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**Counseling for Risky Health Habits:
A Conceptual Framework for Primary Care Practitioners**

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TECHNICAL REPORT

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Many Canadian Task Force reports review the effectiveness of various forms of counseling to prevent occurrence or recurrence of specific conditions. This paper discusses specific models of counseling in primary care and serves as a summary to how the CTFPHC conceptualizes "counseling".

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Counseling for Risky Health Habits: A Conceptual Framework for Primary Care Practitioners

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**Counseling for Risky Health Habits:
A Conceptual Framework for Primary Care Practitioners**

ABSTRACT

Risky lifestyle choices contribute to many contemporary health conditions. Primary care practitioners have frequent opportunities to help patients clarify issues and alter adverse behaviour patterns. This paper formulates a conceptual framework for counseling in the primary care setting, clarifying the different forms, key principles, and tasks for the counselor that best represent the requirements for successful counseling. It describes four theoretical approaches that have contributed to our understanding of lifestyle change. A series of evidence-based illustrations are used to demonstrate how elements of these different models have been applied. The six risky behaviours addressed in this paper are appropriate targets for counseling. Some situations respond to brief on-the-spot advice, others require a few repeated counseling sessions utilizing concepts from behavioural theory, and certain ones need referral to a structured counseling program that employs a longer time-frame and allows for the opportunity to use a range of methods.

Keywords: counseling, primary care, conceptual framework, review

Introduction

The concept that modifying personal health behaviours can prevent disease has been central to a range of public health initiatives. These include interventions aimed at improving diet, reducing tobacco use and discouraging excessive alcohol use. Most interventions in the literature have taken one of three approaches to maximize their effect on behaviour – a) community-level interventions, b) interventions in specialty clinics, or c) repeated sessions with trained counselors over an extended period of time.¹ The Canadian Task Force on Preventive Health Care (see Appendix 1 for a description), in the *Canadian Guide to Clinical Preventive Health Care*,² has recommended counseling as an essential component for a significant number of preventive interventions. This paper is intended to clarify the meaning of “counseling” as used by the Task Force when making practice recommendations for use by primary care clinicians. The approach taken is to describe different forms of counseling, delineating key principles, and illustrating the tasks of a practitioner when s/he is considering counseling a person with an adverse behaviour pattern. The conceptual framework proposed in this article outlines a structured approach to counseling for use by clinicians in the primary care setting.

The term counseling includes a wide array of activities: assessing knowledge and motivation, providing information, modifying inappropriate behaviour, reinforcing desired behaviour, and monitoring long-term progress. To isolate the “counseling effect” from the confounding effects of different study populations, variable health conditions, and counselors with diverse training is extremely difficult, if not impossible. Nonetheless, this paper offers some modest suggestions about the important elements involved in counseling aimed at reducing or preventing risky behaviours. It is not an exhaustive overview, but rather summarizes key

principles of the main counseling approaches based on a review of recent literature that examined counseling as an intervention.

Counseling and psychotherapy are viewed as overlapping areas of professional competence. Historically, counseling has been characterized by the following descriptors: educational, preventive, vocational, supportive, situational, problem solving, developmental, and short-term. Counseling has been viewed as a process for assisting people who are attempting to function more effectively. Psychotherapy has been described with terms such as assertive, reconstructive, depth, analytical, and focus on the past. The emphasis was on more dysfunctional or severe problems that require a longer term and more intense process that attempts to alleviate severe problems in living. To many clinicians, distinctions between counseling and psychotherapy appear to be primarily quantitative rather than qualitative in nature. Professionals in most settings find that they provide both counseling and psychotherapy in accordance with their education, training, and the needs of their clients. In current usage, the terms tend to be used interchangeably, depending on the service setting.³

Counseling is a goal-oriented process, which emphasizes a cooperative role relationship between provider and recipient. When counseling, the provider applies his or her expertise to benefit each recipient, directing them to use information in a way that serves best in everyday life.⁴ The provider's skills should be supported by theoretical models of working. Although the provider needs some advanced knowledge in the field for each specific health-related condition, one of the goals of this paper is to offer a generic approach to lifestyle behaviour change directed towards six different patterns of behaviour, each associated with increased risk of health problems:

- dietary patterns
- unintentional injury

- problem drinking
- risky sexual patterns
- physical inactivity patterns
- cigarette smoking

In this review, a) addictive behaviours related to alcohol and/or street drug dependence were excluded; b) a provider is defined as any professional (i.e. physician, nurse, dietitian, social worker, psychologist) who is offering a personal health service to a recipient in a professional context; and c) a recipient is defined as any person (patient or client) using the service in order to meet some need s/he has identified.⁵

