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A personal reflection, using the Transtheoretical Model of Behaviour Change to analyse the impact of stopping exercise on health and wellbeing.

Key words: Reflection. Nursing student. Perspectives of health. Lifestyle change. Health and wellbeing. Transtheoretical model of behaviour change. Self-efficacy.

Introduction.

This article is an analytical reflection of the personal health journey of a first-year nursing student, that was undertaken as part of a first-year unit of study. Focusing on social, physical and psychological aspects of health, it explores the impact of the cessation of exercise on her emotional and physical health and wellbeing. This is relevant to current practice as a result of Covid-19, that has resulted in reduced opportunities to exercise for many people whether due to self-isolation and lockdown restrictions on leisure facilities, or increased workload and caring responsibilities, all with a subsequent impact on health and wellbeing.

The article is presented in the first person, reflecting the personal analysis it captures.

Definitions of health.

The term 'health' is familiar in everyday language, however defining what it means is problematic. Lay perspectives of health reflect opinions by non-medical individuals. Herzlich (1973) presents health as a combination of the individual's perspective, lifestyle and society. This view is endorsed in research by Macintyre et al (2006). Lay perspectives about the sense of control over health are influenced by social, economic and cultural factors (Scriven and Ewles 2017).

Theoretical definitions focus on health as "the freedom from medically defined disease and disability" (Scriven and Ewles 2017, p35). The biomedical approach to health predominates, focusing on scientific knowledge as the basis of medical, surgical and biological management of illness in order to restore health (Giddens and Sutton 2017). The body is considered as a homeostatic machine that adapts to the change in environment. If the body cannot adapt, then health is compromised (Blaxter 2010). This view disregards the fact that many individuals live long and full lives in the presence of chronic health conditions.

Social theories propose that health is more than freedom from illness. Engel (1977) created the holistic and humanistic 'biopsychosocial model' that takes into account biological, psychological, social and spiritual factors influencing health. Whitehead and Dahlgren (1991) developed the rainbow

model, which predominantly focuses on the influence of individual's socioeconomic conditions on their health. The social definition of health presents a dynamic viewpoint, with health inequalities at the heart, since these have wide implications for every individual.

My personal perspective is that health is constructed by individuals based on their social, biological, geographical and metaphysical factors. This article analyses the impact of my experiences of moving away from home to study nursing at university on my health and wellbeing.

Personal reflection about my health and wellbeing since starting university

Becoming a student nurse meant giving up a full-time job and moving from a rural location with plentiful exercise spaces, to an urban setting with limited green space. My new location meant I was away from my community, friends and family. These factors had a spiritual and social impact on my health and wellbeing. The new challenge of balancing university work, part time work and a social life resulted in stress and anxiety that negatively impacted my emotional health and ultimately caused cessation of exercise that considerably influenced my physical and mental health.

Analysing my experiences in the context of a theoretical model has supported me to understand my response to the health and wellbeing challenges that presented and to take control of my health and wellbeing. This has clear benefits for my own nursing practice when supporting patients to make lifestyle changes, however it also helps me to support peers and colleagues impacted by lifestyle changes arising from the Covid-19 lockdown restrictions. More generally, my experience demonstrates how universities can support student nurses to develop self-awareness about their own health and wellbeing and take action to enhance their health and wellbeing.

Benefits of exercise for health and wellbeing.

Regular exercise is a key contributor good health and wellbeing, endorsed by the World Health Organisation (1995) and more recently championed by the New Economics Foundation within the Five Ways to Wellbeing Model (The Government Office for Science 2008). The UK NHS guidelines recommend that adults do 150 minutes of moderate activity per week, to prevent the onset of chronic conditions and reduce risk of early death by up to 30% (NHS 2019). Exercise increases cardiovascular performance, but also improves self-efficacy, cognitive decision-making, and all-round quality of life (Derakhshanpour et al. 2018). Ersöz's (2017) study of 552 university students found that students who did not exercise displayed more symptoms of stress and depression, concluding that exercise is strongly correlated with positive well-being.

The benefits of exercise support medical theories (reducing the risk of chronic physical conditions developing) and social theories (having a positive impact on social and psychological health and wellbeing). Whitehead and Dahlgren's (1991) Rainbow Model and the Dynamic Model of Wellbeing, developed by the New Economics Foundation (The Government Office for Science 2008) highlight the

impact of external forces on individual's ability or capacity to exercise. Many social determinants affect exercise patterns within society; for example, those with low income may have less access to leisure centres/clubs, which reduces the opportunities to exercise, negatively impacting on their health in the longer term (Kelly et al. 2016). In addition, during the Covid-19 pandemic, restrictions placed on leisure providers and altered working hours has reduced access to exercise for many who can usually use such facilities.

