The current status of health across the world’s population has been impeded by various chronic diseases and health conditions such as obesity, diabetes, cancers, arthritis, back problems, high blood pressure, high cholesterol, asthma and many others. By in large these chronic diseases and illness can be prevented, managed and even reversed with consistent exercise and an increase in general physical activity in the day to day life. Physical fitness is an important component of total fitness along with nutritional health, mental health, social health and medical health. Physical fitness encompasses cardiovascular fitness, muscular strength, muscular endurance, flexibility and body composition (Active IQ 2018).

The institutional body that is responsible for the health services for the people of the Republic of Ireland (ROI) is the HSE (Health Service Executive). In relation to their current exercise guidelines they are based on and adapted from the United Kingdom’s NHS (National Health Service 2018) recommendations. Recommendations for adults between 19-64 years of age is 150 minutes total per week of moderate intensity aerobic activity and strength exercises 2 days per week (this includes exercises that targets the major muscle groups in the body). Young children up to the age of 18 should be aiming for 60 minutes of moderate intensity of physical activity every day (The Department of Health 2016a).

According to the World Health Organisation (WHO 2018), globally 1 in every 4 adults are not active enough. Across all the different age groups, females were reported to be less active than their male counterparts.
Internationally, between the ages of 11-17 years old 84% of girls were active in comparison to 78% of boys. In adults aged over 18 years old, 27% of women were not active enough in comparison to 20% of men.

The current outlook on physical activity in the Republic of Ireland is that many people are not meeting the levels of physical activity as recommended by national guidelines. In Ireland, a WHO (2013) report revealed for male adults (aged 16 years and older) 30.7% had reached recommended exercise guidelines and for older male adults (aged 50 years and older) this increased to 42%. In Irish women (aged 16 years and older), 31.9% had reached recommended exercise guidelines. However, levels decreased to 26% in older female adults (50 years of age+).

There are numerous factors as to why the general population has become increasingly sedentary during the last few decades. The rising popularity of technology in leisure as well as in work has meant people have been more inclined to stay sitting for long periods of time. Keane et al (2017) looked into health complaints from school-aged children and looked into factors such as meeting total screen time (TST) recommendations and physical activity recommendations. It was found that those not meeting TST recommendations were correlated with increased risk of health complaints. Those that did not meet both TST and physical activity recommendations were at an increased risk. It can be deduced from these findings that not should only children limit the amount of being sedentary but they should also aim to be active for at least 60 minutes every day of the week to lessen the likelihood of health complaints.

Regular physical activity has been widely accepted as a key component in decreasing the risk of developing cardiovascular disease and other health conditions. In terms of managing diabetics or those who are pre-diabetic taking regular breaks with activity following long periods of sedentary behaviour can reduce post prandial glycemia. Peddie et al (2013) found following an interventional study that regular activity was found to be effective than continuous physical activity in reducing blood glucose levels.
amongst adults at a healthy weight. Similar findings were reported in numerous studies that reveals effects of interrupting long periods of inactivity (Saunders et al 2018; Duvivier et al 2017; Henson et al 2016).

Increasing activity levels is a key component to achieving a healthful life. White et al (2017) analysed 1873 people that were either diagnosed with or at a high risk of developing osteoarthritis in the knee with an average age of 65 years and an average BMI 28.4. The participants replaced 60 minutes of sedentary behaviour with light physical activity. They concluded that even light activity had more health promoting benefits as opposed to sedentary sitting. It was found that light activity may be the only means of getting exercise for those suffering from arthritic pain. White et al emphasised the importance for health professionals to promote exercise where possible, even to individuals diagnosed with knee arthritis to reduce risk of developing functional limitation.

Similarly, Swärdh and Brodin (2016) reviewed over a dozen trials on the physiological effects from a variety of exercises, performed at different intensity levels and frequency of activity. They found that a combination of long-term aerobic exercises for increased oxygen intake and strength training for improved muscle strength had shown significant improvement in people with rheumatoid arthritis. The benefit of exercise, in particular load-bearing activity, can increase bone health and density. They noted that water-based aerobic activity as an effective way to improve cardiovascular health without further exacerbating the symptoms of rheumatoid arthritis. It can be concluded that a consistent exercise regime even after clinical diagnosis of conditions that limit mobility will prevent worsening of symptoms and benefit cardiovascular health.

There is increasing evidence showing the benefits introducing physical activity at a school-aged level. The uptake of physical activity in Ireland, particularly in the area of sports-based activity, has been popular amongst primary school children. 88% of those children participate on a regular basis with a majority of those taking up more than one more sport (Lunn et al
2013). Lunn et al’s report of three separate Irish surveys reveals further statistical differences right into adulthood. Physical activity and sports participation drop in both females and males by the time they reach examinations at the end of second level education and a further decline by the age of 21-22 which is typically the time for the end of third level education. The report found that reasons for high level of sports participation at a young age are attributed to competitive nature of group activity and improving self-performance. The significant decline in the age of 18 and those around 21-22 years of old is attributed to various factors such as academic commitment, work commitment and moving home. A change in lifestyle appears to have a significant and negative association with physical activity levels. The report reveals that most people, whether participating or not in sports had understood the health benefits in acknowledging that it was “good for overall health” and “reduces the risk of heart disease”. The message behind exercise was clear but other responsibilities appeared to take a priority.