A review of morbidity in family practice supports the relevance of counseling for these six risky behaviours. For example, 12 percent of diagnoses recorded were considered potentially responsive to nutrition-related counseling interventions.⁶ Injury prevention counseling is recommended as part of routine primary medical care because unintentional injuries are the leading cause of death and disability in children and adolescents.⁷ Smoking prevention during childhood and adolescence is critical to the successful reduction of tobacco-related morbidity and mortality in later life. Despite a gradual decrease in smoking rates among adults, the proportion of youth who smoke regularly has remained stable.⁸ In addition to its direct harm, tobacco use may be a marker of other health-compromising behaviours that lead to the abuse of other substances such as alcohol and street drugs.⁹

Problem drinking is far more common than severe alcohol dependence and is associated with considerable morbidity and health care costs. Alcohol use disorders are often comorbid with mental health problems.^{10,11} The public health impact of interventions for problem drinking is potentially enormous.¹² Counseling that focuses on abstinence and monogamous relationships, recognition and eradication of STDs such as Chlamydia and HPV, and proper use of condoms can be expected to reduce the risk of HIV.¹³ Regarding physical inactivity, a large proportion of

North Americans have a sedentary lifestyle – a risk factor for such chronic diseases as coronary heart disease, diabetes, and osteoporosis.¹⁴ Even a small impact at the individual level, if implemented widely, could reduce the population burden from these chronic diseases.¹⁵

Methods

MEDLINE and PsycINFO were searched from 1966 to February 2001. Separate searches were conducted for each of the six conditions of interest, using keywords: dietary patterns (diet or nutrition); risky sexual patterns (sex or STD); inactivity patterns (inactivity or activity or exercise or fitness); smoking cessation (smoking or tobacco); unintentional injury (wounds and injuries or accidents); problem drinking (drinking or alcohol). These were combined with database-appropriate keywords such as “counseling”, “patient education”, “client education”, “prevention and control”, “knowledge, attitudes and practice”, “lifestyles” and “health promotion”, among others. Abstracts for 248 articles were found and reviewed. Of these, 108 studies had, at least, a minimal description of the counseling strategy used, a population drawn from a primary care setting, and employed a brief individual approach. Ideas from these full articles were used to develop the conceptual framework presented in this paper.

Results

This section provides a description of several forms of counseling, and some key principles of counseling that, in the authors’ opinion, best represent what needs to be done when a primary health care provider is considering counseling a person who is experiencing health problems due to risky behaviour patterns.

Basic forms of counseling

If a professional provider estimates that counseling is suited to the needs and personal resources of the recipient, there are three courses of action open to him/her.

A) On the spot information and advice. The provider may give advice about a particular question or problem. The purpose of the advice is to find a useful or helpful course of action that the recipient can pursue independently. The advice is specific to the situation, usually requiring 10 to 20 minutes (or less). Many practitioners and patients expect that matters concerning lifestyle risks, such as physical inactivity, can be dealt with in such a manner. Sometimes this assumption is correct; most often it is not.¹⁶

B) A few repeated contacts on the same topic. A contact with a provider may lead to further visits for the same reason. If the timing of the new visits is known beforehand, it will also be possible to make some advanced plans. The provider can monitor what aspects of the advice the recipient has put into use, what their experience has been, how their needs have changed. This kind of advice and guidance may be given by a range of health professionals and can be linked to monitoring of symptoms.¹⁶

C) Planned period of structured counseling sessions. The contacts between the provider and the recipient may have their beginning in certain problems and needs related to habits and quality of life. The sessions are planned ahead, they have a fixed duration and several sessions (5 to 15) are implemented at fairly short intervals (e.g. weekly). This kind of counseling gives the opportunity to use the full range of methods, outlined in the models section. This form of counseling, also, assumes that the provider has special skills and training, and that each session requires a longer time frame than situations where only advice is given. Only a minority of physicians is trained to provide this kind of counseling; more often s/he gives a recommendation for it.¹⁷

Key principles for counseling

i) Counseling is a **cooperative mode of work** demanding active participation from both the provider and the recipient. The working process requires that both parties take up reciprocal, complementary roles. Each participant comes with a personal agenda, while the provider is responsible for developing rapport and for directing the course of progress. To ensure the recipient is participating in a fully informed way, it is important that the recipient's informed consent be clarified early on. As with any encounter between patient and provider, confidentiality is an essential part of the process.

