Prochaska and di clemente stages of change

The transtheoretical model of change is one of several models of health promotion used by health care professionals in an effort to recognise and foresee health behaviours. The model is supported by various authors as a successful tool and framework within health education. (Warner 2003) This assignment will introduce the model and briefly discuss its input to health promotion together with further developments since its beginning. A concise account of its use in present health education will be given and referred to where applicable. The assignment will go on to discuss the relevance of the transtheoretical model of change within nursing practice and provide an understanding of the model by explaining the main theories. In addition the assignment will discuss and provide further information on what areas impact on how the model is used and why.

Further discussion will take account of the strength of the approach used by this model and include theories on why it is used giving consideration to the patient as well as the health care professional. It is recommended that successful health education models can be used to asses goals in order to engage in pre-emptive behaviour and consequently it is crucial that the model is explained in order to take full advantage of its use. (Downie et al. 1997, Ogden 2004)

The approach will be investigated in order that the reader can form an opinion on its use and why it is needed within health education. It is acknowledged that nursing and health care practice should be established on the most current and reliable research available and nurses must practice in partnership with equally the patient and other health authorities (NMC 2008). The writer hopes to establish the reader with the necessary

information that satisfies these requirements and gives further discussion on how the transtheoretical model of change can be applied to clinical practice. This will include criticisms and challenges against the model and look at how the model is included within broader professional health care such as current health promotion campaigns.

Finally a conclusion will be provided which will summarise the findings of this assignment and emphasise any significant features that add to the validity of the model and its use within health care.

The transtheoretical model of change was developed by Prochaska and Di Clemente (1983) and grew from systematic integration of more than 300 theories of psychotherapy, along with analysis of the leading theories of behaviour change (Prochaska and Velicer, 1997). Consequently following the inception of public- health programmes this model has been implemented and is used within current health promotion. (Wood 2008)

Health promotion is defined by the World Health Organisation (WHO 1986) as " the process of enabling people to increase control over, and to improve, their health". Health education is considered an approach of health promotion which also includes many theories, beliefs and concepts in regards to effective intervention. (Tones 2001)

The transtheoretical model of change focuses on the decision-making abilities of the individual rather than the social and biological influences on behaviour as other approaches tried (Velicer, Prochaska, Fava, Norman, and Redding, 1998; Scholl, 2002).

This model was developed to provide a framework for understanding how individuals change their behaviours and for considering how ready they are to change their substance use or other lifestyle behaviour. The stages and processes by which people change seem to be the same with or without treatment these include the individual’s perceptions of susceptibility to illness, severity of illness, barriers to changing behaviour, benefits to changing behaviour and finally action and maintenance. Although the model has been adapted and modified to include further components for the purpose of this assignment it is necessary to explain the theory behind the original before discussing modifications. (Ogden 2004, Bennett and Murphy 1997, Naidoo and Wills 2000)

In addition it is suggested that by using these concepts in the transtheoretical model of change it will predict the likelihood that behaviour will or will not change depending on the individuals perception.

The idea of anticipating behaviour and therefore adjusting intervention is supported by various researchers who suggest that using cognitive models can assist in how individuals perceive health by conscious thought as to the behaviours and the cost of those behaviours. (Yarbrough and Braden 2001, Roden 2004a, Wood 2008)

This supports healthcare professionals to allow the patient to change behaviours based on their own awareness as opposed to medical tactics to health promotion that have been used previously. Ewles and Simnett (2003) recommend that using a client centred approach empowers the patient to change behaviour and independently manage behaviour and as a result the

health care professional becomes a facilitator instead of an instructor. Using a client centred approach does not discount the benefits of the medical approach as it may require various tactics depending at what stage of the model the individual is identified as being at. However by using an effective health promotion model, it encourages the patient to become an active participant and more responsible for their health related decisions.

