Section 1

Principles of Health and Illness

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1 Concepts of health

Learning objectives

- Identify models of health and illness, how these have developed over time and how they impact on care delivery.
- Understand the concepts of health and illness and how and why personal definitions of these differ.
- Understand how personal definitions of health and illness influence health-related behaviours.
- Understand the implications of individual definitions of health and illness for assessment, planning, implementation and evaluation of care.

Introduction

This chapter will introduce the concepts of health and illness and their implications for the provision of nursing care. This will include a discussion of how health and illness have been viewed historically in health care, and how they are viewed today. Models of health and illness, which help to explain differences in peoples' explanations and behaviour about health and illness, will also be explained and discussed.

Health and illness

Health and illness are central to nursing practice. As Virginia Henderson stated in 1966:

> *The function of the nurse is to assist an individual sick or well in those activities contributing to health, or its recovery, or to a peaceful death that the individual would perform unaided, if the person had the necessary strength, will, or knowledge, and to do this in such a way as to help the person to independence as rapidly as possible* (Henderson, 1966, p. 15).

From this view, nurses are concerned with the maintenance, improvement and/or support of health and the causes and management of illness. It is, therefore, imperative that they have a good understanding of the concepts of health and illness. Without such knowledge, their ability to practise effectively and to meet the needs of individuals will be compromised.

What is a concept?

There are many variations on the meaning of a 'concept'. Concepts are abstract notions and ideas. Chinn & Jacobs (1983, p. 200) define a concept as: 'A complex mental formulation of an object, property or event that is derived from individual perception and experience'. Meleis (1991, p. 12) defines a concept as: 'A label used to describe a phenomenon or a group of phenomena'. McKenna (1997) explains that concepts are labels, which give meaning, they enable us to categorise, interpret and structure a phenomenon, but they are not the phenomenon itself.

The concepts of health and illness are more complex than they first appear. This is apparent when comparing personal definitions of health and illness with those of others. While many people view health as the absence of disease, others' views may be based on physiological parameters or may reflect their beliefs about quality of life and the model of health they believe in. Adequate understanding about the concepts of health and illness is imperative as both have implications for the assessment, planning, implementation and evaluation of care.

Activity

Consider the following:

- What is your personal definition of health?
- What is your personal definition of illness?

Ask a friend, colleague and family member to share their definitions:

- Do they differ from your own?
- What might be the implications of these definitions in your role as a nurse?

A definition of health

In 1958, The World Health Organisation (WHO) published the following definition of health: '. . . a state of complete physical, mental and social well being and not merely the absence of disease or infirmity'. This definition met with the criticism that health cannot be defined as a state, but that it must be seen as a process of ongoing adjustment to the changing demands of day-to-day life. In 1984, the WHO revised its definition to reflect these views: 'Health is, therefore, seen as a resource of everyday life, not the object of living: it is a positive concept emphasising social and personal resources as well as physical capabilities'. This definition recognises the multidimensional nature of health, which includes physiological, psychological and behavioural components.

A definition of illness

Like health, illness includes physiological, psychological and behavioural components. It is important to distinguish between disease and illness. Disease refers to pathological processes that impair normal bodily functioning. Illness is a socially defined concept about a state of health that differs from what is considered as normal in that community (Harding & Taylor, 2002). Beliefs about what is normal may differ between communities, which means that beliefs about illness will also differ. For example, some communities believe that it is normal (and desirable) to gain weight as this indicates affluence and success, while others view this as a health risk that is not considered normal (and that is undesirable). These beliefs can also differ between individuals. For example, some individuals with a particular disease will not consider themselves to be ill, while others who regard themselves as being ill may not necessarily be suffering from a disease.

Again, like health, illness is a complex concept. Lau (1995) highlights this complexity by defining six dimensions of illness:

(1) Not feeling normal, e.g. 'I don't feel right'.
(2) Specific symptoms: these may be physiological or psychological.
(3) Specific illnesses, e.g. cancer, cold, depression.
(4) Consequences of illness: e.g. 'I can't do what I usually do'.
(5) Duration of symptoms, i.e. how long the symptoms last.
(6) Absence of health, i.e. not being healthy (as compared to 'normal' health).