ii) Counseling is **goal-oriented**; the aim is for the recipient to find an answer to an identified question or a solution to his/her specific problem. The provider shares his knowledge in such a form that the recipient can use it to solve the particular problem independently. Through counseling the recipient will learn to apply knowledge in new ways, may acquire new skills, or change some of his/her beliefs or behaviours.

iii) Counseling is best characterized by **client-centeredness**. The needs and views of the recipient have to be respected. The provider must always be sensitive to introducing only culturally appropriate interventions and avoid ordering, patronizing, or acting on the recipient's behalf. S/he is rather like a skilled travel guide, finding out where the recipient wants to go and assisting in determining if the destination is reasonable and/or feasible. S/he assists the recipient in seeking alternative routes, determining their respective difficulties, and discusses the choice of route. S/he helps the recipient to clear out the obstacles along the way. The recipient may, at some point, require more precise guidance in practising new skills that are necessary, lest the journey become too difficult.¹⁶

Tasks of the provider

Managing each unique situation: Counseling begins with the individual needs of a recipient and his/her personal life situation. Health care providers must learn to take advantage of the “teachable moment” when the patient’s preventive health sensitivity has been heightened by a perceived health crisis.¹⁸ The recipient may have difficulty in formulating a question, or may present with a singular point of view. This does not preclude counseling; rather it signifies another starting point for the provider. It is crucial to find out how the recipient sees his/ her problems, what s/he thinks may be causing them.¹⁶

Planning multiple sessions: The provider is responsible for the skilful management of counseling, including the planning of each session, and adherence to a theoretical background on which the sessions are based. Counseling abilities include skills in structuring besides those of relating and communicating. A plan should be followed and kept up to date. In the opening phase, the focus must be on the recipient’s perceptions and needs. In repeated contacts, it is important to plan counseling together with the recipient so that parties have a clear understanding of the session schedule, purposes and manner of proceeding. The closing phase is concerned with reviewing and summarizing what has been discussed, and on the agreements reached.¹⁶

Proceeding by steps: Five markers: “Assess, Advise, Agree, Assist, Arrange” (“5 A’s” step-model) are helpful in managing the progression through the successive sessions. These steps organize the tasks for the provider. They remind him/her of where the emphasis is meant to be during any given session. To move on to the next step, it is necessary to have completed the specific tasks for the current step, and thus, to have brought about the necessary conditions for moving forward.^{17,19}

Step 1: Assess - The provider first collects, selects and analyses information to make decisions. Counseling calls for information that the recipient alone can provide. The provider always begins at the recipient's level of understanding. In the case of life-style problems, it is important to assess the chronicity of the recipient's relevant behaviours. The provider works to involve the recipient in the process of defining targets and determining goals and objectives.

Step 2: Advise - It is not practical to take on too many targets at the same time. Generally, counseling is more effective when the recipient selects the target behaviour on which to focus. The first targets should be highly concrete and the recipient's own actions should lead to fairly quick and clearly visible changes in them. When needed, the provider should help the decision-making process with his/her knowledge of the condition/situation.

Step 3: Agree - The provider has responsibility for the correct assessment of problems, for the formulation of the targets, and for the suitability of the suggested management. A plan or an agreement should state, in the least, the short-term objectives, and trace a route most likely to lead away from the current situation. Often a written agreement or contract clarifies the respective responsibilities.¹⁷

Step 4: Assist - Courses of action should be pondered together with the recipient, always concentrating on the route from the current situation to the nearest immediate objective. At this stage, the responsibility for actions rests with the recipient; s/he should try out the suggestions agreed upon, according to the plan, and bring back experiences for discussion and evaluation together. Common elements in many behaviour change counseling situations include moral support, skill training, environmental change, relapse prevention, and maintenance techniques. The provider's task lies in identifying the recipient's particular needs for instruction, and practical training. This step of implementation may take several sessions.

Step 5: Arrange - Counseling requires that the actions taken undergo continuous monitoring for evidence of change. It is often necessary to arrange for additional learning or skill development through community services or programs. It is essential to find out throughout the duration of the counseling, to what extent the recipient has followed the course of action agreed upon in the previous sessions.²⁰ By the final session, the recipient needs to have a clear picture of the kind of journey s/he has made and of what his/her own efforts have achieved.