Ogden (2004) describes the concept of an individual's perception of control on their health as the " Health locus of control" which will be discussed later within this assignment. Based on the understanding of individual perceptions influencing behaviour it reinforces the use of the components previously discussed and by looking at these separately it is hoped that health care professionals will be able to detect the risks of behaviour and the probability of change. (Naidoo and Wills 2000, Ogden 2004)

The previous mentioned components can be identified in the Transtheoretical model of change; these include pre-contemplation, contemplation, action, and maintenance. However the aspect that makes the transtheoretical model of change unique is the theory that change occurs over time, an aspect generally ignored by other models of change (Prochaska and Velicer, 1997; Velicer et al., 1998; Scholl, 2002).

This temporal dimension of the theory suggests that an individual may progress through five stages of change when trying to adjust their behaviours (Prochaska and Di Clemente, 1983; Prochaska et al., 1992; Prochaska and Velicer, 1997). In the transtheoretical model of change, behaviour change is treated as dynamic, rather than an all or nothing

phenomenon. This distinction is considered one of the theory’s strengths (Marshall and Biddle, 2001).

The first stage of change within the transtheoretical model of change is the precontemplation stage, where individuals have no intention of taking action within the next six months (Prochaska et al., 1992; Prochaska and Velicer, 1997; Scholl, 2002). Individuals at this stage may or may not be aware of the consequences of their behaviour (Prochaska et al., 1992; Scholl, 2002) or may have tried to modify/change their behaviour and failed several times and as a consequence are dejected and unwilling to have another attempt (Prochaska and Velicer, 1997).

Prochaska et al (1992) propose that the main characteristic of someone in the precontemplation stage is that they struggle to accept that they have problem behaviour and as such they cannot move on from this particular stage of the model. In order for the individual to move on they must experience cognitive dissonance which is acknowledging that there are negative aspects to continuing with this behaviour (i. e. smoking and the possibility of contracting lung cancer as a result) (Scholl, 2002).

Following on from precontemplation, contemplation is the individual trying to make significant changes within another six month period, this includes evaluating any benefits or disadvantages to the individual changing their behaviour (i. e. cost of smoking, as opposed to loss of social activity) as a consequence many people stay within this stage for longer (Patten et al., 2000; Prochaska et al., 1992; Prochaska & Velicer, 1997; Velicer, 1997; Velicer et al., 1998). Therefore the behaviour may seem more attractive than

the change needed to be made (Scholl, 2002). This is known as chronic contemplation or behavioural procrastination (Prochaska and Velicer, 1997).

Whilst within this phase the individual will still continue with the risky behaviour despite being aware of the consequences that this behaviour could cause (Patten et al., 2000).

However it is widely accepted that someone within the contemplation stage is genuinely trying to resolve their problem behaviour (Prochaska et al., 1992) and as a result will only move on to the next stage when the positive aspects of change outweigh the negative aspects of remaining the same (Scholl, 2002).

Preparation proceeds contemplation and in this area of change the time scale for the individual to modify their behaviour reduces to within the next month (Patten et al., 2000; Prochaska et al., 1992; Prochaska and Velicer, 1997; Velicer et al., 1998).

An individual in this stage has tried to change or adjust their behaviour within the last year and has been unsuccessful however this has not discouraged them from continuing to i. e. binge drinking, smoking, or misuse of drugs. As a result of this the individual is at a loss as to how to proceed with any changes and if they are ultimately able to make these changes given that they have up until now failed (Scholl 2002).

In this instance a plan of action can be produced by the healthcare professional in order to identify how to reduce or eliminate the problem behaviour and therefore give the person the opportunity to choose between

alternative solutions i. e. smoking 10 cigarettes as opposed to 40 cigarettes a day or to stop smoking with the help of nicotine patches (Prochaska et al., 1992; Prochaska and Velicer, 1997; Velicer et al., 1998).

Consequently when an individual feels confident and in control of the situation and has identified a suitable plan of action they will naturally move on to the next stage of the model (Scholl, 2002).

The action stage follows on from preparation and as a result efforts have been made to adjust the individuals, behaviours, experiences, or environments over the previous six months in order to conquer their predicament. This stage requires a considerable amount of time and energy and is the stage where the individual receives the most amount of attention from others because of their obvious hard work (Patten et al., 2000; Prochaska et al., 1992).

