



## Physical Exercises Reduce Physical Ailments: A Bird's Eye View

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**Abstract:** Based on the information of physical activity habits and outcomes such as physical and psychological health an evidence-based approach is to evaluate the quality of the published data. Various articles that included information on the physical exercises and their influence on physical health and fitness have been observed. Hence, the purpose of this paper is to discourse two specific points. 1) How physical exercises increase health in individuals 2) various evidential discussions on how do these physical exercises reduce physical and psychological ailments.

**Keywords:** Physical ailments, physical training, exercise-based rehabilitation, physical fitness and psychological ailments.

### I. INTRODUCTION

Review of literature reveals that the concept of physical exercises is beneficial in many ways told by many authors. Among them some tend to identify this concept of physical exercises which helps with mortality in men and women. Prevention of coronary heart disease, longevity of healthy life, physical fitness, exercise capacity, exercise-based rehabilitation, changes in lifestyle, survival from breast cancer, resistance in patients, physical training in obese women, muscle function and so on. <sup>1-31</sup>

However, there is a scope for further observations and research such as physical and psychological ailments in women, the elderly, and minority groups, remedial methods can be done.

### How researchers have studied the concept

It is observed that there is a strong bond between physical and psychological health aspects. Physical exercises make a person to overcome physical and psychological ailments. Exercise interventions are also effective in the management of diabetes. One prospective cohort study showed that walking at least two hours per week was associated with a reduction in the incidence of premature death of 39%–54% from any cause and of 34%–53% from cardiovascular disease among patients with diabetes. <sup>32</sup> Physical exercises bring improvements in health status can occur as a result of increasing physical activity levels in the absence of changes in aerobic fitness. This is particularly evident in elderly populations, where regular physical activity can lead to reductions in risk factors for chronic disease and disability. <sup>33,34</sup> Routine physical activity is also associated with improved psychological well-being (e.g., through reduced stress, anxiety and depression. <sup>33,34,35</sup> when asked about perceived health benefits of exercise, general practitioners are most likely to mention psychosocial benefits such as relaxation, increased social contact, promotion of self-care, and self-esteem. <sup>36</sup> Over the last decade there have been several extensive reviews of the exercise psychology literature, which together offer positive if guarded support for the role that exercise can play in the promotion of positive mental health. <sup>37-39</sup>

Different forms of physical exercise may be palliative in relation to particular conditions. Whether that exercise be non-aerobic, aerobic, or anaerobic, of short, medium, or long term duration, competitive or non-competitive, team or individual, single or multi session is not always clear, but there are suggestions that different psychological conditions respond differentially to alternative exercise regimens, and recent attempts to develop taxonomies of physical activity and mental

health may over a realistic starting point in attempting to draw together some of the diverse recommendations.<sup>40,41</sup>

Acute aerobic exercise has been shown to be associated with significant positive mood changes.<sup>42</sup> Two recent studies examining the benefits of acute exercise have also found mood benefits associated with exercise.<sup>43,44,45</sup> Steinberg *et al.*<sup>43</sup>

According to an early review,<sup>45</sup> self-esteem improved with participation in physical activity regardless of physical activity type. However, a meta-analysis<sup>46</sup> that focused solely on self-esteem in young children found a greater effect size for aerobic activities. As more individuals live longer, it is imperative to determine the extent and mechanisms by which exercise and physical activity can improve health, functional capacity, quality of life, and independence in this population.<sup>47</sup>

Functional benefits of regular exercise include increases in cardiovascular fitness, muscle strength, and functional capacity, allowing older individuals to maintain their independence and freely participate in daily activities. In addition, habitual exercise, endurance training, or both can prevent or markedly attenuate the age-related increases in risk factors for coronary heart disease.<sup>48</sup> Additional benefits from regular exercise include improved bone health and, thus, reduction in risk for osteoporosis; improved postural stability, thereby reducing the risk of falling and associated injuries and fractures; and increased flexibility and range of motion. While not as abundant, the evidence also suggests that involvement in regular exercise can also provide a number of psychological benefits related to preserved cognitive function, alleviation of depression symptoms and behavior, and an improved concept of personal control and self-efficacy.<sup>49</sup>

With the recent shift in clinical emphasis from tertiary care to primary and secondary prevention of long-term disease and disability with aging,<sup>50,51</sup> the maintenance of vigor, independence, and quality of life can be extended closer to life expectancy. In this context, regular physical activity can play an important role in preventive gerontology by maintaining cardiovascular health and functional capacity.<sup>52</sup> It is well established that physical activity levels decline with advancing age, and that the prevalence of regular physical activity is lowest in the older population.<sup>53</sup> Indeed, a physically active lifestyle is associated with a more favorable profile in cardiovascular risk factors in middle-aged and older adults.<sup>54</sup> Increasingly, evidence indicates that exercise interventions are not particularly efficacious in reducing body weight and body fat in obese individuals.<sup>55</sup>