Physical activity levels amongst adolescents is interestingly marked by a variety of social and psychological influences such as peer pressure, competitive behaviours, body image, dieting behaviours and others. A review, known as Growing Up In Ireland, (Economic and Social Research Institute 2012) of over 8000 Irish children was published on their health. All the participants were interviewed when they were aged 9 and a follow up interview took place when 7400 of those participants had reached aged 13 to analyse the reasons behind levels of participation in sports and activities. A strong correlation was found that those who exercised more well less likely to be categorised as being overweight or obese. 34% of the obese 13-year olds did not take part in activity citing reasons such as “I feel people laugh at me because of my size”, “I am not competitive” and “I am no good at games”. There are also revealing differences between adolescent boys and girls. 29% of the girls perceive themselves to be a bit or very overweight compared to 20% boys. In terms of self-perception, many participants had
inaccurate beliefs of their weight status, this is especially so in the overweight and obese categories. For instance, 49% that were overweight perceived themselves to be a bit overweight and 44% considered themselves to be “just the right size”. Those that were categorised as obese, 58% perceived themselves as slightly overweight whilst 22% thought they were “just the right size”. Typically, body dysmorphia is a common symptom in people diagnosed eating disorders such as anorexia nervosa and bulimia however evidently this cohort of participants also appears to have a degree of distorted body image.

Dieting behaviour such as consuming low-fat foods and reduced food consumption combined with exercise was reported amongst 28% of the cohort in an effort to lose weight. Regarding their actual weight status, 78% of the obese adolescents exercised to lose weight and 55% reported a combination of both diet and exercise. The report reveals the extent to which perceived self-image can alter dietary patterns as well as physical activity levels amongst adolescents in Ireland.

Maintaining a level of fitness and consistent exercise has been regularly attributed to overall positive mental health, thus, benefit and reward can be reaped from individuals that frequently report experiencing stress and feelings of anxiety. Amongst vulnerable groups such as those diagnosed with cancer, physical activity can be an effective tool when in conjunction with chemotherapy treatment (Backman et al 2016). Exercise during the recovery period can give patients the feeling of empowerment, motivation and what can be perceived as sense of control back into their lives despite sickness. Wilhelmsson et al (2017) revealed similar findings in their study of women diagnosed with breast cancer. The support and advice for undertaking physical activity from oncology nurses proved to be a useful aid following treatment as the patients experienced less fatigue.

Maher et al (2016) investigated a population aged between 50-69 that were registered at an Irish health clinic and analysed “protective lifestyle behaviours” (PLB). The various protective lifestyle behaviours included not
smoking, moderate alcohol consumption, physical activity and adequate fruit and vegetable consumption. It was found that those who engaged with three (24%) or four (39%) of the PLBs were more likely to have completed a higher level of school, more likely to be women and no reports of depressive symptoms. On the contrary, 8% of the participants that engaged with just one or zero PLB was positively correlated with bouts of depression. The limitation of a cross-sectional study such as this one is that cause and effect between the behaviours is difficult to determine. What is revealing in this study is that combining multiple healthy lifestyle choices has a positive influence on mental well-being.

Chronic health conditions such as obesity, diabetes, cardiovascular diseases, physical inactivity poses a strain on wider society. The strain is felt further on individuals with multiple health issues – as many chronic illnesses are often linked. For instance, diabetic patients are likely to be have a BMI index <30. Since a lot of these conditions are preventable and manageable a lot of resource has been placed in many health services worldwide to address these issues before an individual succumbs to avoidable ill-health. For instance, the role of dietitians is to impart knowledge and give guidance to a patient on what constitutes a healthful, nutritional and sustainable diet.

For the healthcare system, it is not resourceful for a physician to refer obese patients to bariatric surgery as the first point of solution. For the patient surgery (not without risk to life) could eliminate the immediate dangers to life but the cause will still need to be addressed. An obese patient could benefit in the long term from the support of a dietitian and an exercise referral specialist. The role of a physiotherapist can treat people with musculoskeletal disorders such as lower back pain through various techniques in the profession such as massage, manipulation and guided exercise programme.

The shift of focus from cure to prevention is evident. The Department of Health (2016b) developed the Get Active Ireland campaign with the aim to promote an active lifestyle. The mission of this programme is to promote
activity levels along with other aspects of health such as smoking, nutrition, drug abuse and mental health. The plan is an ambitious one and it incorporates multiple areas such as educators, professionals, employers, local and national government and the community. The importance of prevention has led to the introduction of physical education as an optional subject for students undergoing the Irish Leaving Certificate (National Council for Curriculum and Assessment 2018). This new curriculum has been rolled out since September 2018 and recognises that fundamental change starts with education.

Whilst many Irish adults do exercise regularly, a significant number of adults do not do enough to meet current guidelines. Small changes to everyday routines will be beneficial to increasing physical activity levels. Alternatives such as taking the stairs instead of using escalators and elevators, walking during lunch breaks, standing instead of sitting, parking the car further away to increase walking distances, reducing the hours spent dedicated to screen time and technology to a minimal and similar changes are all habits worth taking up. The consequence of physical inactivity could potentially lead to a whole host of other health conditions. An active lifestyle is a key determinant in avoiding a life marked by pain, prescriptions and limited mobility.
Reference List


