includes ROM, which structures therapeutic engagement by systematically tracking client feedback. To assess progress against established benchmarks, evaluation methods leverage standardized metrics. This allows therapists to adjust interventions proactively as needed.[71]

Incorporating Motivational Interventions

Motivational interventions play a crucial role in encouraging patients to articulate their aspirations and challenges. By reinforcing commitment to goals and boosting intrinsic motivation, these interventions facilitate reflection on progress and positively impact overall engagement in the therapeutic process.[71]

Counseling Tools and Resources for Implementing Effective Counselling in Primary Care Settings

The Five A's Model

The Five A's Model is an evidence-based framework widely used in healthcare to facilitate behavior change interventions, particularly for tobacco use, unhealthy lifestyle habits, and chronic disease management. The model comprises five sequential steps: Ask (systematically identify risk behaviors), Advise (offer clear, personalized recommendations for change), Assess (evaluate readiness and potential barriers to change), Assist (collaboratively develop strategies and provide resources), and Arrange (schedule follow-up support) as shown in Table 1.[72] Studies highlight its efficacy in smoking cessation, where structured application of the Five A's increases quit rates by fostering accountability and sustained support.[72,73] Its scalability and simplicity have also led to adaptations for physical activity promotion, alcohol reduction, and medication adherence.[74]

FRAMES Model

The FRAMES Model is a client-centered approach: Feedback, Responsibility, Advice, Menu of options, Empathy, and Self-efficacy—each of which plays a crucial role in facilitating positive change (Table 1). Feedback involves providing clients with personalized information about their behavior and its consequences, raising awareness. Responsibility emphasizes that the client is responsible for their own change, fostering autonomy and ownership of the process. Advice offers clear, non-judgmental recommendations for change, while the Menu of options presents various strategies or interventions, allowing clients to choose what resonates with them. Empathy is essential for building rapport and understanding the client's perspective, which can enhance motivation. Finally, Self-efficacy focuses on boosting the client's confidence in their ability to change. The FRAMES Model is particularly effective in healthcare and counseling contexts, where enhancing intrinsic motivation is critical for successful outcomes.[75]

Table 1 Comparison of Key Features of 5A's, FRAMES, 5R's, and PST/BATHE Counseling Models.

Model	Acronym/Steps	Primary Purpose
The Five A's Model	It comprises five sequential steps: Ask (systematically identify risk Behaviors), Advise (offer clear, personalized recommendations for change), Assess (evaluate readiness and potential barriers to change), Assist (collaboratively develop strategies and provide resources), and Arrange (schedule follow-up support	This model mainly used for Behavior change counselling, especially for health Behaviors (eg smoking cessation, promoting physical activity, alcohol reduction Medication adherence
The FRAMES Model	This model deals with Feedback, Responsibility, Advice, Menu of options, Empathy, and Self-efficacy	Indicated for facilitating positive change. The FRAMES Model is effective in healthcare and counselling contexts, where enhancing intrinsic motivation is critical for successful outcomes
Transtheoretical Model	Also known as stages of change and composed of key stages including Precontemplation, Contemplation, Preparation, Action, and Maintenance.	Indicated for understanding and facilitating behavior change, particularly in health-related Behaviors such as smoking cessation, weight management, and addiction recovery
5R's Model	This model also known as Motivational Intervention and composed of key components such as Relevance, Risks, Rewards, Roadblocks, and Repetition.	This model is used for enhancing motivation and long-term behavioural change outcomes
Problem-Solving Therapy (PST) and the BATHE Model	Problem-Solving Therapy consisted of several stages (eg define problem, generate solutions, choose solution, implement, evaluate) BATHE stands for Background, Affect, Trouble, Handling, and Empathy.	PST: structured short-term therapy to help clients solve life problems, often in depression / stress contexts; The BATHE model is a cognitive-behavioural intervention designed to help individuals develop effective problem-solving skills to manage life challenges and reduce psychological distress

Stages of Change (Transtheoretical Model)

The stages of change, also known as the Transtheoretical Model (TTM), is a widely used framework for understanding and facilitating behavior change, particularly in health-related behaviors such as smoking cessation, weight management, and addiction recovery. Developed by Prochaska and DiClemente in the late 1970s, this model outlines five key stages: Precontemplation, Contemplation, Preparation, Action, and Maintenance.

- Precontemplation: Individuals in this stage are not yet considering change and may be unaware of the need to alter their behavior.
- Contemplation: Here, individuals recognize the potential benefits of change but are ambivalent about taking action.
- Preparation: At this stage, individuals are ready to take action and may begin making small changes.
- Action: This stage involves actively modifying behavior and implementing strategies to achieve change.
- Maintenance: Individuals work to sustain their behavior change and prevent relapse, typically for at least 6 months.
- Termination: In this final stage, individuals have complete confidence that they will not revert to their old behavior.[76]

Each stage reflects an individual's readiness to change and requires tailored interventions to support progress. Recent research[77] highlights the model's effectiveness in personalized health interventions, demonstrating that matching strategies to an individual's stage of change significantly improves outcomes.

