

# **Addictions Foundation of Manitoba**

## **A Biopsychosocial Model of Addiction**

### **Introduction**

Over the past fifteen years, various authors in the addictions field have proposed biopsychosocial (biological/ psychological/ social) models of addiction. These models developed as organizations and researchers struggled to reach an understanding of the nature and causes of addiction<sup>1</sup> which reflected the growing body of knowledge in this area. There now appears to be a broad consensus that complex interactions between various biological, psychological and social factors appear to contribute to the development of addiction problems. There appears to be less agreement, however, in terms of how this knowledge is interpreted and applied to prevention and clinical practices in the field.

The Addictions Foundation of Manitoba (AFM) recently developed and adopted a new definitional framework called the Levels of Involvement. This Framework was developed with a clear understanding that biological, psychological and sociological factors are all important in determining an individual's level of involvement with substances or gambling. There remains, however, a need for the organization to articulate its' understanding of:

- a) the role these various causal/risk domains play in creating the problems faced by individuals who enter AFM programs; and,
- b) the implications of this understanding for how the AFM designs and delivers programs and services.

The AFM also acknowledges that continued scientific advancements may result in evolutionary development of its understanding of, and responses to, its representation of a biopsychosocial model.

This paper describes the AFM's interpretation of a biopsychosocial (BPS) understanding of addiction, its program implications and perceived benefits. The AFM views this understanding

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<sup>1</sup> AFM definition of "Addiction" is an unhealthy relationship between a person and a mood or mind-altering substance, experience, event or activity, which contributes to life problems and their recurrence.

or model of addiction as being complementary to, and supportive of, other aspects of its strategic direction:

- The model is consistent a holistic concept of health, and with the Population Health approach adopted by the Government of Manitoba<sup>2</sup>.
- The model supports the AFM belief that problematic alcohol, other drug and gambling involvements lie on a continuum of severity, and that a complementary continuum of programs and services need to be available to address the varied problems or needs represented.<sup>3</sup>
- The model offers an inclusive framework which is able to accommodate a diverse range of other addiction theories and models of therapeutic practice. This supports the need for AFM to offer a range of specialized and targeted programs which utilize a variety of theoretical resources and therapeutic approaches. Similar to purposes which lead to the development of the Levels of Involvement framework, the purpose here is to provide a conceptual framework able to support the existing and necessary diversity in program approaches.

## **A Description of the AFM’s Biopsychosocial Understanding of Addiction**

The Addictions Foundation of Manitoba (AFM) subscribes to a biopsychosocial model of addiction as follows:

On the one hand, the term addiction is understood by the AFM to refer broadly to the field of practice which encompasses the concerns of those who deal with alcohol, other drug and gambling related problems. On the other hand, the AFM also understands the term addiction as a common reference to a type of problem behaviour pattern or problem experience. In this sense, addiction is often understood to refer to problem behaviours or experiences which persist for individuals in spite of their desire and concerted efforts to be free from them. The AFM defines addiction accordingly as an unhealthy relationship between a person and a mood-altering substance, experience, event or activity, which contributes to life problems and their reoccurrence. Under the AFM’s Levels of Involvement (LOI) framework, for example, individuals who might describe their involvement with

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<sup>2</sup> The holistic concept of health refers to health as a state of complete physical, social, and mental well-being, and not merely the absence of illness or infirmity (World Health Organization). Health Promotion: An Anthology, Pan American Health Organization Scientific Publication #557, (1996), World Health Organization, Washington D.C.

<sup>3</sup> The AFM Continuum of Services Policy refers to services ranging from primary to tertiary prevention.

alcohol, other drugs or gambling as "dependent" (ie., Dependent Involvement), or "abstinent" (eg., Transitional or Stabilized Abstinence), might also feel comfortable referring to their problem as addiction. The biopsychosocial model of addiction presented here is understood to apply more to this latter behavioural/experiential definition of addiction. The model provides a framework for understanding what causes and sustains addictive behaviours and experiences and provides direction in framing both clinical and prevention practice.

