UNIT 6 THEORY AND METHODS OF PUBLIC HEALTH*

Contents

- 6.0 Introduction
- 6.1 Health Behaviour and Classification
 - 6.1.1 Definition
 - 6.1.2 Classification of Health Behaviour
 - 6.1.3 Characteristics of Health Behaviour
 - 6.1.4 The Relationship between Knowledge, Values, Attitudes and Beliefs to Health Behaviour
 - 6.1.5 Introduction to the Theories and Models of Health Behaviour
- 6.2 Theories and Models of Individual Health Behaviour
 - 6.2.1 The Health Belief Model
 - 6.2.2 The Theory of Reasoned Action, Theory of Planned Behaviour and the Integrated Behaviour Model
 - 6.2.3 The Trans-Theoretical Model and Stages of Change
- 6.3 Theories and Models of Interpersonal Health Behaviour
 - 6.3.1 Social Cognitive Theory (SCT)
 - 6.3.2 Social Networks and Social Support Models
 - 6.3.3 Stress, Coping and Health Behaviour Model
- 6.4 Community and Group Models of Health Behaviour Change
 - 6.4.1 Diffusion of Innovations
- 6.5 Selection of Theory to Choose While Planning Health Interventions
- 6.6 Summary
- 6.7 References
- 6.8 Answers to Check Your Progress

Learning Objectives

After reading this Unit, you would be able to:

- Discuss the importance of health behaviour theories and interventions to improve health outcomes of a population;
- Define what is a theory, model and identify various broad categorisations of health behaviour theories;
- Discuss and describe nine major theories (by explaining the key constructs, application, advantages and challenges) that are commonly used in public health intervention:
- Identify and appreciate the relevance of various health behaviour theories and models to address public health problems; and
- Identify the most important considerations in choosing the correct theory to address a public health problem in a given social context.

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6.0 INTRODUCTION

Public health uses various methods and approaches to address public health issues. Health behaviour modification, health promotion, outbreak investigation, health research etc., are the important components of public health methods and strategies.

The unit specifically deals with health behaviour theories and how these theories can be used to improve health status of a population. The most frequent causes of death worldwide are chronic non-communicable diseases that include heart diseases, lung diseases and cancer (Yach et al 2004). Behavioural factors like tobacco use, diet, alcohol consumption and avoidable injuries are among the prominent contributors to this mortality (Schroeder 2007). At the same time, in many parts of the world, including India, infectious diseases continue to pose grim threats; malaria, diarrheal diseases, Tuberculosis, HIV/AIDS are major threats to the poorest people around the world (PLoS Medicine Editors 2007). Both communicable (infectious) and non-communicable disease burden can be influenced by changing the important and crucial health behaviour of the people. Positive changes in a person's health behaviour would help to bring down substantial suffering, premature mortality and medical costs. Reports and policy documents of Government of India emphasises on health education and promotion as one among the strategy to combat health problems. To promote health education and health promotion, first, we need to develop understanding about health behaviour, various theories, its applicability and its limitations.

6.1 HEALTH BEHAVIOUR AND CLASSIFICATION

In the simplest sense, health behaviour includes any activity undertaken for the purpose of preventing disease or detecting disease or for improving health and well being.

6.1.1 Definition

Gochman (1997) defined health behaviour as those personal attributes such as beliefs, expectations, motives, values, perceptions and other cognitive elements; personality characteristics, including affective and emotional states and traits; and overt behaviour patterns, actions and habits that relate to health maintenance to health restoration and to health improvement. In the broadest sense health behaviour refers to the actions of individuals, groups and organisations, as well as their determinants, correlates and consequences, including social change, policy development and implementation, improved coping skills and enhanced quality of life (Parkerson and others 1993).

Box 6.1: Some Examples of Key Health Behaviours

- 1) A man avoids smoking to bring down risk of lung cancer.
- 2) An adolescent does daily exercise to remain physically fit.
- 3) A middle-aged woman following a correct diet to control thyroid.
- 4) An elderly woman doing appropriate health screening as per the age.
- 5) A commercial sex worker ensures protected sexual behaviour/acts to avoid the risk of HIV/AIDS and other sexually transmitted infections.

