HUMAN BEHAVIOUR AND HEALTH PROMOTION LINKAGE
HUMAN HEALTH BEHAVIOUR
Human Health Behaviour

- Human behaviour, especially health behaviour, is complex and not always readily understandable.
- Health behaviour, like other behaviour, is motivated by stimuli in an individual’s environment.
- The response to such stimuli may or may not be directly related to health.
Human Health Behaviour -2

- Motivation which leads to health influencing behaviour may also not be related to health per se

- Motivation for health behaviour is dynamic and not static
Types Of Health Behaviour

• Health-directed behaviour
  – Observable acts that are undertaken with a specific health outcome in mind

• Health-related behaviour
  – Those actions that a person does that may have health implications, but are not undertaken with a specific health objective in mind
Types Of Health-related Behaviour -1

• Preventive Health Behaviour
  – action taken when a person wants to avoid being ill or having a problem e.g. a mother takes her child for immunisation

• Illness Behaviour
  – action taken when a person recognises signs or symptoms that suggest a pending illness e.g. a mother gives her child cough medicine after hearing her wheeze
TYPES OF HEALTH-RELATED BEHAVIOUR

• Sick-role Behaviour
  – action taken once an individual has been diagnosed (either self or medical diagnosis) e.g. a mother decides that her child has malaria and takes him to the clinic for treatment
DETERMINANTS OF HEALTH BEHAVIOUR

- Psychological
- Cultural
- Social/Economy
- Environmental
KNOWLEDGE AND BEHAVIOUR
PHASES BETWEEN
KNOWLEDGE & BEHAVIOUR

Knowledge of correct health action
Perception
Interpretation
Salience
Putting the knowledge into action

Source: Adapted from Fishbein & Ajzen 1975.)
• In some cases, knowledge may be sufficient to elicit changes in behaviour, but in other cases it may be neither necessary nor sufficient.

• It should not be assumed that individuals are always knowledgeable about an appropriate health behaviour, but neither should it be assumed that knowledge will guarantee changes in behaviour.
KNOWLEDGE AND BEHAVIOUR

- Where knowledge is deemed important, this should be expressed in terms that are salient to the target audience.
- The transfer of knowledge into action is dependent on a wide range of internal and external factors, including values, attitudes and beliefs.
• For most individuals, the translation of knowledge into behaviour requires the development of specific skills (enabling factors) which may include interpersonal skills.
ATTITUDES, VALUES AND BEHAVIOUR
ATTITUDES, VALUES AND BEHAVIOUR

- An individual’s attitude to a specific action and their intention to adopt it is influenced by:
  - beliefs, motivation which comes from the person’s values, attitudes and drives (instincts), and
  - the influence from social norms
ATTITUDES, VALUES AND BEHAVIOUR

• A belief represents the information a person has about an object or action. It links the object to some attribute.
• Values are acquired through socialization and are those emotionally charged beliefs which make up what a person thinks is important.
ATTITUDES, VALUES AND BEHAVIOUR

- Attitudes are value-ladened social judgements which possess a strong evaluative component

- Attitudes have different components - cognitive (belief), emotional (feeling) and behavioural (predispositions to act)
ATTITUDES, VALUES AND BEHAVIOUR

- Values and attitudes help to explain the knowledge-action gap in many instances.
- Most people are at ease when their knowledge is consistent with their attitude and values.
- If discord arises, the facts are often interpreted (or misinterpreted) so that contradiction between knowledge is removed.
ATTITUDES, VALUES AND BEHAVIOUR

• There is no clear or linear progression from attitudes to behaviour
• Often, attitude change precedes behavioural change
  – Often assumed that changing attitudes to smoking will influence smokers to quit, yet a majority of smokers continue to smoke despite a negative attitude to smoking
ATTITUDES, VALUES AND BEHAVIOUR

• But equally, behaviour change may precede and influence attitudes
  – On the other hand, quitting smoking is often a stimulus for indifferent smokers to develop a negative attitude to smoking
MODELS OF BEHAVIOUR CHANGE
1. THE COGNITIVE DISSONANCE MODEL
   (Festinger-1957)
COGNITIVE DISSONANCE MODEL

• The model holds that inconsistency is a painful or uncomfortable state
• Since dissonance is psychologically uncomfortable, it will motivate an individual to reduce dissonance to achieve consonance
• In addition, the individual will actively avoid situations and information that are likely to increase the dissonance
COGNITIVE DISSONANCE MODEL

• The consequences of this are vital for anyone involved in the process of influence.