Personal definitions of health and illness

While there are numerous definitions of health and illness, such as those above, in the literature, these may not reflect the personal definitions. Personal definitions of health vary considerably. They are affected by a number of factors including age, gender, culture, spirituality,

social background and emotional state, as well as health beliefs and health behaviours (Pender *et al.*, 2001; Richards *et al.*, 2003; Schoenberg *et al.*, 2003). Eliciting a person's personal definitions and beliefs about health and illness is fundamental to the provision of individualised care. Without these, it is not possible to plan care that will meet his or her needs. For example, aiming for a patient to run a half marathon after an accident may be appropriate for someone whose definition of health includes a high level of fitness, but may not be appropriate for someone whose definition is based on being able to complete renovations in his/her home.

Activity

Refer back to your definitions of health and illness:

- How do the definitions of health and illness (above) relate to your personal definitions and those of your colleagues and friends?
- What are the main differences between them?
- Consider what might have caused these in light of the different communities you live in or cultures you embrace.

Models of health and illness

Models of health and illness include those factors deemed important in considering health, illness and health care. Despite their implications for health care, which include influences on healthcare professionals' and patients' decisions about health and health care (Wade & Halligan, 2004), models of health and illness are seldom addressed in the health care literature. The two most common models of health and illness – the biomedical model and the biopsychosocial model – are described below.

The biomedical model of health and illness

The biomedical model, which has dominated health care for the past century, is based on three assumptions (Wade & Halligan, 2004):

- illness has a single underlying cause
- disease (pathology) is always the single cause
- removal of the disease will result in a return to health.

The biomedical model has its origins in Darwin's theory of evolution and the biological identity of humans. It is based on the assumption that the mind and body function independently, and that physiological malfunctioning causes ill health, with medicines and/or medical treatments used to correct the malfunction(s) (Harding & Taylor, 2002). It

is a view that is relevant for many disease-based illnesses and is supported by extensive research (see Porter, 1997). The model recognises psychology and other factors, but as consequences of illness, not as causes of illness. In the biomedical model the medical profession is responsible for any treatment, and for an individual's health or illness, although his or her cooperation with these is expected (Wade & Halligan, 2004).

In physical terms, there have been extraordinary gains in health over the past 50 years. For example, life expectancy worldwide increased from 46 years in the 1950s to 65 years in 1995, there has been a substantial decline in infant mortality, the level of childhood immunisation has increased dramatically and access to primary health care, including water and sanitation, continues to improve (WHO, 1998). Despite these improvements, inequalities in health persist and in some cases are increasing (Acheson, 2002; Department of Health, 2002, 2004a, b). These inequalities highlight the need to view health as more than a purely physical or biomedical concept.

The biopsychosocial model of health and illness

The biopsychosocial model of health and illness addresses some of the criticisms about the biomedical model. In contrast to the biomedical model, the biopsychosocial model recognises that social and psychological factors, as well as biological factors, influence a person's beliefs and behaviours in relation to health and illness (Engel, 1977). Dr George Engel created the biopsychosocial model in order to provide a basis for understanding and treating disease, taking into account the patient, his/her social context and the impact of illness on that individual from a societal perspective. The biopsychosocial model builds upon the biomedical model. It distinguishes between the pathophysiological processes that cause disease and the patient's perception of his/her health and the factors affecting it. Biological measures are still seen as important, but they represent only one of the defining factors for the diagnosis and management of disease (Suls & Rothman, 2004; Wade & Halligan, 2004). The biopsychosocial model describes psychological and social effects of disease risk, prevention, treatment compliance, morbidity, quality of life and survival (Lutgendorf & Costano, 2003). Box 1.1 lists the areas in which the two models differ.

Health beliefs and behaviours

Personal beliefs about health and illness are important as they can influence the way individuals respond to health and illness, i.e. their health behaviour (Harding & Taylor, 2002). Health beliefs shape the way individuals behave in response to their experiences of health and illness. Ultimately, this can influence how a patient behaves in response to advice or information about his/her health. An individual's beliefs

Box 1.1 Summary of the differences between the biomedical and biopsychosocial models of health and illness.

- Causes of illness
- Types of treatment
- Responsibility for illness and treatment
- The relationship between health and illness
- The relationship between mind and body
- The role of psychology in health and illness

about health and illness can be understood from the following perspectives:

(1) physiological/physical, e.g. level of fitness or energy;
(2) psychological, e.g. feeling happy or energetic;
(3) behavioural, e.g. eating and sleeping well;
(4) future consequences, e.g. I will live longer;
(5) the absence of something, e.g. illness, disease, symptoms.