6.1.2 Classification of Health Behaviour

Kasl and Cobb (1966) discuss about three categories of health behaviour. They are:

- a) Preventive health behaviour: Any activity undertaken by an individual who believes himself (herself) to be healthy, for the purpose of preventing or detecting an illness in an early state (example a mother getting her daughter immunised against cervical cancer as a preventive measure) or a simpler example of vaccinating children against an array of diseases in childhood (diphtheria, measles, whooping cough, Tuberculosis, encephalitis, small pox, etc.) In the present context of COVID 19, to prevent this disease, we are directed to cover face with mask, maintain social distancing and wash hands frequently. This is an example of preventive health behaviour.
- b) Illness behaviour: Any activity undertaken by an individual who perceives himself/ herself to be ill, to define the state of health and discover a suitable remedy (example a person consulting a doctor with the fever taking it as a symptom of tuberculosis and acting as per the instructions of doctor to undergo further diagnosis).
- c) Sick role behaviour: Any activity undertaken by an individual who considers himself/ herself to be ill, for the purpose of getting well (example a doctor prescribing drugs and bed rest after being diagnosed with viral fever and the patient follows it).

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1)	Define Health behaviour. Differentiate between different types of health behaviours.		

6.1.3 Characteristics of Health Behaviour

Health Behaviour is complex in nature. This is because it is influenced by beliefs, environment and emotional state/ traits. Further, health behaviour is strongly influenced by psychological, cultural, social and environmental factors.

The second feature of health behaviour is its dynamic nature. That means, along with time, place, age, social-physical environment it undergoes changes and alterations. For example, a person does not smoke when he or she is in home where he or she will be judged, but smokes when he or she moves out to the city for a job.

Next, health behaviour is considered as a process, rather than discrete entity or fixed trait. As time and circumstances changes it will evolve. For example, a person does not become addicted to alcohol suddenly. But it is a gradual process

whereby he or she is introduced to alcohol, slowly increase its consumption due to various reasons and gradually reaches the state of addiction.

Finally, any health behaviour is motivated by a stimulus. This means, any health behaviour, to occur needs a trigger and this trigger leads to its manifestation or happening.

6.1.4 The Relationship Between Knowledge, Values, Attitudes and Beliefs to Health Behaviour

As we already discussed, any health behaviour is shaped by four factors-knowledge, attitudes, beliefs and values. Having appropriate or correct knowledge is one important prerequisite of developing health behaviour. It refers to the knowledge people have about health-related issues. Individuals are not always knowledgeable about the good or bad outcomes of health behaviour. But, imparting correct knowledge alone will not always guarantee changes in an individual's behaviour. This is because change of knowledge into action is dependent on a wide range of internal and external factors, which includes attitude beliefs and values.

Values are acquired through socialization and are those emotionally charged beliefs which make up what a person thinks are important. A belief represents the information a person has about an object or action. It links the object to some attribute. Attitudes are value-ladened social judgments which possess a strong evaluative component. Sometimes, people do not follow a good healthy behaviour despite having correct knowledge. This knowledge-action gap can be explained by attitudes and values that he or she upholds.

For example, in India most adults who smoke, are aware of the hazards of smoking, but continue to smoke. This is because either their attitude, value or belief is having more influence on the behaviour than the knowledge component.

Implication

When the health intervention strategies are planned the first and foremost thing is imparting correct knowledge. The intervention should also focus on factors like beliefs, attitudes and values to bring the desired change in the subject.

6.1.5 Introduction to the Theories and Models of Health Behaviour

Theories and models of human behaviour originate from all disciplines of social sciences. Disciplines like Anthropology, Psychology and Sociology offer considerable insight especially in relation to the factors such as habits and rituals having an impact on health.

Theories of behaviour change?

