CHAPTER 1

THE PROBLEM

1.1 INTRODUCTION

Cost-benefit analysis and cost-effectiveness analysis are advocated or used with increasing frequency as an aid to resource allocation decisions in the health-care sector. Corporations concerned with generating a profit and surviving in a competitive marketplace are increasingly troubled over the rising cost of employee health care benefits. Some corporations, in an attempt to reduce health care costs for preventable illnesses and injuries are capitalising on the recent trend toward wellness and initiating health promotion programmes for their employees (Tulloch & Healy, 1982). At the same time, more visibility has been given to prevention and a number of reports have suggested that expanded preventative activities could significantly improve the health of the American people (Elinson et al., 1978, Fielding, 1978, Nightingale et al., 1978, Department of Health and Human Services, 1980).

Employers frequently incur both direct economic costs in the treatment of employees who become ill and indirect costs due to absenteeism and sick leave. One of the major arguments in favour of worksite health promotion and wellness programmes is its potential for producing economic benefits that offset or even exceed programme costs (Cole et al., 1987; Warner, 1990).

Research to date strongly supports the positive physiologic and health benefits of regular exercise. Song, et al., (1982) indicated that over the first six months of an employee fitness programme, high adherents to the programme showed a substantial reduction of absenteeism and turnover relative to poor adherents in the same company and to employees in a control company (Song et al., 1982). Exercise in the form of participation

in an employee fitness programme has been related to decreased sickness absence (Shepard et al., 1981, Song et al., 1982), decreased visits to physicians and health care facilities, and reduced health care costs. Linden (1969) found positive associations between exercise and objective productivity parameters such as absenteeism. A pilot study on the impact of a health promotion programme on absenteeism reported favourable changes in physical status, stress management and feelings of well being (Blair et al., 1986). In a presentation to the United States Council on Wages and Price Stability Hearing on Health Care Costs, Dr. R. Keeler (1974) mentioned that the introduction of an employee fitness programme by Goodyear Narrköping, Sweden caused a decrease in absenteeism of nearly 50%. Dr. Pravosudov of the U.S.S.R. provided impressive statistics on employee fitness and absenteeism. He found that those who are not physically active are ill five to six times more than those who exercise (Pravosudov, 1976).

Therefore the cost-benefit analysis of the impact of a physical wellness programme on absenteeism and sick leave in South Africa will remain uncertain until research has provided a firmer foundation than that which presently exists. We know what exercise does for individuals and that it is cost-effective, but we do not know how it affects the economy of the company and if physical wellness programmes will have a positive impact on sick leave and absenteeism. What is the financial bottom line for the company and is the physically fit employee of benefit to the economic health of the organisation for which he/she works?

1.2 PROBLEM STATEMENT

Out of the above mentioned literature it is clear that existing research is limited by the fact that to date no attempt has been made to analyse the impact of a worksite physical wellness programme on absenteeism and sick leave in any South African company. Dreyer (1996) revealed that to date there is no concrete empirical evidence that corporate based wellness programmes show a cost-benefit to companies. With the above motivation, the work is directed primarily towards understanding the impact of a worksite

physical wellness programme on absenteeism and sick leave among black African men. Secondarily, this study will provide answers to the question whether a physical wellness programme will have a positive effect on health-related fitness.

1.3. HYPOTHESES

The following hypotheses are related to the purpose of the study:

- 1. Subjects exposed to a worksite physical wellness programme will show a difference in sick leave and absenteeism over six months of intervention from those that did not receive intervention.
- 2. Subjects exposed to a worksite physical wellness programme will show a different health and fitness profile over six months of intervention from those that did not receive intervention.

1.4 DEFINITIONS

The following concepts are related to the study:

1.4.1 ABSENTEEISM

Nel (1973) defines the term absenteeism as being the failure of employees to report on the job when they are scheduled to work. This term is also used to indicate the time lost when sickness or accidents prevent a worker from being on the job, as well as the time that a worker may spend away from the job for any unauthorised reason. However absence may take on a variety of forms, which are not always as easily identifiable and objective as the measurement of labour turnover. The difficulty would appear to arise from the fact that absence may be a measure of unsatisfactory work adjustment, which is difficult to measure, or it may reflect a genuine inability by an individual to be at work.

1.4.2 SICK LEAVE

Sick leave can be defined as the permission to be absent from work or duty because of illness (Linden, 1969).