Health behaviours have played an increasingly important role in health and illness over the past century. For example, the decline of infectious diseases since the 1800s started prior to the development and use of medication, and a number of diseases in the Western world (e.g. lung cancer, heart disease) are the result of health-related behaviours (e.g. smoking, consumption of fast food) that are not found in other parts of the world.

Models of health behaviour

In order that the basis of health behaviours can be explained, a number of models of health behaviour have been developed. These fall, broadly, into three categories: stage models, cognition models and social cognition models. These models of health-related behaviours are used increasingly to explain the complex interplay of health beliefs that influence an individual's health behaviours. They are helpful in determining the basis for health behaviour and for answering questions such as:

- How do people decide whether or not to exercise regularly?
- What information is most likely to help people give up smoking?

The models provide a framework for healthcare professionals to gain insight into an individual's health beliefs and therefore his or her

perspective of health, illness and the behaviour(s) that result. By doing so they provide a means of meeting individual needs, and of targeting health care to this end.

Stage models

The transtheoretical model

The transtheoretical model (DiClemente & Prochaska, 1982) describes the process an individual goes through in making a change or changes to his or her health behaviour. The model identifies five stages an individual goes through in this process: pre-contemplation, contemplation, preparation, action and maintenance. Sometimes a sixth stage, relapse, is added. While the emphasis here seems to be on the process of change, the model also emphasises the interaction between health beliefs and behaviours. During the process of change, the individual weighs up his or her beliefs, the time required to make the change, any costs and benefits of the change. Box 1.2 illustrates the stages of behaviour change in the transtheoretical model and uses a smoker as an example to illustrate how changes in beliefs influence behaviour.

Cognition models

Cognition models examine the predictors of health behaviours. They developed from subjective expected utility theory (Savage, 1954), which suggests that behaviours result from the individual weighing up the possible costs and benefits of a certain behaviour. For example, a decision to wear sunscreen might be based on an individual weighing up the likelihood of getting sunburnt if he/she doesn't wear sunscreen

Box 1.2 The stages of behaviour change in the transtheoretical model.

(1) ***Pre-contemplation***: in this stage the individual has no intention of making a change to his or her behaviour, e.g. 'I am happy being a smoker'.
(2) ***Contemplation***: in this stage, the individual is considering a change, e.g. 'Perhaps I should give up smoking'.
(3) ***Preparation***: the individual makes small behaviour changes, e.g. 'I will buy lower-tar cigarettes'.
(4) ***Action***: the individual actively engages in the new behaviour, e.g. 'I have stopped smoking'.
(5) ***Maintenance***: sustaining the change over time, e.g. 'I have stopped smoking for 4 months now'.
(6) ***Relapse***: characterised by a return to the original behaviour, e.g. 'I gave up smoking for 3 weeks, but have started again'.

against not getting burnt if he/she does. His or her behaviour will depend on the importance he/she places on not getting burnt. The importance of this to the individual will be determined by his/her health beliefs about the risks of sunburn and skin ageing and cancer, for example.

The health belief model

The health belief model (Rosenstock, 1974; Becker & Rosenstock, 1987) is probably the most widely known model of health behaviour in health care. In this model, health behaviour is seen as the result of a set of five core beliefs held by the individual. Combined with an individual's demographic particulars, such as age, gender and socio-economic group, these five beliefs can both shape and help to predict an individual's health behaviour. The five core beliefs are listed in Box 1.3. Like Box 1.2, a smoker is used as an example to illustrate possible health beliefs in reaching a decision about his/her smoking behaviour.

Together with an individual's demographic details, these five health beliefs combine to influence health behaviour. In some more recent versions of the health belief model, health motivation, perceived control and self-efficacy are added (Rosenstock *et al.*, 1994). By making health beliefs explicit, the model can help nurses and other healthcare professionals understand the reasons for an individual's health behaviours. Gaining an understanding of the beliefs that inform behaviour provides a way of addressing why, for example, an individual is behaving in a certain way, or appears to be ignoring advice about a health problem. Health beliefs that are based on poor or inaccurate information can have important and detrimental effects on health behaviour and therefore on health. Identifying these provides a way of explaining health behaviours, and is the first step to modifying health behaviours. It is important to remember that not all beliefs have the same impact on health behaviour.

Box 1.3 The five core health beliefs included in the health belief model.