A theory is a set of interrelated concepts, definitions and propositions that present a systematic view of events or situations by specifying relations among variables, in order to explain and predict the events or situations. The notion of generality (broad application) is important as is the testability (Kerlinger, 1986).

Theories of behaviour change are comprehensive answers to the question "why does behaviour change". They incorporate a variety of constructs, interventions and methods to explain relationships or causes that influence behaviour (Michie et al 2008).

Broad Classification

Different theories of health behaviour emphasise and focus on different aspects. Based on the way health behaviour is conceptualised or defined the theories can be broadly divided into three categories.

a) Theories of Individual Behaviour and Behaviour Change

A wide range of health professionals focus all or most of their efforts on changing the health behaviour of individuals. The primary focus is on the *individual*. These theories consider the behaviour as an outcome of competing influences balanced and decided upon by the individual. 'Health Belief Model', 'The Theory of Reasoned Action' and 'The Theory of Planned Behaviour' are some examples of theories that focus on the individual himself or herself.

b) Theories and Models of Interpersonal Health Behaviour

These models emphasise that the interpersonal interactions influence the individual's cognitions, beliefs and behaviours. Other people influence our behaviour by sharing their thoughts/ ideas/ feelings and by providing emotional and social support. Social Cognitive Theory, Community level theories are some popular and widely accepted theories in this category. Diffusion of Innovation theory is an example of community level theory. Unlike the theories of individual behaviour, the second category of theories shifts the focus from *individual to the behaviour itself*. These theories also stress upon relationship between behaviour and the individual and social/physical environment.

c) Theories and Models that Focus on Behaviour as an Outcome

The third set of theories focus on *behaviour as an outcome* of complex inter-relationships and shared social practices. In these theories, environment and object both become active in the production of particular behaviour. 'Social Practice Theory' is the most cited example.

6.2 THEORIES AND MODELS OF INDIVIDUAL HEALTH BEHAVIOUR

During 1940-50s, research focused on how individuals make decisions about health and what determines health behaviour. In 1950s in the USA American Psychological Association studied why individuals did or did not participate in screening programme for TB. This work led to the development of health belief model. In the last twenty years value expectancy theories were proposed that include both the Health Belief Model and the theory of Planned Behaviour and the Theory of reasoned Action. The Trans theoretical Model also known as Stages of Change model grew initially from the work of Prochaska, Diclemente and their team of researchers during the period 1970-90.

6.2.1 The Health Belief Model

Health Belief Model explains people's beliefs about the severity of a disease and their susceptibility to it. This belief will influence their willingness to take a preventive action. Example: a group of social psychologists trying to explain why people do not use health services like immunisation though it is provided free of cost and is accessible. Health Belief model, proposed by Rosenstock and Becker in 1974, considers behaviour as an outcome of perceived susceptibility, perceived severity, perceived barriers, perceived benefits, cues to action and self-efficacy. Box 6.2 explains these constructs in detail and Figure 6.1 narrates the relationship between these constructs. The major advantage of this theory is that it is amongst the oldest theories that helped to understand health behaviour. Its simplicity enabled researchers to identify the reasons behind many health problems like why people do not adhere or accept public health programmes.

Box 6. 2: Major Constructs of Health Belief Model

Perceived susceptibility: The degree to which a person feels at the risk of health problem.

Perceived Severity: The degree to which a person's belief that the consequences of health loss will be severe in terms of both health and societal consequences (like loss of job etc.).

Perceived susceptibility together with the perceived severity is called as Perceived Threat.

Perceived Benefits: The person's beliefs regarding the benefits provided he or she prevent or treat the disease on time.

Perceived Barriers: The negative aspects of a health action

Self-Efficacy: The conviction that one can successfully execute the behaviour required to produce the outcome (Bandura 1997)

Cues to Action: This triggers the actual adoption of a certain (preventive) behaviour. This might be an individual or an incident.