However it should be noted that research has stated not to mistake trying to change with actual change, this only occurs when the criteria is reached for the individual and will reduce the risks associated with their particular problem behaviour (Prochaska et al., 1992; Prochaska and Velicer, 1997; Velicer et al., 1998).

Prochaska, DiClemente, and Norcross (1992) suggest that the main ways of identifying a person within the action stage is by the individuals obvious lifestyle changes i. e. healthy eating and documented weight loss to a more acceptable criterion level.

Progress into the final stage happens when the individual perceives positive changes to their lifestyle, health and as a result feels better whilst also receiving encouraging feedback from family, friends and health professionals (Scholl, 2002).

Lastly the transtheoretical models maintenance stage is where people work to prevent a relapse and only after six months of being free of the problem behaviour can it be recognised as the criteria of an individual being within the maintenance phase.

Research also recognises that maintenance is a continuation of change not an absence of it (Patten et al., 2000; Prochaska et al., 1992; Prochaska and Velicer, 1997; Velicer et al., 1998).

Consequently individual perception is referred to the threat of illness and modifying factors can be referred to as behavioural response. In addition the likelihood of action is influenced by environmental cues. As a result the behaviour change occurs because of a threat to illness and therefore the behaviour changes or is adapted.

Mc Clanahan et al. (2007), Warner (2003) and Clark (2000) all describe the threat as an individual’s susceptibility to illness or disease. If an individual believes they are open to the illness or disease they may identify this as a danger to their health. This is only applicable if there is a significant risk factor such as smoking, diet, alcohol or drugs misuse. If an individual does not take into consideration their own vulnerability then it is unlikely that the transtheoretical model of change will be successful in predicting associated behaviour.

Ogden (2004) suggests that perceived susceptibility can not be used as an effective predictor of behaviour change. Furthermore consideration must be applied to adolescents who are more likely to expose themselves to risks but be less aware of the consequences to their associated health.

Naidoo and Wills (2000) suggest that health promotion can be challenging when dealing with young people in regards to risk behaviour as risk taking is essentially a part of adolescence. On the other hand it is usually accepted that if an individual perceives themselves to be vulnerable to a disease (i. e. lung disease from smoking) they will also consider the severity of that disease. (Daddario 2007, Simsekoglu and Lajunen 2007)

The perception of severity or seriousness of a disease is subjective depending on the individuals understanding of the potential threat. Browes (2006) refers to the variance of perceived severity in relation to sexual health. The severity can vary from the belief that most diseases can be treated to the belief that sex can result in contracting potentially fatal diseases such as HIV.

Therefore it may be necessary for the health care professional to encourage learning in relation to the severity of conditions in relation to the susceptibility. Finfgeld et al (2003) outline that to facilitate learning effectively it may be necessary for the health care professional to apply a more direct attitude which would involve the nurse addressing the increase of behaviour (susceptibility) as well as identifying potential risks (severity).

However with this intervention the approach becomes nurse led as opposed to patient led which may compromise empowerment and likelihood that risk

behaviour will return when the intervention is reduced. As a result the delivery of the necessary information to the patient may result in feeling of fear or guilt. Although it is suggested that fear and guilt can be effective in changing behaviours , it is criticised as it does not change behaviour long term and can contribute to feelings of denial and therefore affect the relationship between both patient and healthcare professional. (Naidoo and Wills 2000)

Based on perceived susceptibility and severity the transtheoretical model of change believes that behaviour change will take place if the benefits outweigh the barriers to changing behaviours.

However it is expected that potential benefits may be small compared to the barriers that prevent changes to behaviour. (Daddario 2007)

Then again as previously discussed the transtheoretical model of change has had several modifications made to it in order to maximise its use within healthcare in order to apply it to other more complex health conditions.

The psychologists who developed the stages of change theory in 1982 did so in order to compare smokers in therapy and self-changers along a behaviour change continuum. The idea behind this was to allow health care professionals to adapt a plan of action for each individual and as a result their therapy would be tailored to their particular needs. This process was then added to by a fifth component (preparation for action) as well as ten processes that help predict and motivate individual movement across the stages of the continuum. In addition, the stages are no longer considered to

be linear; but are components of a cyclical process that varies for each individual (Diclemente and Norcross 1992).