In proclaiming adherence to a biopsychosocial model of addiction, the AFM wishes to acknowledge its understanding of the origins of addictive behaviours and experiences as complex, variable and multifactoral. The AFM believes that addictive behaviours and experiences arise from complex and ongoing interactions between various biological, psychological and sociocultural factors. It also believes that the combinations, interactions and the weightings of specific factors will be different for different individuals.

The AFM believes that in many cases complex interactions of biological, psychological and sociocultural factors, similar to those which contribute to the appearance of addictive behaviours and experiences, also contribute to other less persistent or less severe forms of alcohol, other drugs or gambling problems, including what is referred to in the LOI as Harmful/Problem Involvements.

Above all, the biopsychosocial model acknowledges and accommodates diversity and respects individual differences. Any model of service that follows from it would need to ensure that it is consistent with those principles. By saying that this model is inclusive the AFM wishes to recognize that it is also able to selectively accommodate and respect a broad range of other theories of addiction (eg., disease; social learning; or sociocultural) and program approaches ( eg., 12 step; cognitive-behavioural; therapeutic community). In this regard, a biopsychosocial model can be seen as a model of "Best Practices". It compels the BPS practitioner to seek out and recommend the best possible fit between identified client needs and interests and the most promising available program or service.

Subscribing to a biopsychosocial model of addiction has implications for how the AFM conceptualizes both the range of problems that it is mandated to address and the range of programs and services it offers in response to those problems. Some of those implications are as follows:

- ❖ In accordance with its understanding of the complex biopsychosocial nature of addiction, the AFM views the population of those with harmful or dependent involvements as a heterogeneous group which defies stereotyping. Although the AFM recognizes that there are certain specific biological, psychological and sociocultural risk factors which appear to be strongly related to problems of this nature, it also recognizes that the potential for developing an alcohol, other drug or gambling problem exists for all individuals regardless of race, gender, biological or psychological profile, social or cultural group.
- ❖ This model invites an appreciation for both the diversity and uniqueness of the individual problems which arise from the interaction of widely variable sets of contributing factors. In accordance with this appreciation, the AFM views individual alcohol, other drug, and gambling problems as widely varied and as falling loosely along a continuum of risk or severity, from those that involve the least risk to those that involve the most risk. This continuum is reflected in the AFM's Levels of Involvement framework.
- ❖ In accordance with its support for this model, the AFM views the natural course any substance use or gambling problem development as different from one individual to another and, for any given individual, variable over time. The AFM believes, however, that once a level of dependent involvement becomes apparent, the natural course of development becomes less variable and more predictable.
- ❖ Because the AFM recognizes that the elements which contribute to and/or sustain harmful involvements and addictive behaviours are different for different individuals, it also acknowledges that there is no one superior therapeutic method or process for responding to these issues. The AFM recognizes that a range of therapeutic best practices need to be available to match the range of individual client needs and interests.
- ❖ Acknowledging the importance of individual differences, the AFM recognizes the importance of providing services which are based on identifying and responding to unique individual client needs and interests. To aid in the tailoring of clinical program offerings to the client needs, the AFM has adopted a Stages of Change / Motivational Interviewing model which is applicable to all of its clinical services. The AFM believes that it is important for its programs and services to

recognize diverse client spiritual needs, and encourages clients in their individual quests for spiritual development. In addition, the AFM endeavours to provide a range of program options which include those that focus on harm reduction goals and those that focus on the achievement of abstinence.

- ❖ In accordance with its understanding of the diverse nature of alcohol, other drug and gambling problems, including those referred to as addictive behaviours and experiences, the AFM recognizes that in many cases abstinence may not be required as a client goal in order to achieve tangible improvement in life functioning or problem resolution. The AFM does, however, encourage abstinence as a preferred goal for any client where continuing harmful/dependent involvement is evident.