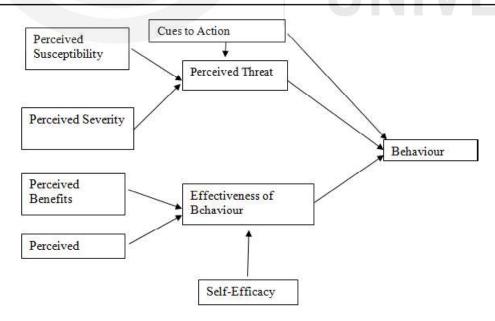


Fig. 6. 1: Depicting the relationship between various constructs of health belief model

(Source: Becker, M. H. & Maiman, L. A., (1975). Socio-behavioral determinants of compliance with health and medical care recommendations. Medical Care, 134(1), 10-24. Figure 1, p. 12.

Box 6.3: Case Study

Health Belief Model (HBM) in Breast Cancer Screening: HBM predicts that woman will be more likely to adhere to screening tests like mammography, if they feel perceived threat to breast cancer as high and perceived barriers (like expenditure, accessibility of service, fear) as low. Perceived benefits (like continuing in good health, advantages of early detection in increasing recovery chances) etc., should also be clearly explained. Self-efficacy of women also plays a major role in deciding the behaviour/ action. Cues to action can be a mass campaign exposure where women became suddenly conscious about the need to undergo a screening. When the perceived benefits are more than the perceived barriers the person will take the step and seek a mammography/ screening test.

Take the example of COVID 19. When the cases were initially reported from China the perceived threat in India was low; so, people did not take preventive steps like covering face with mask. However, as cases are reported in India or in own state/district people become more cautious as perceived risk is more. Government has announced that all COVID infected cases will be treated by Government hospitals; this is to bring down the perceived barrier level to low so that infected person will seek treatment and will cooperate to break the chain.

Researchers cite two major limitations about HBM which are: 1) This model is based on cognitive component and it completely ignores the emotional component of behaviour, 2) There is no major research done about "cues to action" construct and it's role is not clearly explored.

Che	Check Your Progress		
2)	Discuss Health Belief Model and its applicability in altering health behaviour of alcohol addict person.		

6.2.2 The Theory of Reasoned Action, Theory of Planned Behaviour and the Integrated Behaviour Model

The Theory of planned behaviour is the most widely cited and applied behaviour theory in the field of public health. It adopts a cognitive approach to explain behaviour that centres on individual attitudes and beliefs. The Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA) which includes an additional construct called 'perceived control over the performance of behaviour'. The Theory of Planned Behaviour was proposed by Icek Ajzen in 1985) and later in 1986 Icek Ajzen and Madden refined it.

In recent years a group of psychologists led by Fishbein have further expanded TRA and TPB to include more components from behaviour theories and have proposed the use of an Integrated Behaviour Model (IBM).

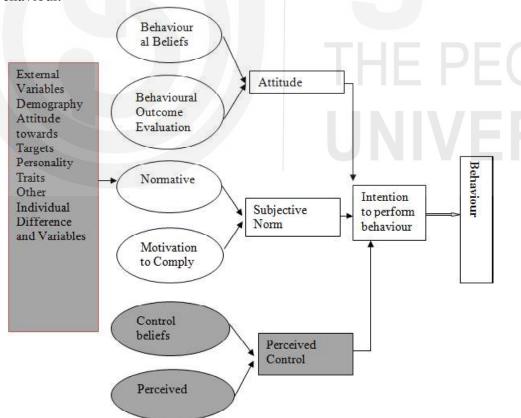
Theory of reasoned Action and the Theory of Planned Behaviour both argue that the best predictor of behaviour is *behavioural intention*. This behavioural intention is shaped by a) attitude towards the behaviour, and b) social-normative perceptions. TRA used these two constructs and later TPB added a third set of factors affecting intention as *perceived behavioural control*. This is the perceived ease or difficulty with which the individual will be able to perform or carry out the behaviour

How attitude towards behaviour is shaped? It is determined by the individual's beliefs about outcomes or attributes of performing behaviour. The health decisions are influenced by a person's view about that action and whether the significant others (like family and friends) would approve it.