Used correctly and by incorporating the various modifications to the model, it is recognised that the transtheoretical model of change can assist health care professionals in health education. However as a psychological theory, the stages of change focuses on the individual without assessing the role those structural and environmental issues may have on an individual's ability to enact behaviour change. In addition, since the stages of change presents a descriptive rather than a causative explanation of behaviour, the relationship between stages is not always clear. Consequently each stage of change may not be appropriate for characterising every population. An example of this would be the study of sex workers in Bolivia which highlighted that very few of the participants were actually in the precontemplative, contemplative stages with regards to using condoms with their clients (Posner, 1995).

However mass media campaigns can motivate individuals to change behaviours by highlighting the benefits of safer sex by the use of condoms. The use of positive messages as opposed to negative messages within mass media campaigns increases the likelihood of retaining the relevant information for longer. (Bennett and Murphy 1997)

Naidoo and Wills (2000) also suggest individuals may have personal experiences of illness and disease within their family or friend network therefore this will influence how the benefits are perceived. These modifying

factors will influence the likelihood of action and therefore determine if behaviour will change.

As a result research conducted by Charron-Prochonwnik et al. (2001) found that changes to individual sexual behaviour correlated to the consideration of modifying factors such as social support, culture and positive attitudes resulting in safer behaviour.

Additionally there are other features of the Transtheoretical Model of Change that are not easily applied to non-addiction type clinical problems. Howarth (1999) noted that the application of Transtheoretical Model of Change has promise in the field of eating behaviours but the translation is made difficult because the goal of smoking intervention is cessation whereas eating interventions is reducing intake of some foods and increasing the intake of others. Also in smoking interventions the main aim is to stop and is clearly understood by everyone. However in eating interventions the main aims are not so easily understood.

Whereas in smoking research the outcome variables are reasonably simple compared to eating research where outcomes are more complex and the results variable. Ultimately smoking interventions target one behaviour whereas eating interventions focus on multiple behaviours. Furthermore there is the degree of difficulty in discontinuing smoking in the initial stages but as time progresses things get easier for the individual whereas eating more healthily can be easy at first but hard to maintain. Moreover when smoking discontinues it produces immediate physiological changes but

eating interventions in the early stages only produce distant and subtle changes.

As a result behaviour change will not only be on the basis of potential benefits but may also be subject to internal and external cues. As previously mentioned campaigns can promote changes to behaviour and this would be considered an external cue, the individual is motivated by the message that is projected. (Naidoo and Wills 2000) However internal cues may also influence behaviour, this may be a change in physical health or psychological wellbeing which encourages the individual to ask for help from health care professionals.

Daddario (2007) suggest that internal cues are most likely to change behaviour in individuals that are over weight. Clarke et al, (2000) further suggest that with the incorporation of self-efficacy, health models can be more effective in predicting behaviours; this concept was developed by Bandura (1977) and can be described as an individual’s confidence in their ability to complete a task.

Finfgeld et al. (2003) also acknowledge that nurses can promote self-efficacy alongside models of health by reinforcing the importance of the contribution of individual capability in changing behaviours and can be used within educational and client centred approach to health education.

In addition to self-efficacy Hughes (2004) considers the concept locus of control in order to maximise the use of various models of health. Locus of control refers to how the individual perceives control over their life and physical health. An individual’s beliefs may be based on the idea that their

health is subject to internal actions such as diet, lifestyle and as a result able to be changed. However in contrast others may believe that health is subject to external factors such as bad luck or fate.

Just as important is the belief that religion and culture can contribute to the belief that health is predetermined and therefore cannot be influenced by behaviour changes. (Niven 1994, Naidoo and Wills 2000)

Consequently Syx (2008) suggests effective questioning technique to establish where an individual places the locus of control, which should then determine how likely they are to engage in health education behaviours.

