The Bill Blackwood Law Enforcement Management Institute of Texas

The Benefits of Implementing a Fitness Program at the Hillsboro Police Department

An Administrative Research Paper Submitted in Partial Fulfillment of the Requirements for Graduation from the Leadership Command College

> By Carl A. Cain Jr.

Hillsboro Police Department Hillsboro, Texas February 2002

ABSTRACT

The health concerns relating to police officers have been studied for years now. Research has shown that police officers are prone to heart disease, high blood pressure and sleeping disorders, and also have a shorter life span and a level of fitness below the average person. Police officers have the obligation of protecting members of the community, but often times they are less physically fit then the people they are supposed to protect. Rotating shifts, long hours and hazardous conditions all contribute to the stress police officers experience.

The answer to combat these problems is simple: exercise. Exercising as little as 30 minutes a day can reduce the risk of the health problems outlined above. While the answer seems simple, getting officers to exercise can be difficult. Supervisory personnel have an obligation to be a part of the solution. Departments need to take the lead on this issue and implement on-duty fitness programs. Having fit officers can improve productivity, reduce medical expenses, and reduce personnel and training costs. While one must consider the possibility of an officer getting injured working out, this liability is no greater than having an unfit officer working on the street.

It is concluded that implementing a fitness program would be a benefit not only to the officers, but also to the department they serve and to the community which they have sworn to protect.

Table of Contents

	Page
Abstract	
Introduction	-1
Review of Literature	-3
Methodology	-8
Findings	10
Conclusions	-12
References	14
Appendices	

Introduction

The Hillsboro Police Department is like many other law enforcement agencies through out this country, trying to find ways to improve the productivity of its people. The Hillsboro police department has increased the productivity level of the officers in several ways. It has gone to a twelve (12) hour shift, working three (3) on two (2) two off three (3) off two (2) off, increased the monies allocated for training and also implemented the use of computers for all paperwork needs. These improvements have worked for the officers and the department. Officers enjoy the flexibility of working only fifteen (15) days a month and, adding the computers, allows all officers to enter their reports in the department's database; this reduces the time it takes to write reports. Technology and equipment are important items but as in any business, the people are what make the system successful. The backbone of a successful police department is the officers doing their job. How well the officer does his or her job depends a great deal on his/her health. If the officer cannot come to work due to injuries or sickness, no matter what kind of equipment the officer has, the job will not be preformed to the most effective level. Science has shown health and well being are significant elements of job performance on a day-to-day bases (The Association, 2000). Health and fitness are important to a person in law enforcement. Another important element that affects an officer's fitness level is the long hours and bad eating habits that appear to be an unofficial part of the job. The harsh physical demand officers are sometimes called upon to expect only increases the demands on an officer's body. It is easy to see the need for an officer to be at a higher level of physical fitness.

Statement of the Problem

Police officers have a history of poor physical fitness level, which can lead to poor health and carry over to poor job productivity. This research will examine if implementing a fitness program and what type would benefit the Hillsboro police department. There are many different fitness programs in place in different police departments in Texas and in the private sector. From cities paying membership at local gyms to departments having fitness equipment for the officers to use at the police stations for a physical work out session.

Purpose of the Study

Implementing a fitness program at the Hillsboro police department would allow officers who currently work out to continue their exercise programs and be more consistent, while those officers who do not currently have an exercise program to be motivated to start a program of their own. Having time to work out during the workday would lead to a more fit officer; working a twelve (12) hour shift and having other responsibilities, officers of the Hillsboro police department have little time for sleeping, much less time to exercise on the days they work. This paper will also examine the health problems common to law enforcement officers such as heart problems, cancer and dieing at a younger age than non-police officers. This paper will explore how exercise can help reduce those health problems.

Method of Inquiry

A questionnaire will be given to different representatives of police departments in Texas and asked if they have a fitness/wellness program in their department and what

kind of fitness program their departments have in place. It will also examine how much support the programs have from the officers and if the equipment is used.