These models are very useful to study why some people change health behaviour after health education programmes and why some others do not change. Figure 6.2 represents TRA and TPB thematically.

Key Constructs are:

The individual's attitude, or personal opinion, on whether a specific behaviour is good or bad, positive or negative, favourable or otherwise. The attitude must be specific, since this specificity will allow the prediction in the resulting behaviour.



*Note: Light area shows the TRA and the Entire figure shows TPB

Fig. 6.2: Representing TRA and TPB

(Source: Montano& Kazprzyk TRA , TPB and Integrated Model in the Book Health Behaviour and Health Education Theory, Research and Practice, Ed Glanz.K ,Rimer , B. And Viswanath K, Wiley Imprint , 2008,San Fransisco, $\,pp.70$)

The prevailing subjective norms, or the social pressure arising from other people's expectations, as seen from the individual's point of view. This, in turn, has two components:

The individual's normative beliefs, or what he perceives to be what other people want or expect; and

The individual's motivation, or need, to comply with what other people want or expect.

The perceived behavioural control of the individual, or his perception of his ability to perform a specific behaviour.

An Integrated Behavioural Model

This model integrates the constructs of the TRA and the TPB along with constructs from some other behavioural theories. Apart from the most important component of 'behavioural intention', the integrated model points out four other components that directly affect behaviour.

They are listed as follows:

- 1) Even if a person has a strong behavioural intention, he or she needs knowledge and skills to carry out that behaviour.
- 2) There should be no or few environment constraints.
- 3) Behaviour should be salient to a person.
- 4) Experience of performing the behaviour may make it habitual so that the intention becomes less important.

Box 6.4: Case Study — Integrated Behavioural Model

If a woman has a strong intention to get a mammogram, it is important to ensure that a) she has sufficient knowledge about health care system, b) No environment constraints like lack of transportation or limited clinic hours that prevent her from getting the tests done, c) for an action that is carried out at longer interval (example mammography is generally performed once in a year for screening purpose) the behaviour must also be made salient (cued) so that the woman will remember to carry out her behaviour intention.

6.2.3 The Trans-Theoretical Model and Stages of Change

The Trans theoretical model also known as the Stages of Change (SoC) Model was first developed by James O Prochaska in 1978. This model was first developed based on health behaviour studies on smoking.

Assumptions:

- 1) Stages of behaviour Change: It's a cognitive model of health behaviour that divides individual between first categories that represent different "levels of motivational readiness". The behaviour change is a process that unfolds over time, with progress through a *series of six stages*. These six stages are (i) Pre-contemplation, (ii) Contemplation, (iii) Preparation, (iv) Action, (v) Maintenance, and (vi) Termination.
- 2) The Process of Change is important in SoC model. These are the covert and overt activities people use to progress through stages. (i) Consciousness

Theory and Methods of Public Health

raising, (ii) Dramatic relief (like media campaigning), (iii) Self-revaluation, (iv) Self-liberation, (v) Stimulus control are some of the important process of change.

- 3) Decisional Balance: An individual weigh the pros and cons of change systematically and logically before initiating a behaviour change. Self-efficacy is also the factor that decides the behaviour change. It is the situation specific confidence that the person has that he or she can cope with the situation without any relapse.
- 4) The individuals at the same stage should face similar problems and barriers and thus can be helped by the same type of intervention.
- 5) The movement or transition between these stages is driven by two key factors self-efficacy and decisional balance.
- 6) Relapse: Moving backwards through the stages is common and acceptable.

The Trans-Theoretical Model is showing good results when applied for interventions like substance abuse control programmes. Large number of TTM related intervention studies have focused on smoking cessation. The major limitations of this model is it's complete focus on the self and misses the structural, economic, social and environment factors which affect an individual's ability to change the behaviour. Another limitation is that the model has not shown promising results with children and adolescents because culture specific aspects are not acknowledged/ taken care of.

Box 6.5: Stages of Behavioural Changes-Trans Theoretical Model

Precontemplation: It is the stage in which the person does not intend to take any action in the near term, usually the next six months.