In conclusion despite conflicting evidence for the transtheoretical model of change Macnee & McCabe (2004) do not have conceptual concerns regarding this, but question the applicability of the model to specific populations. Sutton (2001) also suggests that there are some serious problems with the existing methods used to measure the stages of change. For example, stage criteria are not consistent across studies that use the approach. Some studies do not include questions about past attempts to change, and various time frames are used as reference points which alter distribution of people across stages (Lerner, 1990; Nigg et al., 1999; Stevens & Estrada, 1996; Weinstein et al., 1998).

Finally, Littell and Girvan (2002) suggest that a continuous model of readiness for change may be more integrated with related concepts from other theories.

It is also documented that healthcare professionals be able to distinguish readiness for change from readiness to participate in particular treatments, and that change may come about quickly as a result of life events, or external pressures. Accordingly at this time there is an increase in the number of studies criticising the model over conceptual, methodological analytic concerns. On the other hand there is an equal amount of evidence supporting the model, verifying the constructs, and showing support for application to modifying health behaviour.

Therefore the benefit of understanding this model and maximising it to its full potential can support nurses and other health care professionals to practice in accordance to guidelines set out by both clinical and academic bodies. The NMC (2008) outline the responsibilities of nursing professionals to work in a professional manner and ongoing research provides evidence in how the model can be used with modifications to suit different needs. (Roden 2004a, 2004b)

REFERENCE LIST

Bandura, A. (1977) “ Self-efficacy; toward a unifying theory of behavioural change”. Psychology Review, Vol. 84, no. 2, pp. 191-215

Bennett, P., Murphy, S. (1997) Psychology and health promotion, Open University Press: Buckingham.

Browes, S. (2006) “ Health psychology and sexual health assessment”. Nursing Standard, Vol. 21, no. 5, pp. 35-39

Charron-Prochownik, D., Sereika, S., M., Becker, D., Jacober, S., Mansfield, J., White, N., Hughes, S., Dean-McElhinny T., Trail, L. (2001) “ Reproductive health beliefs and behaviours in teens with diabetes: application of the expanded health belief model. Paediatric Diabetes, Vol. 2, no. 1, pp. 30-39

Clark, A. V., Hildegarde, L., Williams, A., Macpherson M. (2000) “ Unrealistic optimism and the health belief model”. Journal of Behavioural Medicine, Vol. 23, no. 4, pp. 367-376

Daddario, D. (2007) “ A review of the use of the health belief model for weight management”. Medsurg Nursing, Vol. 16, no. 6, pp. 363-366

DiClemente, C., Prochaska, J. (1982) Self-change and therapy change of smoking behaviour: A comparison of processes of change in cessation and maintenance. Addictive Behaviours, Vol. 7, pp. 133-142.

Downie, R., S., Tannahill, C., Tannahill, A., (1996) Health Promotion Models and Values, Oxford University Press: Oxford.

Ewles, L., Simnett, I. (2003) Promoting health: a practical guide, 5th ed., Balliere Tindall: Edinburgh.

Finfgeld, D. L., Wongvatunyu, S., Conn, V. S., Grando, V. T., Russell, C. L., (2003) “ Health belief model and reversal theory: a comparative analysis”. Journal of Advanced Nursing, Vol. 43, no. 3, pp. 288-297

Hughes, S. A. (2004) “ Promoting self-management and patient independence”. Nursing Standard, Vol. 19, no. 10, pp. 47-52

Lerner, C. (1990) The transtheoretical model of change: Self-change in adolescent delinquent behaviours. Psychology. Kingston, RI, University of Rhode Island.

Littell, J. H., Girvan, H. (2002) Behaviour modification. Available from. http://www. bmo. sagepub. com

Macnee, C., McCabe, S. (2004) The Transtheoretical model of behaviour change and smokers in southern Appalachia. Nursing Research, Vol. 53, no. 4. pp. 243-250

Marshall, S., Biddle, S. (2001) The Transtheoretical model of behaviour change: A meta-analysis of applications to physical activity and exercise. Annals of Behavioural Medicine, Vol. 23, no. 4, pp. 229-246

McClannahan, C., Shelvin, M., Adamson, G., Bennett, C., O'Neill, B. (2007) " Testicular self-examination. A test of the health belief model and the theory of planned behaviour". Health Education Research, Vol. 22, no. 2, pp. 272-284

Naidoo, J., Wills, J. (2000) Health promotion foundations for practice, 2nd ed., Bailliere Tindall: Edinburgh.