Intended Outcome

The research will show the health issues associated with law enforcement personnel and how exercise can combat those health problems. It will also show the benefits of a fitness program to the officers of the Hillsboro police department, but to the city also. A plan will be introduce that will allow for a fitness plan to be put in place that will work for personnel and take the financial outlook of the city into consideration. The program will be mandatory, but will allow for officers to have time while their on duty to complete their fitness programs at a local gym or use the equipment the department provides.

Benefit of Research

This research hypothesizes that the program will benefit the officers of the department in several ways, (1) better fitness level and (2) upgrade moral. The research will also show the benefits to the department healthier officer and more productive officer.

Review of Literature

Police work has always been said to be one of the most dangerous occupations (Richard & Fell, 1975; Kroes, 1985 as cited by Reviere, Young (1994). It also has been said that because of the nature of police work, the work itself leads to the health problems and premature deaths of police officers (Richard & Fell, 1975; Kroes, 1985 as cited by Reviere, Young (1994). With this in mind, police departments have looked into different

way to focus on those health problems. From mandatory retirement, ages 50 and 60 to pension plans provide for retirement after 20 to 25 years of service (Fogelson, 1984). With this retirement plan in place officers could retire at an early age then most people in other occupations (Young, 1994).

Health Issues

Earlier research that was centered on the general health of police officers found that officers had more health problems then workers in other occupations. Most of the problems were related to the stress of the job and the lifestyle of police officers (Kroes, 1985; Violanti et al., 1986). Velde et al. (1977 found that the leading cause of death to the law enforcement officers studied were heart attacks and the same reason for early retirement. A study done by Mowstardi et al. (1986) found that police officers from Akron Ohio had a higher risk of heart attack then the general population and as the officer aged the risk increased. McHenry (1972) found cardiovascular disease in 5 % of policemen aged 25 to 35 years, 13 % of those aged 35 to 44 and 21 % of those aged 45 to 54. A study done by Pollock (1978) found that police officers had a higher cardiac death rate then other people in other profession.

Another health risk found in police officers was the risk of cancer. According to (Violanti el al., 1986) police officers in the age group of 40 and over and those with 10 to 19 years of work experiences had the highest risk of cancer. The two forms of cancer that officers have the most were cancer of the esophagus and cancer of the colon.

When one thinks of some of the physical demands police officers have to do in their everyday jobs, you would think police officers would be some of societies most physically fit people, but research has shown that is far from the truth. A study conducted by the International Association of Chiefs of Police sample 203 officers and tested their cardiorespiraitory endurance levels and percent body fat approached the 25th percentile of the general public. This means 75 percent of the general population scored better. In upper body and abdominal strength the officers were between the 20th and 35th percentiles and flexibility scores were at the 45th percentile (Hoffman, Collingwood 1996). "These figures suggest that the officers studied were fatter and weaker and had less stamina and flexibility than the general population they were responsible to safeguard" (Hoffman, Collingwood 1996 p. 51).

Another health problem was sleep deprivation. Due to long hours and shift work, officers have problems not only sleeping, but not getting enough sleep. There are many health problems short and long term, associated with sleep deprivation. Short-term problems can be poor memory and loss of the ability to concentrate. Long-term problems having sleep disturbances during stage II or the REM stage of sleeping impairs health and accelerates the aging process (Reintzell, 1990). Some researchers have said that working rotating shifts decreased one's life expectancy by five years (Reintzell, 1990).

Exercise as a Weapon

As the research shows, police officers have many health problems; you add the stress of doing the job and the demands of an every changing world, it is understandable how officer's health gets to such low levels. Science has one common weapon to combat health disease. The weapon is exercise. The American College of Sports Medicine (ACSM) and the Center for Disease Control and Prevention recommend that an adult should have 30 minutes or more of moderate intensity physical activity throughout the day. This recommendation is from research indicating the health benefits of physical

activity are linked to the total time spent in an activity not the type of activity performed (as cited by Pate et al, 1995 by McGuire (1999).