• For example, if a respected role model with whom an individual identifies makes a statement or declaration with which the individual disagrees, consonance is achieved by either:
  – (a) changing the belief, or
  – (b) changing attitudes to the respected person.
2. MASLOW’S HIERARCHY OF NEEDS
(Maslow - 1968)
MASLOW’S HIERARCHY OF NEEDS

Basic physiological needs - hunger, thirst and related needs

Safety needs - to feel secure and safe, out of danger

Belongingness and love needs - to affiliate with others, be accepted and being

Esteem needs - to achieve, be competent, and gain approval and recognition

Self-actualization needs - to find self-fulfilment and realise one’s own potential
MASLOW’S HIERACHY OF NEEDS

• Behaviour is motivated by a hierarchy of human needs
• Explains why not everybody responds to the obviously beneficial and well-meaning interventions
• Health needs may be compromised for the sake of satisfaction of low-order needs
3. THE HEALTH BELIEF MODEL
   (Rosenstock and Becker - 1974)
HEALTH BELIEF MODEL

“Two major factors influence the likelihood that a person will adopt a recommended preventive health action

**First** they must feel personally threatened by disease i.e. they must feel personally susceptible to a disease with serious or severe consequences

**Second** they must believe that the benefits of taking the preventive action outweigh the perceived barriers to (and/or cost of) preventive action”
HEALTH BELIEF MODEL (Visual)

**INDIVIDUAL PERCEPTIONS**
- Perceived Susceptibility to Disease “X”
- Perceived Severity of Disease “X”

**MODIFYING FACTORS**
- Demographic variable [age, sex, race, ethnicity, etc.]
- Socio-psychological variables

**PERCEIVED THREAT OF DISEASE “X”**

**PERCEIVED BENEFITS OF PREVENTIVE ACTION**

**PERCEIVED-barriers to PREVENTIVE ACTION**

**LIKELIHOOD OF ACTION**
- Perceived benefits of preventive action
- Perceived barriers to preventive action

**LIKELIHOOD OF TAKING RECOMMENDED PREVENTIVE HEALTH ACTION**

**CUES TO ACTION**
- Mass Media Campaigns
- Advice from others
- Reminder postcard from physician or dentist
- Illness of family member or friend
- Newspaper or magazine article
HEALTH BELIEF MODEL (Detailed)

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived</td>
<td>One’s opinion of chances of getting a condition</td>
<td>Define population(s) at risk based on a person’s features or behaviour.</td>
</tr>
<tr>
<td>Susceptibility</td>
<td></td>
<td>Heighten perceived susceptibility if too low.</td>
</tr>
<tr>
<td>Perceived</td>
<td>One’s opinion of how serious a condition and its sequelae are</td>
<td>Specify consequences of risk and condition.</td>
</tr>
<tr>
<td>Severity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived</td>
<td>One’s opinion of the efficacy of the advised action to reduce risk or</td>
<td>Define action to talk: how, where, when; clarity the positive effects to be</td>
</tr>
<tr>
<td>Benefits</td>
<td>seriousness of impact</td>
<td>expected.</td>
</tr>
<tr>
<td>Perceived</td>
<td>One’s opinion of the tangible and psychological costs of the advised</td>
<td>Identify and reduce barriers through reassurance, incentives, assistance.</td>
</tr>
<tr>
<td>Barriers</td>
<td>action</td>
<td></td>
</tr>
<tr>
<td>Cues to Action</td>
<td>Strategies to activate “readiness”</td>
<td>Provide how-to information, promote awareness, reminders.</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Confidence on one’s ability to take action</td>
<td>Provide training, guidance in performing action.</td>
</tr>
</tbody>
</table>
MODIFIED HEALTH BELIEF MODEL AS APPLIED TO HIV/AIDS PROGRAMME

**Perceived Susceptibility**
Young man has been engaging in sex with multiple partners.

**Perceived Severity**
Young man believes that AIDS is a death sentence since there is no cure.

**Perceived Threat**
Young man believes that he is at risk because friend is ill.

**Cues to Action**
Radio messages explaining the need for safe sex. Peer education on safe sex and HIV.

**Benefits/barriers**
- Condoms are easy to use, one can feel safe
- Condoms not readily available, costly

**Desired Behaviour**
Young man buys and uses condoms regularly.

**Self-efficacy**
Young man has had practice using condoms and feels confident to use them.
4. THE SOCIAL LEARNING OR SOCIAL COGNITIVE THEORY

(Bandura - 1977)
SOCIAL LEARNING THEORY

• The first theory to introduce the notion of self-efficacy
• Theory is based on the belief that behaviour is determined by expectancies and incentives
SOCIAL LEARNING THEORY