(1) ***Susceptibility to illness***, e.g. 'Smoking increases my chances of getting lung cancer'.
(2) ***Severity of illness***, e.g. 'Lung cancer is a serious illness'.
(3) ***Costs involved in carrying out the behaviour***, e.g. 'Stopping will make me put on weight'.
(4) ***Benefits involved in carrying out the behaviour***, e.g. 'Stopping will save me money'.
(5) ***Cues to action (may be internal)***, e.g. 'My friend has just been diagnosed with cancer'.

Box 1.4 Health beliefs that combine to shape behavioural intentions.

- ***Attitude towards a behaviour***: comprised of both a positive or negative evaluation of the particular behaviour and beliefs about the outcome of the behaviour.
- ***Subjective norm***: comprised of the perception of social norms and pressure to perform a behaviour, and evaluation of whether the individual is motivated to comply with this pressure.
- ***Perceived behavioural control***: comprised of a belief that the individual can carry out a particular behaviour based upon a consideration of internal control factors and external control factors, both of which relate to past behaviour.

Social cognition models

Social cognition models examine the factors that predict behaviour and/or intended behaviour and, in addition, examine why individuals fail to maintain a behaviour to which they are committed. They developed from social cognitive theory, which was developed by Bandura (1977, 1986).

The theory of planned behaviour

The theory of planned behaviour (Ajzen, 1985), which developed from the theory of reasoned action (Ajzen & Fishbein, 1980), emphasises intended behaviour as the result of a number of health beliefs. These health beliefs, listed in Box 1.4, combine to shape intended behaviour – referred to as behavioural intentions in the theory.

Responses to illness or the threat of illness

When considering an individual's health beliefs and behaviours it is often useful to have information about the way he/she copes with illness or the threat of illness, or at least to be prepared for their responses.

Illness cognitions

Illness cognitions are an individual's implicit beliefs about his/her illness. They provide a framework from which to understand how individuals identify, perceive, cope and behave (Leventhal *et al.*, 1980, 1997). There are five cognitive dimensions of these beliefs; these are listed in Box 1.5.

Box 1.5 Five cognitive dimensions of illness.

(1) ***Identity***: the name of the disease/diagnosis and the symptoms.
(2) ***Perceived cause***: may be biological, psychosocial.
(3) ***Time line***: how long will it last; acute or chronic.
(4) ***Consequences***: limiting consequences, e.g. physical, emotional, financial and those of treatment.
(5) ***Curability and controllability***: e.g. cancer versus the flu, control by the individual or by others.

The way an individual responds to an illness will be affected, to some extent, by the way he or she interprets these dimensions. For example, an individual who believes that an illness will last only a short time might respond differently to an individual who believes that the illness is long term. Part of a nurse's role is to understand how an individual has interpreted these dimensions. This allows any misguided perceptions to be addressed. As stated previously, health beliefs that are based on poor or inaccurate information can have important and detrimental effects on health behaviour and therefore on health. Chapter 2 will discuss how individuals' beliefs about health can affect their health behaviours.

Summary

- While definitions of health and illness can be found in the literature, individual definitions vary substantially and are affected by a number of social, cultural and other factors.
- The two most common models of health and illness are the biomedical model and the biopsychosocial model.
- The view that health is a multidimensional concept and includes physiological, psychological and behavioural components has gained increasing support in recent years.
- Health beliefs shape the way an individual behaves in response to his/her experiences of health and illness.
- It is important for nurses to understand the health beliefs of individuals in their care.
- There are a number of models of health behaviour, which are based on health beliefs. These include: the health belief model, the transtheoretical model and the theory of planned behaviour.
- The way an individual responds to an illness, or the threat of an illness, is also affected by the way he or she interprets the five cognitive dimensions of illness.

References

Acheson, D (1998) *Independent Inquiry into Inequalities in Health Report – Acheson Inquiry*. Available at http://www.archive.officialdocuments.co.uk/document/doh/ih/ih.htm

Ajzen, I (1985) From Intentions to Actions: A theory of planned behaviour. In: Kulh, J & Beckman, J (eds) *Action Control From Cognition to Behaviour*. Springer, New York. pp. 11–39.

Ajzen, I & Fishbein, M (1980) *Understanding Attitudes and Predicting Social Behaviour*. Prentice Hall, Englewood Cliffs, New Jersey.

Bandura, A (1977) *Social Learning Theory*. Prentice Hall, Englewood Cliffs, New Jersey.

Bandura, A (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice Hall, Englewood Cliffs, New Jersey.