Exercise also has other health benefits. They include improvement in an individual's heart and the vascular system, blood pressure, blood lipids, the lungs and respiration, body composition and weight, the muscle system, the bones and the endocrine system (American Correctional Association 2000). Exercise not only helps the body and its organs work more efficiently, but it also helps the mind. When the mind is overloaded due to positive or negative input that feeling is called stress (American correctional Association 2000). A study on officers' stress levels conducted by Folkin studied 36 policemen and firemen, who were involved in a 12 week exercise program showed improvement in physical fitness and a decrease in anxiety and depression (cited by Lambrinides 1992). Another benefit associated with an officer being involved in exercise is a reduction in excessive force. Officers that are fit are more confident and that transfers to the suspect who will think twice about getting into a physically altercation (Hoffman, Collingwood 1995).

Law enforcement is now taking a closer look at implementing fitness programs. This is not a new ideal the business sector has been applying the concept that a fit employee is a better employee with the added benefit of a reduction in absenteeism, improved employee moral, productivity and reduced medical cost (Conrad, 1987; Cunningham,1982). The Peacedale Manufacturing Company was the first company in the U.S. to have a recreation program in 1854 (McGuire 1999). As early as 1895 Oneida Limited, Oneida, New York, opened a nine-hole golf course for its employees (Neer 1957, as cited by McGuire).

Not until the 1970's did the business section change its approach from a recreation program to an exercise program where employees could exercise while at work. The employers found that the programs helped with employee's productivity, but it was also a visible and popular employee benefit: the programs made the employees feel that the employers cared for them (Conrad, 1987, 1988). In the 1980's the Adolph Coors Company started their wellness program. The company saved an estimated \$19 million dollars a year in on medical costs; saw a reduction in sick leave taken and increased employee productivity. Due to the wellness program between 1988 and 1989 Coors' health care cost rose only 5.9 % with other companies having an increase of 18 % (Demeo 1992). A study completed by the Association for fitness in Business found company's with wellness programs and those who participate in the programs took fewer sick days, had more job satisfaction and handled stress better (cited in Tuhy, by Demeo 1981). Opatz (1990) found that fit employees had higher performance ratings than those in lower fitness levels. The research also found employees who are fit have fewer injuries, can perform at a higher level and come back to work sooner after a job related injury. A two and a halve year study done on the participants (66 to 160) of the Prudential fitness program found 51.7 % felt they were more productive, 75.8 % felt better physically, 66.2 % felt better mentally, and 59.1 % felt better emotionally (cited by Bowne, 1981). Another benefit of exercise programs was a reduction in turnover. Tenneco studied the differences in turnover experience for participants and non participants of its fitness program. This study also found people who exercise were higher performers. They also found that they could use the fitness program as a

recruiting tool and a tool to keep high performing employees (Tsai, Baun, & Bernacki, 1987).

An example in the law enforcement arena of a fitness program is the fitness program implemented by the Hobbs police department in New Mexico. The program is mandatory for all officers, which makes it part of the job. The program had three components, cardiovascular, nutritional diet and stress management. The department developed programs for each officer to fit their fitness needs. After a sixteen-week program 27 of the 64 participating were questioned about the program. They reported, officers lost an average of 8 pounds, 11 officers cut down smoking or quit, 21 reduced their caffeine intake, 23 said they felt better and 27 said the program was helpful (Arters, L & Aaron, K. 1989).

Liability Issues

A major issue regarding fitness programs is the issue of what happens if someone gets hurt while they are exercising. According to risk manager for the Texas Municipal league (TML), if a person does get hurt while exercising as part of their job, it will be a workers compensation issue, unless it was found that the person was hurt do to the employee misconduct. According to Prentice and Tracy (1992) officers are not suing their departments for workers compensation claims, but for the departments knowing the risk of the job and not have programs in place to help protect them from injuries.

Methodology

According to the information taken from the research it is easy to ascertain that the Hillsboro Police Department would benefit from implementing a fitness program.

Police departments are all unique, but there is a lot that is the same in police departments within Texas. In order to gather information representatives from different police departments were given a questionnaire regarding if their departments had a fitness program, was it an in-house or a program where the department supplied personnel with a membership to a gym. Also asked if the personnel with the departments that had a program used it and those departments that did not have a program felt like they wanted or needed one.