Motivational Intervention (5R's Model)

The 5R model is a motivational intervention framework designed to enhance individuals' readiness to quit smoking and improve their overall health behaviors. The model comprises five key components: Relevance, Risks, Rewards, Roadblocks, and Repetition.

- Relevance: This component emphasizes the importance of personalizing reasons for quitting smoking, making it relevant to the individual's living circumstances, such as health concerns or family responsibilities.
- Risks: Here, the focus is on educating individuals about the health risks associated with continued tobacco use and helping them understand the potential consequences of their behavior.
- Rewards: This aspect highlights the benefits of quitting such as improved health, financial savings, and enhanced quality of life, which can motivate individuals to take action.
- Roadblocks: Identifying and addressing barriers to quitting are crucial. It involves discussing the challenges that may hinder the quitting process and developing strategies to overcome them.
- Repetition: The final component underscores the importance of reinforcing motivational messages over time, as repeated exposure can strengthen the individual's commitment to change.[78]

Recent studies have emphasized the importance of tailoring the 5R's to individual needs, showing that personalized interventions significantly enhance motivation and long-term behavioral change outcomes.[79]

Problem-Solving Therapy and the BATHE Model

Problem-Solving Therapy (PST) is a cognitive-behavioral intervention designed to help individuals develop effective problem-solving skills to manage life challenges and reduce psychological distress. Therapy is based on the premise that difficulties in solving everyday problems can lead to increased stress and psychiatric symptoms. PST teaches a structured approach to identify problems, generate solutions, and implement effective strategies, ultimately enhancing the individual's coping abilities and well-being.[80]

The BATHE Model complements PST by providing a framework for clinicians to engage patients in supportive dialogue. BATHE stands for Background, Affect, Trouble, Handling, and Empathy as shown in Table-1. This model encourages healthcare providers to explore the patients' context (Background), understand their emotional responses (Affect), identify specific issues they are facing (Trouble), discuss their coping strategies (Handling), and express empathy to foster a therapeutic alliance.[81] Recent research[82] highlights the integration of these models into primary care, demonstrating their effectiveness in reducing psychological distress and improving patient satisfaction.

Practical Tips for Managing Constraints in Counselling at Primary Care

To overcome the constraints of providing effective counseling during busy practice such as in a primary healthcare setting, health providers can:

Adopt a Structured, Stepwise Approach

This approach maximizes efficiency without compromising quality. Evidence-based frameworks such as the 5 A's (Ask, Advise, Assess, Assist, Arrange) and the FRAMES model (Feedback, Responsibility, Advice, Menu, Empathy, Self-efficacy) offer practical solutions by breaking down interventions into clear, actionable steps. These models enable providers to streamline counseling sessions, ensuring that critical elements such as patient engagement, personalized advice, and goal setting are addressed within time constraints. For example, the 5 A's framework allows clinicians to quickly assess patient needs, provide tailored recommendations, and arrange follow-ups,[73] while the FRAMES model emphasizes empathy and self-efficacy, fostering patient motivation even during brief interactions.[83] By integrating these approaches, health providers can deliver concise yet comprehensive counseling that aligns with the demands of a fast-paced practice while enhancing patient outcomes.

Prioritize Brief Interventions

Integrating the stages of change (Transtheoretical Model) to tailor counseling to the patient's readiness to change can reduce the time spent on resistance. This model identifies five stages—Precontemplation, Contemplation, Preparation, Action, and Maintenance—and emphasizes that matching interventions to the patient's stage can significantly reduce resistance and enhance engagement. For instance, during the Precontemplation stage, when patients may not yet recognize the need for change, motivational interviewing techniques such as the 5 R's (Relevance, Risks, Rewards, Roadblocks, Repetition) can be particularly effective in fostering awareness and readiness.[76,77] By aligning counseling strategies with the patient's stage of change, providers can deliver targeted and efficient interventions that respect time limitations while promoting meaningful behavior modification.

Schedule Strategic Follow-Ups

Healthcare providers can schedule strategic follow-ups by breaking counseling into multiple short visits rather than relying on single lengthy sessions. This approach aligns with chronic disease management models, which emphasize ongoing support and incremental progress over time.[84] By spacing out interactions, providers can address patient needs in manageable segments, reducing cognitive overload for both the patients and clinicians, while allowing time for reflection and behavior change between sessions. In addition, incorporating ROM can further streamline this process by enabling efficient tracking of patient progress through validated tools and feedback mechanisms.[69] ROM not only helps identify areas requiring further attention but also ensures that follow-ups remain focused and goal-oriented, ultimately enhancing the quality and continuity of care.