Contemplation: The person intends to take action soon usually within next six months.

Perception: The person intends to take action soon usually within next one months.

Action: The person has taken specific, overt modifications in their lifestyles within the past six months.

Maintenance: It is the stage in which the person has made specific overt modifications in their lifestyle and are working to prevent relapse.

Termination: In this stage the person has zero temptation to relapse and has 100% self-confidence about this.

Box 6.6: Case Study TTM

Let us apply TTM to develop an intervention for an entire high-risk group for cardio-vascular diseases like smokers. The intervention should identify where the person presently located in the stages of behaviour. The programme should help the participant to progress through the stages of change in a systematic manner. The transition from one stage to another should be progressive and smooth. Relapse to previous stage is commonly seen and this should be accepted. A matching process of change should be selected depending upon everyone's interest.



6.3 THEORIES AND MODELS OF INTERPERSONAL HEALTH BEHAVIOUR

These models in general emphasize that interpersonal relationships and interactions influence the individual's cognitions, beliefs and in turn decide behaviour. Contrary to the previous theories (discussed in Section 3) the focus shifted from individual to behaviour itself and the influence of interpersonal relations on the behaviour. We will discuss three important theories here:

- 1) Social Cognitive Theory (SCT)
- 2) Social Networks and Social Support Model
- 3) Stress, Coping and Health Behaviour Model

6.3.1 Social Cognitive Theory (SCT)

This theory was proposed by Albert Bandura 1960s and developed as Social Cognitive Theory in 1986 and the key term proposed is *reciprocal determinism*. The theory argues that, both individuals and their environment interact and influence each other which he termed as reciprocal determinism. This results in changes both at individual and social level. SCT was first known as social learning theory (SLT), later it was renamed as SCT when concepts from cognitive psychology were integrated to accommodate the growing understanding about human information processing. With further developments, SCT has embraced concepts from sociology and political science.

This theory used the following five constructs:

- 1) Psychological determinants of behaviour: This includes outcome expectations and self-efficacy. People act (or behave) in a way to maximise benefits and minimise costs. Self-efficacy is the person's belief about his/her capacity to influence the events that affect his or her life.
- 2) Observational Learning: This is the capacity of a person to observe something and learn-repeat that behaviour. For example, access to family peer and media models determines what behaviour a person is able to observe and learn.
- 3) Environmental Determinants of Behaviour: No amount of observational learning will lead to behaviour change unless the observers' social and physical environment support the new behaviour.
- 4) Self-Regulation: SCT emphasises the human capacity to endure short-term negative outcomes in anticipation of important long-term positive outcomes. Self-regulation does not depend on a person's willpower but instead on his or her acquisition of concrete skills for managing himself/ herself.
- 5) Moral Disengagement: When people learn moral standards for self-regulation this will lead them to avoid violence and cruelty to others.

Application

Social Cognitive Theory provides a comprehensive and well supported conceptual framework to understand many health behaviours and how to alter health

Theory and Methods of Public Health

behaviours. SCT based intervention focuses on changing behaviour by increasing self-efficacy, social modelling, verbal persuasion etc., are the ways in which self-efficacy can be improved. While designing intervention programmes importance is given to the aspects like self-monitoring, self-reward, goal setting, feedback and social support. The advantage is that SCT is very broad and ambitious in that it seeks to provide explanations for virtually all human phenomena. This, broad nature of theory also brings in the limitation that since it is too broad it has not been tested comprehensively. Another problem with SCT based interventions is the constructs are difficult to measure and manipulate.

6.3.2 Social Networks and Social Support Models

The social network and social support-based models assume that social relationships have powerful influence on health behaviours, health status and health decision-making.

Social network refers to the web of social relationships that surround individuals. Social networks give rise to various social functions like social influence, social control, social companionship and most importantly social support. These social networks may or may not provide *social support*. Social networks, through social support provide emotional support, instrumental support, information support and appraisal support.