Conceptual models for counseling individuals

Four broad categories of behavioural theories have contributed to our understanding of lifestyle change and compliance with recommendations during counseling in medical practice: these include, communication, rational belief, self-regulative system, and social learning models.²¹ Each of these theories views the problem of behaviour associated with increased health risks from a different perspective, but all refer to similar components: illness cognition, risk perception, motivation to change, acquisition of coping strategies, and appraisal of results. A counseling intervention may have one or more of these models as its theoretical framework. Indeed, most counseling sessions utilize a combination of components from two or more complementary theoretical constructs. Additionally, from these theoretical models have arisen a number of scales or processes for measuring changes in behaviour that result from counseling. Clearly the choice of outcomes is important in determining the effectiveness of counseling as a preventive intervention for behaviours associated with increased health risks. Improvement in an intermediate process outcome (such as attitude or knowledge) is not necessarily associated with a reduction in the actual behaviour.²² Similarly, a reduction in risky behaviour at the time of counseling may not be associated with long-term improvement. Although the primary outcome

of interest in counseling interventions is generally evidence of behavioural change; at times, other measures serve as proxy indicators of change in behaviour. For example, nutrition counseling aimed at improving dietary patterns may be evaluated using a measure such as nutritional knowledge. Such factors, if believed to influence or facilitate behaviour, are considered mediators or intermediate outcomes.²²

Many of the papers we reviewed did not explicitly state the theoretical framework being tested; it had to be inferred. The accompanying series of vignettes do not represent an exhaustive review of the evidence regarding counseling for behaviours associated with increased health risk; rather, they provide concrete examples of the range of counseling interventions that exist for selected lifestyle-related conditions.

Communications Models: These models highlight the importance of the generation of the message, the reception of the message, message comprehension, and belief in the substance of the message. Carkhuff's Stems of Communication and Discrimination Index, for example, builds on the core conditions for good communication in any situation: empathy, warmth, and genuineness.¹⁹ Green's Precede Model categorizes different external influences on behaviour into predisposing, reinforcing, and enabling factors.²⁰ By being attentive to these categories of external factors, the predictability of the behaviour is increased and there is a greater ability to communicate prescriptive information concerning intervention choices.²⁰ More recently, a Precede-Proceed Model developed by Green proposes a "patient counseling algorithm" for use in primary care.²³ This triage approach, based on a meta-analytic synthesis of existing evidence for various counseling and prevention strategies, helps determine a patient's needs within a given counseling context by assessing motivational characteristics, physical, manual and economic

barriers and facilitators, and specific circumstantial rewards and penalties. The approach, according to Green, can avoid inappropriate techniques, for example trying to persuade an already-motivated patient that change is necessary. Skipping unnecessary steps frees time to focus on aspects of the knowledge, beliefs, attitudes and understanding that require modification. As is evident, communications models have been used for a wide range of counseling interventions.

Evidence-Based Illustration: Clamp and Kendrick conducted a trial (N = 169) where low-income families with children under five years of age were randomized to receive from their general practitioners: a) usual care or b) standardized communication of advice regarding safety measures and pamphlets of a reinforcing nature.²⁴ As well, they were offered safety devices such as smoke detectors at reduced cost. The follow-up rate at six weeks was 98%. Families in the intervention group were more likely to use safety equipment compared to families in the control group.

Rational belief models: According to these theories, objective, logical thought processes determine behaviour; providing one has appropriate information on both the health risks and benefits, and the consequences of various behaviours. For example, the “Health Belief Model” emphasizes four perceived predictors: probability of threat, severity of threat, feasibility and benefits, and barriers to adopting new pattern of behaviour.²⁶ This model has been valuable in identifying predictors of health behaviours and planning health promotion strategies. Fishbein and Ajzen developed their “Theory of Reasoned Action” to discern and predict determinants of volitional behaviour. Intention to perform a behaviour is viewed as a function of one’s beliefs,

attitude towards the behaviour, and perceived social norms.²⁶ Studies have reported intention-behaviour correlations exceeding 0.70.²⁷

Evidence-Based Illustration: Rhodes et al. compared the effect of medical nutrition therapy among persons at risk for cardiovascular disease.²⁸ Patients were assigned to one of four nested treatment groups (N = 104). All participants received dietary instruction (ten minutes) from a physician or a nurse. Groups 2, 3 and 4 received a copy of the Grocery Shopping Guide and viewed a videotape explaining its use. Group 3 took part in a one-hour consultation with a dietician; group 4 had three such consultations. Partly due to small sample size, groups 1 and 2 were combined to form the medical-intervention cohort while groups 3 and 4 were combined to become the dietician-intervention cohort. Data were available for 88% of the sample population at study end (three months). Both groups showed a significant improvement in knowledge about nutrition. However, the dietitian cohort also had significantly greater improvements in feelings of efficacy about dietary changes, lower mean body mass index (BMI), and consumed a healthier diet than the medical cohort. Both cohorts showed reductions in total cholesterol; the dietitian cohort had lower triglycerides compared to subjects in the medical cohort.