Analysis of my experience of stopping exercising, in the context of the transtheoretical model of behaviour change.

My personal reflection, constructed within the Transtheoretical Model (Prochaska and DiClemente 2005), considers the impact of my cessation of exercise since starting university on my health and wellbeing. Although dated, this model remains widely accepted, having been adapted to consider behaviour change and individual attitudes (Manchaiah et al. 2018). The five steps of behaviour change, proposed by McConaughy et al (1983), of precontemplation, contemplation, decision making, action and maintenance are used to frame my analysis. Prior to starting university, I was very active and participated regularly in team sports. On starting university, I was at the maintenance stage of the model. I was still exercising, and my attitude and self-efficacy was still high, supporting my positive mental health. I quickly noted a change when I moved to university, with my whole routine disrupted. My withdrawal from team sports had a negative impact on my physical and mental health. The irregular shift patterns I was working as a nursing student made it difficult to put an exercise routine in place. I began to feel extremely frustrated, more agitated and more negative in my outlook, which resulted in me stopping all exercise within a month of starting university.

After four weeks without exercise, my holistic health started to deteriorate. I considered this as negligence of my health and wellbeing. I noticed physical changes in myself. Psychologically, I experienced low moods and I struggled to concentrate. I didn't initially link this to my lack of exercise but the work of Morgan et al. (2018) showed me how the cessation of exercise increased depressive related symptoms. Although I experienced poor attention span, fatigue and mood swings I was unaware of their basis, meaning that I was in the precontemplation stage of the Transtheoretical Model. In this stage it is common to have low self-efficacy and discredit the effects of change. I have always been an advocate of exercise however I was in denial of the physical and psychological changes I experienced in body and mind. My self-efficacy was low and I was not making time to exercise.

As my self-awareness increased, I experienced a period of 'contemplation'. I recognised discrepancy when I started placement, where I was advocating exercise to patients to improve their health and wellbeing, yet hypocritically, I was not exercising myself. Bandura's (1977) Social Learning Theory, endorsed by Hwang (2019) proposes that learning arises when observing, and later replicating behaviour viewed in others. Working as a student nurse I noticed the positive impact of physiotherapy on patient's emotions and attitudes. I realised that a change could be positive for me. My analysis of my feelings and observations fuelled me to the preparation stage of the model, where self-liberation occurs, and realistic and manageable goals start to be set. After preparing I engaged in 'action', taking purposeful steps to modify my behaviour. After sustaining the behaviour change for six

months or longer, I reached the 'maintenance' stage (Fidanci et al. 2017), engaging happily in exercise as I had been prior to starting my university course and experiencing positive health and wellbeing.

The Transtheoretical Model continues to be endorsed in healthcare practice, supporting individuals to Finance review their behaviours and to consider the psychosocial benefits of behaviour change on their health and wellbeing (Manchaiah et al 2018). Whilst useful, a limitation of the Transtheoretical Model it is that the criteria for each stage of change appear arbitrary, making its application subjective. Having used the model, I am better equipped to support others to understand and use it to support their own behaviour change.

Whilst my experience is specific to starting university, many people have experienced a reduction in their health and wellbeing as a result of the Covid-19 restrictions reducing exercise opportunities (Faulkner et al 2021). As the restrictions are beginning to lift this is the perfect time to foster self-awareness and support others to make lifestyle changes around exercising to improve their health and wellbeing.

Conclusion

Critically analysing the impact of stopping exercising on my health and wellbeing, reinforces my view that 'health' is a concept that is personal, influenced by the relationship between physical, social, psychological and spiritual factors. Developing self-awareness about factors that affect my health and wellbeing, as a student nurse, has supported me to take positive action to enhance my own wellbeing, building my sense of self efficacy. It has helped me to manage during the Covid-19 pandemic. The understanding gained from my personal analysis and experience of taking action, enables me to better support patients in practice, as well as to support peers.