By 1990s, a new concept, *social capital* has been introduced. Jane Jacobs used this term in her writings to mention about value of networks. In the late 1990s the concept gained popularity, serving as the focus of a World Bank research programme. It refers to certain resources and norms that arise from social networks. Social support is provided consciously. It is always intended to be helpful thus distinguishing it from intentional negative interactions. Enhancing existing social linkages (like training members for skill development), developing new social network linkages (like developing self-help groups, peer groups) and enhancing networks using indigenous natural helpers and community health workers are the health intervention examples based on social network and support model.

Example: There is research evidence that shows, negative interpersonal interactions such as those characterised by mistrust, hassles, criticisms and domination are more strongly related to such factors as negative mood and depression. It also accelerates risky health behaviour like substance abuse.

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3)	Examine the relevance of social network and social support model in altering adolescents' behaviour.	

6.3.3 Stress, Coping and Health Behaviour Model

This model considers stress and the coping skill as the most important determinants of health behaviour. Stress may have a negative physiological effect on health or contribute indirectly to behaviour that are not conducive to good health. For example, smoking might be a way for a person to cope with stress. Interpersonal interactions and communications play a crucial role in helping people copes with stress by providing social support potentially mitigating the impact of stress or providing ways to cope with it.

Transactional Model of stress and coping is a framework for evaluating process of coping with stressful events. Stressful experiences are constructed as *personenvironment transactions*. When faced with a stressor, a person evaluates potential threats or harms (this is termed as *primary appraisal*) as well as his or her ability to alter the situation and manage negative emotional reactions (*secondary appraisal*). Actual coping efforts aimed at problem management and emotional regulation, give rise to *outcomes* of the coping process. Figure 6.3 represents the transactional model of stress and coping in more detail.

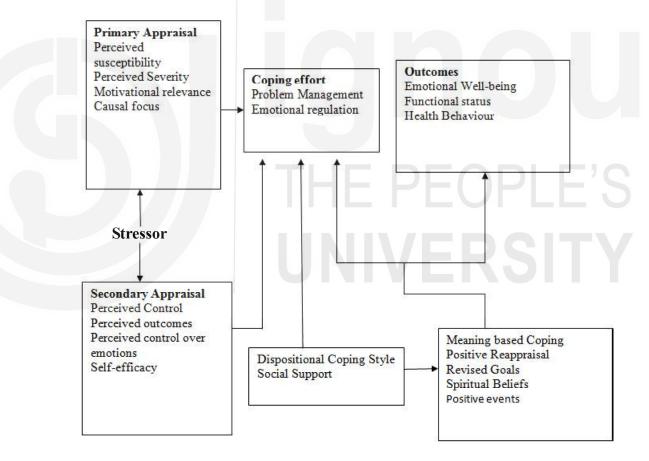


Fig. 6.3: Represents the Transactional Model of Stress and Coping

(**Source:** Prochaska, J., Redding, C and Evers, K. The Trans theoretical Model and Stages of Change, in the Book Health Behaviour and Health Education Theory, Research and Practice, Ed Glanz. K, Rimer, B. And Viswanath K, Wiley Imprint, 2008, San Fransisco, pp.112)

Applicability of transactional model: The transactional model has been applied to public health issues such as the effect of racism on health disparities. Studies examining relationship between perceived racism and hypertension have found positive associations. A variety of techniques to manage stress, improve coping and reduce deleterious effects of stressors on health have been developed. Relaxation strategies, cognitive behavioural stress management etc., are the approaches that are developed from transactional model.

6.4 COMMUNITY AND GROUP MODELS OF HEALTH BEHAVIOUR CHANGE

Groups, organisations and large-scale organisations and communities play a vital role to health improvement. The collective well-being of the communities can be fostered by creating structures and policies that support healthy lifestyles and by reducing or eliminating health hazards. Health concerns like substance abuse, HIV/AIDS, obesity can't be addressed adequately through individual or small group interventions alone. Rather health professionals need to review and health behaviour in the context of large communities and social institutions.

Improving health through 'Community Organisation and Community Building', and 'Diffusion of Innovations' are the main two models in this category.