• Behaviour is influenced by expectancies about:
  – environmental cues (i.e. beliefs about how events are linked and what leads to what)
  – consequences of one’s actions (i.e. how behaviour is likely to influence outcomes)
  – competency to perform the behaviour needed to influence outcomes (i.e. self-efficacy)
<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocal Determinism</td>
<td>Behaviour changes result from interaction between person and environment; change is bi-directional.</td>
<td>Involve the individual and relevant others; work to change the environment, if warranted.</td>
</tr>
<tr>
<td>Behavioural Capability</td>
<td>Knowledge and skills to influence behaviour.</td>
<td>Provide information and training about action.</td>
</tr>
<tr>
<td>Expectations</td>
<td>Beliefs about likely results of action.</td>
<td>Incorporate information about likely results of action in advice.</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Confidence in ability to take action and persist in action.</td>
<td>Point out strengths; use persuasion and encouragement; approach behaviour change in small steps.</td>
</tr>
<tr>
<td>Observational Learning</td>
<td>Beliefs based on observing others like self and/or visible physical results.</td>
<td>Point out others’ experience. Physical changes’ identity role models to emulate.</td>
</tr>
<tr>
<td>Reinforcement</td>
<td>Responses to a person’s behaviour that increase or decrease the chances of recurrence.</td>
<td>Provide incentives, rewards, praise; encourage self-reward; decrease possibility of negative responses that deter positive changes.</td>
</tr>
</tbody>
</table>
5. THEORY OF REASONED ACTION
(Fishbein and Atzen - 1975)
THE THEORY OF REASONED ACTION

- Proposes that voluntary behaviour is predicted by one’s **intention** to perform the behaviour (e.g. how likely is it that you will take up a quit smoking programme?)

- Intention, in turn, is a function of:
  - **attitude** towards the impending behaviour (do you feel good or bad about quitting?), and
  - **subjective norms** (do most people who are important to you think you should quit?)
THE THEORY OF REASONED ACTION  -2

- Attitude is a function of **beliefs about the consequences of the behaviour** (how important do you think it is to quit?) weighted by an evaluation of the importance of that outcome (how important is it to you to quit?)

- Subjective norms are a function of **expectations of significant others** (does your spouse think you should quit?) weighted by the **motivation to conform** (how important is it to do what your spouse wants?)
• Unlike the Health Belief Model and the Social Learning Theory, this model is based on rationality and does not provide explicitly for emotional ‘fear-arousal’ elements such as the perceived susceptibility to illness.

• Basically more emphasis is put on intention rather than attitudes.
**The Theory of Reasoned Action**

**External Variables**
- Demographic variables: Age, sex, occupation, socio-economic status, religion, education.
- Attitudes towards targets: Attitude towards people, attitudes towards institutions.
- Personality traits: Introversion-extraversion, neuroticism, authoritarianism, dominance.

**Intention**
- Beliefs that the behaviour leads to certain outcomes.
- Evaluation of the outcomes.
- Attitudes towards the behaviour.
- Relative importance of attitudinal and normative components.

**Subjective Norm**
- Beliefs that specific referents think I should not perform the behaviour.
- Motivation to comply with the specific referents.

**Behaviour**

Possible explanations for observed relations between external variables and behaviour.
- Stable theoretical relations linking beliefs to behaviour.
**Personal attitude**  
Young man is afraid of getting AIDS and believes that wearing condoms is good protection.

**Subjective norm**  
*(perceived social pressure)*  
Young man believes that his friends think condoms are not cool.

**Perceived behavioural control**  
Young man feels confident that he can use condoms and handle his sexual drive.

**Behavioural intention**  
Young man indicates a willingness to use condoms regularly and ask for information on where he can obtain them cheaply.

**Desired behaviour taken**  
Young man buys condoms and begins to use them regularly.
6. STAGES OF CHANGE MODEL
(Prochaska and DiClemente -1984)
STAGES OF CHANGE MODEL
(Prochaska J & DiClemente C, 1984)

- **Pre-contemplation**: Not interested in changing ‘risky’ lifestyle
- **Contemplating**: Thinking about change
- **Commitment**: Ready to change
- **Action**: Making changes
- **Maintenance**: Maintaining change
- **Relapse**: Relapsing back
- **Exit**: Maintaining ‘safer’ lifestyle
STAGES OF CHANGE MODEL

• The model identifies a number of stages which a person can go through during the process of behaviour change
• It takes a holistic approach, integrating a range of factors such as the role of personal responsibility and choices, and the impact of social and environmental forces that set very real limits on the individual potential for behaviour change
• It provides a framework for a wide range of potential interventions by health promoters
STAGES OF CHANGE MODEL

- Pre-contemplation stage: The stage which precedes entry into the change cycle. At this stage the person has not considered changing their lifestyle or become aware of any potential risks in their health behaviour.

- Contemplation stage: Although the individual is aware of the benefits of change, they are not yet ready and may be seeking information or help to make the decision. This stage may last a short while or several years.
STAGES OF CHANGE MODEL

• **Commitment stage:** When the perceived benefits seem to outweigh the costs and when the change seems possible as well as worthwhile, the individual may be ready to change, perhaps seeking some extra support.