1.4.3 PHYSICAL WELLNESS PROGRAMMES

Physical wellness refers to an individuals physical health that include optimal physical, biological and psychological functioning. It refers to aspects such as lifestyle, personal behaviour and medical selfcare that can influence a person's muscle strength, muscle endurance, cardiovascular function, flexibility, body composition, energy levels, sleeping patterns, self image and the absence of disease (Eberst, 1984). Several researchers indicated that regular physical exercise has an influence on the abovementioned aspects that referring to physical wellness (Burdick, 1983; Ardell., 1986; Seaward 1988).

1.4.4 HEALTH PROMOTION PROGRAMMES

Defining health promotion is not a clear-cut task; no universally agreed-upon definition of health promotion exists (Lusk, 1995). The meaning of health promotion according to Greenberg (1985) is unclear, because of the ambiguous relationships between health, wellness, illness and disease prevention.

Health promotion programmes are those designed to promote health or reduce illness-producing behaviour (Lusk, 1995). It is the process of fostering awareness, influencing attitudes and identifying alternatives so that individuals can make informed choices and change their behaviour in order to achieve an optimum level of physical and mental health and improve their physical and social environment (American Hospital Association, 1979). Health promotion according to Goodstadt et al. (1987) is the maintenance and enhancement of existing levels of health through the implementation of effective programmes, services and policies. It involves two separate but complementary strategies namely *optimisation* and *integration*.

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Optimisation firstly refers to the narrowing of the gap between actual and potential levels of wellness in the one domain or more. This ideal state, which may never be realised, is defined by the individual's personal goals, potentials, and limitations in the different domains of health (Goodstadt, 1987). The second strategy namely *integration* refers to the establishment of a balance or equilibrium among the various domains of health, resulting in an overall or holistic level of wellness on one's life (Perry, 1985).

1.4.5 COST-BENEFIT ANALYSIS

It measures the economic efficiency in monetary units of a programme as a relationship of costs and benefits (Durstine et al., 1993). Cost-benefit analysis is welfare economics and provides a framework for determining whether health promotion programmes are a good economic investment for corporations (Anderson et al., 1977; Sassone et al., 1978).

1.4.6 COST-EFFECTIVE ANALYSIS

Cost-effective analysis measures the value or merit of a programme in non-monetary units (Durstine et al., 1993). It is a means for measuring the extent to which resources allocated to an accepted specific objective under each of several alternatives actually contributes to accomplishing that objective, so that different ways of achieving the objective may be compared (Grayson, 1972).

1.4.7 DIRECT COSTS/BENEFITS

Direct costs or benefits affect the real value of an output and refer to changes in production and/or consumption opportunities in the economy resulting from any project or policy (Sassone et al., 1978; Cohn, 1979). Direct economic benefits include reductions in health care costs, life insurance, disability, workers' compensation and improvements in labour productivity, such as reduction in absenteeism and sick leave (Warner, 1987).

1.4.8 INDIRECT COSTS/BENEFITS

Indirect costs or benefits reflect the impact of the project on the rest of the economy and involve changes in the demand for and supply of goods, services, resources, and factors of production that arise from a particular project (Sassone et al., 1978; Cohn, 1979). According to Warner (1987), indirect benefits include improvements in employee job satisfaction and the ability to recruit healthy motivated employees, and a general polishing of "corporate image" (Warner, 1987).

1.5 LIMITATIONS

The following limitations are related to the study:

- A paramount consideration is that the experimental group will co-operate and comply to the home Biokinetic exercise programme and follow-up sessions for the duration of the study in order to ensure comparative testable results.
- 2. The fact that some of the subjects may have HIV/AIDS will have a delimiting effect on the results.

1.6 SIGNIFICANCE OF THE STUDY

Physical exercise and worksite physical wellness programmes according to overseas studies reduce illnesses, absenteeism, improve individual physical and health status, and in the process benefit employees as well as employers. The results of the impact of a worksite physical wellness programme on the prevalence of absenteeism and sick leave in the South African context among black African men will be significant.

Of major significance in this study is whether worksite physical wellness programmes and physical exercise are arguably a unique advantageous situation, good for individual health, good for public health, and good for the economy of South African companies. Thus, a significant selling point and buying consideration for worksite physical wellness

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and physical exercise programmes is the notion that it represents sound financial investment, in addition to (and as a result of) enhancing the health of employees. The argument is a simple one: avoidable behaviour-related illnesses impose costs on businesses in the form of higher health insurance premiums, disability, workers' compensation, sick pay and absenteeism.