Becker, M H & Rosenstock, I M (1987) Comparing social learning theory and the health belief model. In: Ward, W B (eds) *Advances in Health Education and Promotion.* JAI Press, Greenwich.

Chinn, P L & Jacobs, M K (1983) *Theory and Nursing: A Systematic Approach*. Mosby. St. Louis.

Department of Health (2002) *Tackling Health Inequalities: Summary of the 2002 Cross-Cutting Review*. Available at www.hmtreasury.gov.uk/media//EEDDE/Exec%20sumTackling%20Health.pdf

Department of Health (2004a) *NHS Improvement Plan: Putting People at the Heart of Public Services*. Available at http://www.dh.gov.uk/assetRoot/04/08/45/22/04084522.pdf

Department of Health (2004b) *Tackling Health Inequalities: A Programme for Action*. Available at http://www.dh.gov.uk/assetRoot/04/01/93/62/04019362.pdf

DiClemente, C C & Prochaska, J O (1982) Self-change and therapy change of smoking behaviour: a comparison of processes of change in cessation and maintenance. *Addictive Behaviours* 7: 133–42.

Engel, G (1977) The need for a new medical model: a challenge for biomedicine. *Science* 196 (4286): 129–36.

Harding, G & Taylor, K (2002) Health, illness and seeking health care. *The Pharmaceutical Journal* 269: 526–8.

Henderson, V (1966) *The Nature of Nursing: A Definition and its Implications, Practice, Research and Education*. Macmillan, New York.

Lau, R R (1995) Cognitive representations of health and illness. In: Gochman, D (ed.) *Handbook of Health Behaviour Research*, Vol. 1. Plenum, New York.

Leventhal, H, Meyer, D & Nerenz, D (1980) The common sense representation of illness danger. In: Rachman, S (ed.) *Contributions to Medical Psychology*. Pergamon Press, Oxford. pp. 7–30.

Leventhal, H, Benyamini, Y, Brownlee, S, Diefenbach, S, Leventhal, E A, Patrick-Miller, P & Robitaille, C (1997) Illness perceptions: theoretical foundations. In: Petrie, K J & Weinman, J (eds) *Perceptions of Health and Illness.* Harwood, London. pp. 19–46.

Lutgendorf, S K & Costano, E S (2003) Psychoneuroimmunology and health psychology: an integrative model. *Brain, Behavior, and Immunity* 17: 225–32.

McKenna, H (1997) *Nursing Theory and Models*. Routledge, Abingdon.

Meleis, A I (1991) *Theoretical Nursing: Development and Progress*, 2nd edition. Lippincott, Philadelphia.

Pender, N J, Murdaugh, C L & Parsons, M A (2001) *Health Promotion in Nursing Practice*, 4th edition. Appleton & Lange, Stamford, Connecticut.

Porter, R (1997) *The Greatest Benefit to Mankind. A Medical History of Humanity from Antiquity to the Present.* Harper Collins, London.

Richards, H M, Reid, M E & Watt, G C M (2003) Victim-blaming revisited: a qualitative study of beliefs about illness causation, and responses to chest pain. *Family Practice* 20 (6): 711–16.

Rosenstock, I M (1974) The health belief model and preventative health behaviour. *Health Education Monographs* 2: 354–86.

Rosenstock, I, Strecher, V & Becker, M (1994) The health belief model and HIV risk behaviour change. In: DiClemente, R J & Peterson, J L (eds) *Preventing AIDS: Theories and Methods of Behavioral Interventions*. Plenum Press, New York. pp. 5–24.

Savage, L J (1954) *The Foundations of Statistics*. John Wiley & Sons, New York.

Schoenberg, N E, Peters, J C & Drew, E M (2003) Unravelling the mysteries of timing: women's perceptions about time for treatment for cardiac symptoms. *Social Science and Medicine* 56: 271–84.

Suls, J & Rothman, A (2004) Evolution of the biopsychosocial model: prospects and challenges for health psychology. *Health Psychology* 23 (2): 119–25.

Wade, D T & Halligan, P W (2004) Do biomedical models of illness make for good healthcare systems? *British Medical Journal* 329: 1398–404.

World Health Organisation (1958) *Constitution of the World Health Organisation*, Annex 1. WHO, Geneva.

World Health Organisation (1984) *Report of the Working Group on Conception and Principles of Health Promotion*. WHO, Copenhagen.

World Health Organisation (1998) *The World Health Report 1998. Life in the 21st Century: A Vision For All.* WHO, Geneva.