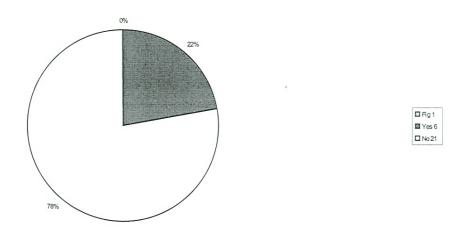
A total of 27 departments were asked to complete the questionnaire. The departments were from all sizes, large cites like Austin, San Antonio to very small departments with only one person. The departments are from every area of Texas. The questions were regarding if their departments had fitness/wellness programs. There were 27 surveys sent out and 25 were returned. The return rate of the survey was 92.59%. Out of the 25 surveys returned only six had fitness programs in place. Out of the six departments that had fitness programs five had in-house facilities. The other department paid for the employees a membership at a local gym. When asked if their department gave them time to workout while they were on duty. Two departments gave their employees time while on duty to workout, while four did not. Those departments that did not monitor the employees exercise program closely did not have the employees take the program seriously. The department that paid for the employees membership to the gym wrote that the employees like the ideal of have the memberships at the gym, but most don't use the facilities. Their program was not mandatory. Twenty of the departments that don't have fitness program think that the personnel in their department would like to have one. One department expressed that the cost of the program would not benefit the department, because most of the personnel would not use the program on a consistent bases.

The survey shows that most departments don't have a fitness program in place, and those that do have an in-house program where the employees exercise at one of the department's facilities. Most personnel from departments that don't have programs thinks that the implementing of a fitness program would be a good ideal and most of the personnel in their departments would like to see the program implemented.

Findings

The returned surveys were analyzed to find out what kind of fitness/wellness programs their different departments had if any. Once the surveys were compared if was found the majority did not have a fitness program in place (see Figure 1).

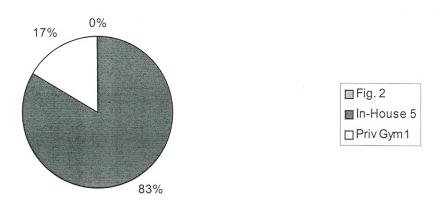
Agencies with Fitness Programs



The survey also asked if they fitness programs were in-house or a paid membership at a gym. All but one of the programs that had a fitness program in place had in-house

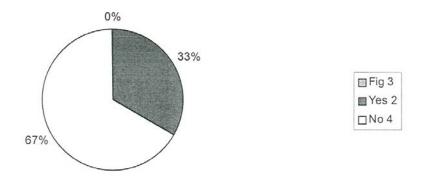
programs (see Figure 2).

In-House Facilites or Private Gym



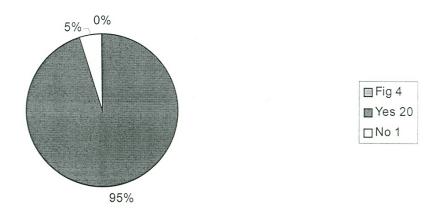
When asked if their departments gave them time to workout while on duty the majority said that did not, only swat and specialty departments had time to work out while on duty (see Figure 3).

On Duty Training Time



The survey also analyzed if personnel wanted a fitness program. (see figure 4).

Personnel Wanting a Fitness Program



The majority of the information received suggest that if the programs are not monitored closely the personnel will not used it.

Conclusions

This research confirms that police officers have not only have dangers related to day to day obligations of do the job, due to that job officers have a long list of added health problems the that lead to decline in quality of life and worst case scenario a shorter life span. As this study has confirmed there is a simple solution to this problem. The answer is exercise. Yes the answer is simple, but putting it into action is the difficult part. Part of the problems that lead to officers having trouble health is not being able to have normal work schedules and if the officer is lucky enough to be on a stable work schedule he or she works long hours are at night.

The purpose of this study is to find out if the officers of the Hillsboro Police

Department would benefit from a fitness program. The research clearly says yes. From

the examples from the private sector where there have been in place longer and have seen the benefits from there implementation to the mandatory program implemented at the Hobbs Police Department. The programs had benefits for the employers and the employees they stated an increase in productivity and an increase in job satisfaction. The study supported the hypothesis that the Hillsboro Police Department would benefit from the implantation of a fitness program and this best way to facilitate it is to have an in-house program where the equipment is a location within one of the cities buildings.