Self-regulative systems models: The self-regulation process consists of three components: self-monitoring, self-evaluation, and self-reinforcement. A basic assumption is that people are rational and will act in accordance with their interest, once it is known to them. This model highlights the impact of social and cultural values and norms of the surrounding environment.²⁹ For example, Bandura's "self-efficacy theory" attempts to link self-perception and individual action and assumes individuals selectively heed information from four sources: active attainment of goal, vicarious experiences of others, persuasion, and physiological cues.³⁰ In Prochaska's

“Stages of Readiness for Change” theory, the stages of change are categorized as: precontemplation, contemplation, preparation, action, and maintenance.³¹

Evidence-Based Illustration: A study by Wang compared three smoking cessation interventions provided by physicians who: 1) received two lectures on the stages-of-change model, 2) received only a poster for the office as a reminder and 3) received no lecture or poster.³² Physicians were instructed to follow the patient’s smoking status and to provide brief periods of counseling during each clinic visit. Of 93 patients enrolled, 88.2% were followed up at six months. Patients counseled by physicians exposed to the stages-of-change model achieved significantly higher “quit smoking rate” (28.6%) than the usual care group (4.3%); the comparison with the poster group rate (8.3%) was borderline significant ($p = 0.054$). A significantly greater proportion of patients of physicians in Group 1 had reduced their daily consumption of cigarettes.

Operant and social learning models: These models focus on the stimuli that elicit or reinforce a specific behaviour, such as Skinner’s and Pavlov’s “conditioning approaches” to behaviour change. Bandura’s “Social Learning Theory” emphasizes the immediate social reinforcing consequences when attempting behaviour change: three critical elements are self-efficacy, modeling, and self-management.³³ New ways of behaving occur through imitation and modeling, and by observing the behaviour of others.³⁴

Evidence-Based Illustration: Marcus et al. used a sequential comparison group design to examine change in physical activity between the intervention group (counseling and self-help materials) and the control group who received usual care ($N = 63$).³⁵ The intervention group received activity counseling (three to five minutes) from their physicians at the time of a regularly scheduled office visit and during a scheduled follow-up visit one month later. The

response rate at follow up six weeks later was 70%. Level of physical activity was assessed by telephone interview using a self-report questionnaire. Both groups of patients showed an increase in physical activity; however, the gain was greatest for patients in the intervention group (effect size of adjusted group difference was 0.20).

Practice Implications

Evidence that counseling by clinicians in a primary care setting can produce long-term behavioural change is only beginning to appear in the literature. The six risky habit patterns addressed in this paper are appropriate targets for behaviour change counseling. Some situations respond to brief on-the-spot advice, others require a few repeated counseling sessions utilizing concepts from behavioural theory, and certain ones need referral to a structured counseling program that employs a longer time-frame and allows for the opportunity to use a range of methods.³³ The description of studies outlined above however, is not meant to infer that any form of brief counseling sessions will necessarily achieve comparable reduction in health outcomes to those reported in this paper. Rather, there is evidence that even brief counseling can be effective in busy primary care settings, that a triage approach for evaluating a patient's status regarding predisposing, enabling and reinforcing factors is effective in appropriately targeting education and counseling strategies,²³ and that the use of office support tools and programs improves the delivery and effectiveness of counseling in the primary care setting.^{37,38}

Research Priorities

Ideally, future studies involving counseling interventions will examine changes in both direct and proxy (intermediate) outcomes over the long-term, using randomized controlled trials. Providing detailed information about the theoretical model(s) and the counseling intervention itself would significantly strengthen reports on effectiveness trials of counseling, and allow practitioners to structure their counseling maneuver more explicitly. We suggest that future publications answer the following questions. 1. Which form of counseling is being used (on-the-spot advice, few repeated contacts on same topic, series of planned sessions)? 2. Which behavioural theory (model or combination of models) is used in counseling? 3. What is the current evidence for the effectiveness of counseling for the target behaviour?

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Appendix 1 - Brief Description of the Canadian Task Force on Preventive Health Care

The Canadian Task Force on Preventive Health Care is an independent scientific panel of physician-researchers from Universities across Canada that uses a standardized methodology and explicit analytic criteria to evaluate the strength of published medical research evidence and make practice recommendations for early detection and prevention of disease. The Task Force provides a bridge between medical research findings and clinical preventive practice. When research does not provide clear guidance, this lack of evidence is made clear. A main goal of the Task Force is to help physicians and other primary health care professionals choose tests, counseling strategies or other preventive interventions of proven effectiveness, and avoid those that lack demonstrated value.

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Members of the Canadian Task Force on Preventive Health Care

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