Delegate and Collaborate

To optimize the delivery of counseling and improve efficiency in busy healthcare settings, providers can adopt a team-based approach by delegating routine tasks to nurses or care coordinators. These tasks may include goal setting, resource distribution, and follow-up support, which are critical yet time-consuming components of patient care. By empowering non-physician team members to manage these responsibilities, clinicians can focus their expertise on more complex cases that require advanced decision-making and specialized interventions.[85] This collaborative model not only enhances workflow efficiency but also improves overall care quality by ensuring that patients receive consistent personalized support throughout their care journey. Studies have shown that task delegation and team-based care lead to better patient outcomes, higher satisfaction, and reduced burnout among healthcare providers.[86]

Focus on Proactive Care

Focusing on proactive care by implementing preventive protocols is a strategic approach to streamline counseling and healthcare delivery, particularly in busy practice settings. By addressing potential issues early—through cardiovascular risk management, smoking cessation programs, or diabetes prevention initiatives—providers can reduce the likelihood of crisis-driven demands on time and resources[87] This preventive model minimizes the need for reactive, high-intensity interventions and also fosters long-term patient well-being and reduces overall healthcare costs. For instance, evidence suggests that systematic screening and early intervention for modifiable risk factors significantly improve outcomes while freeing up clinician time to focus on complex cases.[88] By embedding preventive care into routine practice, providers can deliver more efficient and streamlined care that prioritizes sustainability and patient-centeredness.

Discussion and Conclusion

Discussion

The Diabetes Prevention Program (DPP) showed that intensive lifestyle changes could significantly reduce the risk of developing type 2 diabetes, with benefits lasting over 10 years.[89] On the other hand, the Look AHEAD trial found that while lifestyle interventions can lead to sustained weight loss and improved metabolic health, they might not necessarily reduce major cardiovascular events.[90] These studies highlight two important takeaways for healthcare providers[89] including comprehensive lifestyle interventions can lead to meaningful benefits, and improving intermediate outcomes does not always translate to reduced complications without long-term support and targeted strategies.[89] In addition, literature also suggests that counseling on diet, exercise, and weight can have short-term benefits for people with diabetes

or at risk of developing it. However, the evidence for long-term benefits is less clear-cut. Studies have produced mixed results, likely due to differences in design, participant selection, and follow-up duration. For instance, the Diabetes Prevention Program showed that lifestyle changes can reduce the risk of developing type 2 diabetes over 10 years.[89] While the Look AHEAD study found that sustained weight loss did not necessarily translate to fewer heart problems.[90] This highlights the importance of setting realistic goals, providing ongoing support, and tracking both intermediate and patient-centered outcomes.

Strengths and Limitations

Strengths include a comprehensive scope, focus on practical implementation strategies, and integration of both empirical and grey literature. By examining counseling in primary care through three domains (Why? What? and How?), actionable insights are highlighted for improving lifestyle-related disease management. Key strengths include:

- Emphasis on evidence-based frameworks such as the 5A's and FRAMES model.
- Identification of the role of counseling in enhancing medication adherence, reducing health risks, and addressing psychosocial challenges.
- Practical guidance for clinicians, including rapport-building techniques and patient-centered communication.

Limitations involve potential biases from narrative synthesis, reliance on self-reported data, and exclusion of non-primary care studies that may limit generalizability.

Synthesis of Findings

Rationale for Counseling

Counseling addresses critical gaps in lifestyle-related disease management by promoting adherence, self-efficacy, and behavioral change. Studies confirm its efficacy for smoking cessation, physical activity promotion, and mental health integration.

Definitions and Concepts

Despite its importance, counseling suffers from ambiguous definitions, often conflated with informal advice-giving. Clear operational frameworks such as WHO's definition and ACA's guidelines distinguish counseling as a structured, evidence-based practice requiring specialized competencies.

Implementation Strategies

Effective primary care counseling hinges on structured models such as the 5A's and FRAMES, combined with rapport-building techniques (active listening and empathy). Team-based approaches and brief interventions mitigate resource constraints.

Future Research Directions

Further studies are necessary to evaluate long-term outcomes of counseling interventions, cultural adaptations, and integration into low-resource settings. Routine outcome monitoring and digital tools could enhance scalability.

Conclusion

The global rise in lifestyle-related diseases makes effective counseling a top priority. The strategies outlined in this review, such as brief interventions and team-based care, are applicable across various healthcare systems. In low-resource settings, primary care providers play a crucial role, making practical counseling approaches vital. By integrating counseling into primary care, we can improve patient outcomes through better adherence, behavioral change, and support. To make this work, we need clear guidelines and standardized protocols. Frameworks like the 5A's and FRAMES model offer effective solutions. Future research should focus on ensuring these approaches are equitable and sustainable. By making counseling a routine part of primary care, helps in reducing chronic disease burden and improve population health. Digital tools like health apps and

telehealth can also enhance counseling, especially in resource-limited areas, and their effectiveness and fairness should be carefully evaluated.

Practical Implications

1. For Clinicians: Adopt structured counseling models (eg, 5A's) to address tobacco use, physical inactivity, and medication non-adherence.
2. For Policymakers: Invest in training programs to standardize counseling competencies and integrate mental health services into lifestyle-related disease care.
3. For Researchers: Prioritize longitudinal studies focused on cultural adaptations and digital counseling tools to expand accessibility.

Data Statement

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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