The limitations of this study is lack of long term studies of police departments having fitness programs. Departments have had exercise equipment at there stations, but It was not mandatory for personnel to use. As the research states, even now most departments don't have programs in place. As stated above due to different finances, department size it is very difficult to say what works for another department will work exactly in another department. There is not clear- cut way of implementing a program.

This study can be helpfully to those who want to combat the health related issues for police officers. Not trying to combat the problems is not helping the officer or the department. With departments having small hiring pools it only makes scene to keep the officers we have as long as possible, but in order to do that the officers in place have to be in the best shape possible. It also reverent to a department like the Hillsboro Police Department who at this time don't have finances to purchase additional equipment for a program but it is possible to give officers time while on duty to exercise at a local gym or use the small amount of equipment the department has. As the research shows just 30 minutes a day would lead to better quality of life for the officer and for the department to have a more productive employee.

References

- Aaron, K., & Arters, L., (1989). Fitness for life. Law and Order 37(12) 62-64.
- American Correctional Association. (2000). More than muscle: a total fitness program for corrections and law enforcement: the variable cyclic phase system. Lanham, Md: The Association.
- Cunningham, R.M. (1982). Health promotion. Wellness at work: Not just a passing fancy. <u>Hospitals</u>, 56(11), 82-84, 86.
- Demeo, Christine V. (1992). Frequency of use of an onsite fitness center in relation to j job satisfaction and absenteeism. Texas Woman's University, Denton Texas.
- Fogelson, R. (1984). Pensions: <u>The Hidden Costs of Public Safety.</u> New York, NY: Columbia University Press.
- Hoffman, R., & Collingwood, T., R.(1996). Fit for Duty. Law and Order, 44 (7) 17-18.
- Kroes, W. (1985). Society's Victim: <u>The Police</u>, Second Edition. Springfield, IL: Charles C Thomas.
- Lambrinides, Theodore, c., (1992). Why and ways to "just do it". Law and Order.39
- McGuire, Brenda., (1999). Nutrition knowledge, dietary practices, and physical activity Texas Woman's University, Denton Texas.
- McHenry PL, Fisch C, Jordan, Cardiac arrhythmias Observed during mill testing in clinically normal men. Cardiology 29: 331-336, 1972.
- Mostardi, R., J. Porterfield, S. King, K. Widman, and S. Urycki Cardiovascular Intervention Among Police Officers: A Two Year Report. <u>The Police Chief</u>, 53(6): 32-34.
- Neer, D. L. (1957). Industry. Recreation in the age of automation. <u>The annals of the American Academy of Political and Social Sciences</u>, 313, 79-82.
- Reintzell, John F., (1990). <u>The police officers guide to survival, health, and fitness.</u> Springfield, Ill., U.S.A.: C.C. Thomas, c1990.
- Reviere, R., & Young, V. D. (1994). Mortality of Police Officers: Comparisons by Length of Time on the Force. <u>American Journal of Police</u> Vol. 13, (1), 51-64.

- Tsai, S. P., Baun, W. B., & Bernacki, E.J. (1987). Relationship of employee turnover to exercise adherence in a corporate fitness program. <u>Journal of Occupational Medicine</u>. 29, 572-575.
- Violanti, J., J. Vena, and J. Mashall (1986). Disease Risk and Mortality Police Science and Among Police Officers: New Evidence and Contributing Factors. <u>Journal of Police Aministration</u>. 14(1): 17-23.

RESEARCH SURVEY

I'm conducting my research on police department's fitness programs. You answering the below questions regarding your department will be a great help. Thank you for your prompt response. Tony

esponse. Tony
1. Does your department have a fitness/wellness program?
2. If so, is it in-house or involves the department paying for a membership at a gym or fitness club?
3. Does your department give you time to workout while on duty?
4. If you have a fitness program in place at your department how do you think personnel accept it?

- 5. If you don't have a fitness program at your department do you think the personnel in your department would benefit from one?
- 6. What department do you work for?