6.4.1 Diffusion of Innovations

The development of diffusion studies has emerged from works of Rogers (1995) later developed by Wejnert (2002).

Key concepts of the Diffusion of Innovations are the following:

- Diffusion is defined as the overall spread of an innovation. The process by which an innovation is communicated through certain channels over the time.
- 2) Five stages of Diffusion. Any innovation is diffused into a society through five stages viz. Adoption, Implementation, maintenance, sustainability and institutionalisation.
- 3) The following characteristics of innovations affect diffusion: Relative Advantage, Compatibility, Complexity, Triability, Observability.
- 4) Any community has five type of people viz. Innovators, early adopters, early majority, late majority, and laggards. The adoption of ideas and its diffusion in the person is different in the community depending upon which category he or she falls.

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Limitation of the diffusion theory is that it has stressed a lot on pro-innovation orientation. Individual blame bias is another problem of this theory where the individual is held responsible for the problem rather than society or community. The application level of the theory is that when public health professionals plan for some interventions, where the person is located in these five stages has to be located. Similarly, for community level health interventions we need to identify the innovators and early adapters and channelize the communication through them.

Box 6.7: Five Types of People in a Community

Innovators: Introduction of a new idea is always picked up first by this group. They have features like independent, adventure and risk taking. They will come forward to accept any new health behaviour that public health professional introduces.

Early Adopters: They are very interested in the innovation, but they are not the first to sign up. They wait until the innovators are already involved to make sure the innovation is useful. They will be mostly respected people of that community.

Early Majority: They are interested in the innovation but will need external motivation to become involved.

Late Majority: are next and it will take more time to get them involved for they are skeptical and will not adopt an innovation until most people in the community have done so.

Laggards: are not very interested in innovation and would be the last to become involved. They are very traditional and are suspicious of innovations.

Five stages of diffusion of any idea related to health:

Adoption: Uptake of the programme or innovation by the target audience.

Implementation: The active, planned efforts to implement an innovation within a defined setting.

Maintenance: The on-going use of an innovation over time.

Sustainability: The degree to which an innovation or programmes of change is continued

Institutionalisation: Incorporation of the programme into the routines of an organisation or broader policy and legislation.

6.5 SELECTION OF THEORY TO CHOOSE WHILE PLANNING HEALTH INTERVENTIONS

After learning about various theories and models of health interventions, you might be having this question in mind "How to pick one theory over another"? The simple answer to this question is that there is no superior or inferior theory. Some theories are intuitively appealing than others, matching people's naïve ideas of the motivators of health behaviour. Other theories are quite complex and are applicable to specifically health domain. In the absence of a good research-based evidence on which theory is better, researcher and practitioners should

select theories based on their assessment, merits and appropriateness of the theories to the cultural and social context of the targeted group/community. The readers should consider integrating theories from more than one level and using theories to design and evaluate (and also understand) health behaviour interventions.

6.6 **SUMMARY**

Theories that emphasize individual health behaviour have an important role to play in our understanding of how to improve human health. One must nearly always consider the social and community context to understand where beliefs come from and to find ways to change both beliefs and external constraints. Health professionals to consider the nature of the health problem or condition on which they wish to intervene and select the appropriate theory, sometimes employing multiple theories to permit intervention at multiple levels.

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6.8 ANSWERS TO CHECK YOUR PROGRESS

- 1) Health behaviour refers to the actions of individuals, groups and organisations, as well as their determinants, correlates and consequences, including social change, policy development and implementation, improved coping skills and enhanced quality of life. For more details refer sub-section 6.1.2.
- 2) Health belief model explains people's beliefs about the severity of a disease and their susceptibility to it. This belief will influence their willingness to take a prevention action. For more details refer sub-section 6.2.1.
- 3) Social networks, through social support provide emotional support, instrumental support, information support and appraisal support. For more details refer sub-section 6.3.2.
- 4) Any innovation is diffused into a society through five stages viz. Adoption, Implementation, maintenance, sustainability and institutionalisation. For more details refer sub-section 6.4.1.