Regular exercise is recognized as an important factor in the maintenance of reduced body weight and body fat.<sup>56,57</sup> It may be more important for the older adults to engage in moderate physical activity to promote health and function rather than in intense physical activity to promote aerobic fitness.<sup>58</sup> Although the recommended amount of exercise may not be achievable for some older adults, there is sufficient evidence that even those older adults who participate in less physical activity than recommended still achieve some health benefits from it.<sup>59,60,61</sup> Identical exercise programs induced considerably smaller reductions in blood pressure in older adults than in their younger counterparts.<sup>62</sup>

It is also possible that the absence of association between vigorous physical activity and any of the outcomes of interest was due to the fact that some women with more severe or aggressive disease engaged in vigorous physical activity as a means to cope with disease and treatment effects. A substantial body of literature indicates that exercise training in breast cancer survivors, both during and after treatment, enhances quality of life, reduces symptoms, and improves cardio respiratory fitness and physical function<sup>63-67</sup>. The findings suggest a reasonably clear, modest risk reduction of about 20% to 30% for active women compared with sedentary women<sup>68</sup>. Over 60 cohort and case-control studies have examined the role of physical activity in the primary prevention of breast cancer<sup>69</sup>. Consistent and statistically significant protective association was observed between physical activity and all-cause mortality, even in multivariable analyses. The finding of a protective association between physical activity and all-cause mortality is consistent with other cohort studies of breast cancer survivors<sup>70,71</sup>. Physical activity was also associated with reduced risk of death in the Women's Healthy Eating and Lifestyle study, but only in women who also consumed >5 fruits and vegetables a day<sup>72</sup>.

The importance of physical activity in preventing a number of chronic diseases is highlighted in the 1996 Surgeon General's report on physical activity and health. Quality of life is directly related to functional status and the ability to maintain independence, and it appears that physical activity improves health-related quality of life by enhancing psychological wellbeing and improving physical functioning in persons with poor health<sup>73</sup>. Physical activity is an essential component of a healthy life<sup>73,74</sup>. An increase in physical fitness will reduce the risk of premature death, and a decrease in physical fitness will increase the risk.<sup>75-78</sup> People who went from unfit to fit over a 5-year period had a reduction of 44% in the relative risk of

death compared with people who remained unfit.<sup>79</sup> Low-intensity exercise training (e.g., exercise at less than 45% of maximum aerobic power) has also been associated with an improvement in health status among patients with cardiovascular disease.<sup>80</sup>

It appears that routine physical activity, whether as part of a job or as a leisure activity, is associated with reductions in the incidence of specific cancers, in particular colon and breast cancer.<sup>51-85</sup> A systematic review of epidemiologic studies revealed that moderate physical activity (> 4.5 METs [equivalent to mowing the lawn]) was associated with a greater protective effect than activities of less intensity.<sup>65</sup> Physically active men and women exhibited a 30%–40% reduction in the relative risk of colon cancer, and physically active women a 20%–30% reduction in the relative risk of breast cancer compared with their inactive counterparts.<sup>86</sup>

In general, physical activity is defined as any type of bodily movement, whereas exercise denotes a structured, planned activity performed with a fitness goal in mind.<sup>87</sup> Physical fitness can refer to cardiorespiratory fitness (important for the prevention of CHD events) or other health-related components, including balance, flexibility, strength, and body composition.<sup>88</sup> Physical fitness (measured by treadmill time duration or stage reached on a cycle ergometer protocol) has been shown to be inversely associated with mortality from all causes and a number of other outcomes, including coronary heart disease CHD.<sup>89-94</sup> Further evidence suggests that persons with rheumatoid arthritis may also benefit from regular physical activity to improve aerobic capacity or conditioning.<sup>95-98</sup>

## II. DISCUSSION

Hence, the researcher finds from the above observations that regular exercises work effectively in order to reduce innumerable physical ailments. The finding gives an unblemished picture of benefits which are associated with physical exercises to improve the quality of life. Apart from all, the above discussions make it clear that exercises can suggestively increase the quality of life. The purpose of this review is to define the relation between physical activity or fitness and healthy life. It also focused on such elements like how physical activity plays in the intensity reduction and sometimes cure of chronic diseases like diabetes, cancer, hypertension, obesity, depression and premature death. It is also evidential with this study that there is coherence between physical activity and health prospects and further increase in physical activity and fitness which leads to additional improvements in health conditions. The research finds how regular exercise includes improving of bone health and reducing risk for osteoporosis and improving postural stability and so on. In conclusion, the role that physical exercise is undoubtedly suggestible for sound health.

## III. CONCLUSIONS:

All the studies in this review are observational studies, so conclusions are based on evidence category. Based on the observations, the conclusions are made for the two specific points of this paper are: 1) health risks are diminished with regular physical exercises 2) physical exercises rescue not only health risks but also make humans lower the mortality rate. 3) It also makes individuals be in full fitness which keeps them away from all ailments.

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