• **Action stage:** The early days of change require positive decisions by the individual to do things differently. A clear goal, a realistic plan, support and rewards are features of this stage.
STAGES OF CHANGE MODEL

- Maintenance stage: The new behaviour is sustained and the person moves into a healthier lifestyle.

- Relapse stage: Although individuals experience the satisfaction of a changed lifestyle for varying amounts of time, most of them cannot exit from the revolving door first time around. Typically, they relapse back. Of great importance, however, is that they do not stop there, but move back into the contemplation stage.
Stages Of Change Model As Applied To HIV/AIDS Programme

**Precontemplation**
Young man has heard about AIDS but doesn’t think it is relevant to his life.

**Contemplation**
Young man believes that he and his friends are at risk and thinks that he should do something.

**Decision/Determination**
Young man is ready & plans to use condoms so goes to a shop to buy them.

**Maintenance**
Wearing condoms has become a habit and young man regularly buys them.

**Action**
Young man buys and uses condoms.
<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-contemplation</td>
<td>Unaware of the problem hasn’t though about change.</td>
<td>Increase awareness of need for change, personalize information on risks and benefits.</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Thinking about change, in the near future.</td>
<td>Motivate, encourage to make specific plans.</td>
</tr>
<tr>
<td>Commitment</td>
<td>Making a plan to change.</td>
<td>Assist in developing concrete action plans, setting gradual goals.</td>
</tr>
<tr>
<td>Action</td>
<td>Implementation of specific action plans.</td>
<td>Assist with feedback, problem solving, social support, reinforcement.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Continuation of desirable actions, or repeating periodic recommended step(s).</td>
<td>Assist in coping, reminders, finding alternatives, avoiding slips/relapses (as applies).</td>
</tr>
</tbody>
</table>
7. THE DIFFUSION OF INNOVATION THEORY
(Rogers - 1962)
DIFFUSION OF INNOVATION PROCESS

Cumulative number or % of adopters

- Innovators
- Early adopters
- Early majority
- Late majority
- Late adopters

Time

Source: Green & MCAlister 1984.
DIFFUSION OF INNOVATION

- The adoption of ideas in a community diffuses among individuals in that community at varying rates.

- Early in the introduction of a new idea, it is picked up by ‘innovators’ (between 2 and 3% of the target population) who are venturesome, independent, risky and daring. They want to be the first to do things and they may not be respected by others in the social system.
• The second group of people, the ‘early adopters’ (about 14% of the target population) 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 are respected by others in the social system and looked at as opinion leaders.
• The next group ‘early majority’ (about 34% of the target population) may be interested in the innovation but will need external motivation to become involved, They will deliberate for some time before making a decision.

• The ‘late majority’ (also about 34% of the target population) 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 social system have done so.
DIFFUSION OF INNOVATION

- The last group the ‘laggards’ (about 16% of the target population are not very interested in innovation and would be the last to become involved. They are very traditional and are suspicious of innovations. Laggards tend to have limited communication networks, so they really do not know much about new things.
- This situation calls for different strategies for different categories of people and at different stages of the adoption process.
DIFFUSION OF INNOVATION
Time Relapse between awareness, interest, trial and adoption

Source: Green & MCAlister 1984.
DIFFUSION MODEL

PRIOR CONDITIONS
1. Previous practice
2. Felt needs/problems
3. Innovativeness
4. Norms of social systems

COMMUNICATION CHANNELS

Characteristics of the Decision Making Unit:
1. Socio-economic characteristics
2. Personality variables
3. Communication behaviour

Perceived Characteristics of the Innovation
1. Relative Advantage
2. Compatibility
3. Complexity
4. Trialability
5. Observability

1. Adoption
   - Continued Adoption
   - Later Adoption
2. Rejection
   - Discontinuance
   - Continued Rejection
Generally speaking it appears that in order for a person to perform a given behaviour one or more of the following must be true:

1. The person must have formed a strong positive intention (or made a commitment) to perform the behaviour.
2. There are no environmental constraints that will make it impossible to perform the behaviour.
3. The person has the skills necessary to perform that behaviour.

4. The person believes that the advantages (benefits, anticipated positive outcomes) of performing the behaviour outweigh the disadvantages (costs, anticipated negative outcomes).

5. The person perceives more social (normative) pressure to perform the behaviour than to not perform the behaviour.
VARIABLES UNDERLYING BEHAVIOURAL PERFORMANCE - 3

6. The person perceives that performance of the behaviour is more consistent than inconsistent with his or her self image, or that it’s performance does not violate personal standards that activate negative self-actions.

7. The persons emotional reaction to performing the behaviour is more positive than negative; and
8. The person perceives that he or she has the capability to perform the behaviour under a number of different circumstances…”