Nigg, C. R., Burbank, P. M., Paddula, C., Dafresne, R. (1999) The Gerontologist. Available from. http://www. oxfordjournals. org

Niven, N. (1994) Health psychology: an introduction for nurses and other health care professionals, 2nd ed., Churchill Livingstone: Edinburgh.

Nursing and Midwifery Council. (2008) Standards of conduct, performance and ethics for nurses and midwives, Nursing and Midwifery Council: London.

Ogden, J. (2004) Health Psychology A Textbook, 3rd ed., Open University Press: Maidenhead.

Patten, S., Vollman, A., Thurston, W. (2000) “ The utility of the transtheoretical model of behaviour change for HIV risk reduction in injection drug users”. Journal of the Association of Nurses in AIDS care, Vol. 11, no. 1, pp. 57-66

Prochaska, J., DiClemente, C. (1983) Stages and processes of self-change of smoking: Toward an integrative model of change. Journal of Consulting and Clinical Psychology, Vol. 51, no. 3, pp. 390-395

Prochaska, J., DiClemente, C., Norcross, J. (1992) In search of how people change: Applications to addictive behaviours. American Psychologist, Vol. 47, no. 9, pp. 1002-1114

Prochaska, J., DiClemente, C., Velicer, W., Ginpil, S., Norcross, J. (1985) Predicting change in smoking status for self-changers. Addictive Behaviours, Vol. 10, pp. 395-406

Prochaska, J., Velicer, W. (1997) The Transtheoretical model of health behaviour change. American Journal of Health Promotion, Vol. 12, no. 1, pp. 38-48

Roden, J. (2004a) “ Revisiting the health belief model: nurses applying it to young families and their health promotion needs”. Nursing and Health Science, Vol. 6, no. 1, pp. 1-10

Scholl, R. (2002) The transtheoretical model of behaviour change. Available from. http://www. cba. uri. edu/Scholl/Notes/TTM. html

Stevens, S. T., Estrada, A. L. (1996) Journal of Drug Issues. http://www. ncjrs. gov

Sutton, S. (2001) Back to the drawing? A review of applications of the transtheoretical model to substance abuse. Addictions, Vol. 96, pp. 175-186

Syx, R., L. (2008) “ The practice of patient education. The theoretical perspective”. Orthopaedic Nursing, Vol. 27, no. 1, pp. 50-54

Tones, K. (2001) “ Health promotion: The empowerment imperative”. In Scriven, A., Orme, J. (ed) Health Promotion professional perspectives, 2nd ed., Palgrave: New York. pp. 3-16

Velicer, W., Prochaska, Fava, j., Norman, G., Redding, C. (1998) Smoking cessation and stress management: Applications of the Transtheoretical Model of behaviour change. Homeostasis, Vol. 38, pp. 216-233

Warner, P. (2003) “ Factors influencing intentions to seek a cognitive status examination: a study based on the health belief model” International Journal of Geriatric Psychiatry, Vol. 18, no. 9, pp. 787-794

Weinstein, N. D., Rothman, A. J., Sutton, S. R. (1998)" Stage theories of health behaviour: Conceptual and methodological issues". Health Psychology, Vol. 17, pp. 229-290

Wood, E. M. (2008) " Theoretical framework to study exercise motivation for breast cancer reduction" . Oncology Nursing Forum, Vol. 35, no. 1, pp. 89-95

World Health Organisation. 1986. Ottawa charter for health promotion. (policy statements) [Online]. Available from. http://www. euro. who. int/aboutwho/policy

Yarbrough, S. S., Braden C. J. (2001) " Utility of health belief model as a guide for explaining or predicting breast screening behaviours". Journal of Advanced Nursing, Vol. 33, no. 5, pp. 677-688