## **Advantages of a Biopsychosocial (BPS) Model**

- 1. A BPS model focuses attention on the diversity of client needs, reinforcing the importance of both client-centered clinical practices and the provision of a range of program options.***

A BPS model not only emphasizes the need to respect the unique circumstances and perspectives of each client, but it also supports a view of individuals as powerful agents for self-determination. Rather than inviting a view of individual outcomes as being largely the product of complex of external determinants, the BPS model appreciates the significant role played by individual qualities of resiliency and personal agency. As a best practices model, BPS accommodates and supports non-linear systems theories which place individuals and behaviours within contexts of biological, family and socio-cultural systems, and which view individuals as active participants in on-going system maintenance and change dynamics.

- 2. A BPS model includes traditional addictions models as therapeutic options. It provides a broad and flexible framework for conceptualizing the nature of the problem and for selecting from a wide range of potentially effective responses to it.***

A BPS model respects a broad range of variation in the assertion of which factors, domains and interactions may be more influential or dominant for any given individual or group of individuals. Although all three of the key causal domains are viewed as influential in the unfolding of events, a BPS model allows for a selective focus on one or two domains as having theoretical prominence. In this way a BPS model can readily accommodate both traditional and non-traditional addiction program models. Whereas medical science based interventions tend to place greater emphasis on biochemical factors, other intervention/helping models like those of AA tend to place greater emphasis on psychological or spiritual elements. Various "cognitive" models, on the other hand, tend to place greater emphasis on the psychosocial and sociocultural elements. Within a BPS framework, any of these may be viewed as acceptable therapeutic options subject to their purported effectiveness and consensus as to their desirability.

3. ***A BPS Model is consistent with current addiction research and health behaviour theory, and supports prevention and health promotion practices based on the Determinants of Health/ Population Health Model.***

One prominent feature of current addiction rehabilitation research is the burgeoning diversity of promising therapeutic approaches. What program evaluation research also tells us, however, is that no one approach appears to have an overall edge. This research indicates that the quality of the client-therapist relationship and the degree to which client needs and interests are matched to program methods tend to be more predictive of success or failure.

When one examines the current range of health behaviour theory, it is clear that the most prominent theories are multifactorial and based on person-environment interactions. In addiction related areas, researchers now almost universally accept the idea of biopsychosocial risk and protective factors as interdependent determinants of health outcomes. AFM prevention services are currently based on a multi-component model adopted in the late 1980's. The Conceptual Framework for Preventive Action presented by Torjman<sup>4</sup> refers to three primary domains of influence (person, substance and environment) which may be targeted in a prevention strategy. Today these domains are often referred to as: *substance, set* (biological,

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<sup>4</sup> S. Torjman, Essential Concepts and Strategies, ARF, 1986

psychological and knowledge/skill/behavioural attributes of the person), and *setting* (characteristics of the physical, inter-personal and social environment).

In the area of health services policy, the Government of Canada has endorsed a multifactoral biopsychosocial model called the Determinants of Health<sup>5</sup> and has used this model to develop its Population Health Promotion strategy and Canada's Drug Strategy<sup>6</sup>.

**4. *The BPS model is amenable to empirical scrutiny and supports a broad range of empirically tested "best practices".***

BPS models have arisen as the result of evolving scientific understandings of addiction and remain open to future advances in knowledge and understanding. To this extent, BPS models are science-based and support an evidence-based, "best practices" approach to program planning. A BPS model is able to support a broad array of theoretical perspectives and models of practice based on evidence that they are effective for specific applications. Operating within a BPS framework means that the AFM will be continually challenged to demonstrate the value and effectiveness of its various programs and services on the basis of sound theory and supporting outcome data.

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<sup>5</sup> Determinants of Health include: income and social status, social support networks, education, employment and working conditions, physical environments, biology and genetic make-up, personal health practices and coping skills, healthy child development, health services, gender and culture. (Health Canada, 1999)

<sup>6</sup> Canada's Drug Strategy (1998) states that a prevention, treatment and rehabilitation programs must consider the determinants of health and address the underlying factors associated with substance abuse".