References

- Bandura, A., 1977. *Social learning theory*. Prentice Hall. Michigan.
- Blaxter, M., 2010. *Health*. 2nd edition. Polity Press. Cambridge.
- Derakhshanpour, A., Mousavi, M. K. V. and Taheri, H., 2018. The Effect of the Special Cognitive-Behavioral Intervention on the Commitment to Exercise and Adherence to the Exercise Routine. *Annals of Applied Sport Science*, 6 (2), 61-68. DOI: <http://aassjournal.com/article-1-568-en.html>
- Engel, G. L. , 1977. The Need for a New Medical Model: A Challenge for Biomedicine. *Science*, 196 (4286), 129. DOI: <https://www.jstor.org/stable/1743658?seq=1>
- Ersöz, G., 2017. The Role of University Students' General Self-Efficacy, Depression and Psychological Well-Being in Predicting Their Exercise Behavior. *Journal of Education and Training Studies*, 5 (3), 110-117. DOI: <10.11114/jets.v5i3.2209>
- Faulkner, J., O'Brien, W.J., McGrane, B., Wadsworth, D., Batten, J., Askew, C.D., Badenhorst, C., Byrd, E., Coulter, M., Draper, N., Elliot, C., Fryer, S., Hamlin, M.J., Jakeman, J., Mackintosh, K.A., McNarry, M. A., Mitchelmore, A., Murphy, J., Ryan-Stewart, H. & Saynor, Z. 2021. Physical activity, mental health and well-being of adults during initial COVID-19 containment strategies: A multi-country cross-sectional analysis. *Journal of Science & Medicine in Sport*, 24, 320-326. DOI: <https://doi.org/10.1016/j.jsams.2020.11.016>
- Fidanci, I., Ozturk, O. and Unal, M., 2017. Transtheoretic model in smoking cessation. *Journal of Experimental & Clinical Medicine*, 34 (1), 9-13. DOI: <10.5835/jecm.omu.34.01.003>

Giddens, A. and Sutton, P. W., 2017. *Essential concepts in sociology*. Second edition. Polity Press. Cambridge.

Herzlich, C., 1973. *Health and illness: A social psychological analysis*. Academic Press. Oxford.

Hwang, H., 2019. Influence of Social Cognitive Factors on Physical Activity among Breast Cancer Survivors. *Korean Journal of Adult Nursing*, 31 (2), 211. DOI: <https://doi.org/10.7475/kjan.2019.31.2.211>

Kelly, S., Martin, S., Kuhn, I., Cowan, A., Brayne, C. and Lafortune, L., 2016. Barriers and Facilitators to the Uptake and Maintenance of Healthy Behaviours by People at Mid-Life: A Rapid Systematic Review. *PLoS ONE*, 11 (1), e0145074. DOI: <https://doi.org/10.1371/journal.pone.0145074>

Lawton, J., 2003. Lay experiences of health and illness: past research and future agendas. *Sociology of Health & Illness*, 25 (3), 23-40. DOI: <https://doi.org/10.1111/1467-9566.00338>

Macintyre, S., McKay, L. and Ellaway, A., 2006. Lay concepts of the relative importance of different influences on health; are there major socio-demographic variations?, *Health Education Research*, 5, 731. DOI: <https://doi.org/10.1093/her/cyl015>

Manchaiah, V., Hernandez, B. M. and Beck, D. L., 2018. Application of Transtheoretical (Stages of Change) Model in Studying Attitudes and Behaviors of Adults with Hearing Loss: A Descriptive Review. *Journal of the American Academy of Audiology*, 29 (6), 548-560. DOI: [10.3766/jaaa.16122](https://doi.org/10.3766/jaaa.16122)

Morgan, J. A., Olagunju, A. T., Corrigan, F. and Baune, B. T., 2018. Does ceasing exercise induce depressive symptoms? A systematic review of experimental trials including immunological and neurogenic markers. *Journal of Affective Disorders*, 234, 180-192. DOI: [10.1016/j.jad.2018.02.058](https://doi.org/10.1016/j.jad.2018.02.058)

NHS, 2019. *Exercise*. NHS. Available from: <https://www.nhs.uk/live-well/exercise/> [Accessed 29 October 2020].

Prochaska, J. O. and DiClemente, C. C., 2005. The transtheoretical approach. In: Norcross, J. C. and Scriven, A. and Ewles, L., 2017. *Promoting health : a practical guide*. Seventh edition. Elsevier.

The Government Office for Science, 2008. *Mental capital and wellbeing: making the most of ourselves in the 21st century. Final project report*. Government Office for Science, London. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/292450/mental-capital-wellbeing-report.pdf [Accessed 20th October 2020].

Whitehead, M. and Dahlgren, G., 1991. What can be done about inequalities in health? *Lancet*, 338 (8774), 1059. DOI: [10.1016/0140-6736\(91\)91911-D](https://doi.org/10.1016/0140-6736(91)91911-D)

World Health Organisation, 1995. The State of World Health, 1995: World Health Organization. *Journal of Public Health Policy*, 16 (4), 440. DOI: [10.2307/3342621](https://doi.org/10.2307/3342621)