A STUDY TO INVESTIGATE THE IMPACT OF LEAD PELLET TO THE AIR PISTOL AND AIR RIFLE SHOOTERS HEALTH IN SUBANG NATIONAL SHOOTING RANGE

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July 2013

A STUDY TO INVESTIGATE THE IMPACT OF LEAD PELLET TO THE AIR PISTOL AND AIR RIFLE SHOOTERS HEALTH IN SUBANG NATIONAL SHOOTING RANGE

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Thesis Submitted to the
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Master of Human Resource Management

Othman Yeop Abdullah
Graduate School of Business

Universiti Utara Malaysia

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ABSTRACT

Handling of lead pellets among the Air Pistol and Air Rifle shooters are the potential risk that may have adverse effect on the shooter's health. In shooting course of action, shooters need to physically handle lead pellet, susceptible to inhaling the lead dust or fume and the improper ventilation system may increase the lead contaimination in the shooting range. Limited of empirical evidence focusing on the lead pellet effect to the shooters has created some difficulty to the researcher to complete the research. The reseach was conducted among the Air Pistol and Air Rifle shooter in the Subang National Shooting Range with the objective to the determine the contributing factors i.e physical contact, inhalation and ventilation system that may have impact to the shooter health status.

Keywords: Airgun, Air Pistol, Air Rifle, ISSF, Lead.

ABSTRAK

Pengendalian dan penggunaan pellet oleh penembak Air Pistol dan Air Rifle mendedahkan mereka kepada risiko yang negatif kepada tahap kesihatan mereka. Setiap penembak perlu secara fizikal mengendalikan pellet, risiko terdedah kepada menghidu debu atau gas timah hasil daripada tembakan pellet serta pemasangan dan fungsi sistem ventilasi yang tidak sempurna pada lapang sasar menjejaskan tahap kesihatan penembak. Sumber rujukan yang terhad di dalam mendapatkan bukti-bukti faktor tersebut menyumbang kepada risiko kesihatan penembak merupakan kekangan utama yang dihadapi semasa menyiapkan kertas kerja ini. Skop kajian meliputi penembak Air Pistol dan Air Rifle di Lapang Sasar Kebangsaan Subang dan sebanyak 80 kertas soal selidik telah diagihkan bagi mendapatkan maklumbalas mengenai hubung kait pengbolehubah yang dinyatakan di atas pada tahap kesihatan penembak.

Kata kunci*:* Airgun, Air Pistol, Air Rifle, ISSF, Plumbum.

ACKNOWLEDGEMENT

First and foremost, Alhamdulillah, I would like to praise and thank to Allah, the Almighty God, for His passionate and merciful enables me to eventually complete my thesis.

Nevertheless, I would like to extend my utmost gratitude to the immediate supervisor of this research project, En Lukman bin Wan Mat Daud for his continuous assistance, guidance and word of encouragement the author received starting from the planning of the project to its completion.

I would take this opportunity to express my thank you my beloved family especially to my loving wife for providing morale support and sacrificed most of her times taking care of the family while I was away continuing my master study. Not forgetting to my four lovely daughters; Ainun Balqis, Ainun Bahiyah, Ainun Najiha and Ainun Nadiya for your understanding during the period of study.

Last but not least, I would like to extend my heartiest gratitude to the Management of National Shooting Association of Malaysia (NSAM) and all the shooters who are directly involved in this study. Your cooperation and willingness to share your though are highly appreciated.

Azuha bin Mat Ail (810919)

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ISSF	**International Sport Shooting Federation**
NSAM	**National Shooting Association of Malaysia**
OSHA	**Occupational Safety and Health Act**
FMA	**Factory and Machineries Act**
NIOSH	**National Institute of Occupational Safety and Health**

CHAPTER 1

INTRODUCTION

1.1 Introduction

Lead is a toxic agent and it is classified as hazardous and one of the oldest established poison which has negative impact to the human health. There are many studies conducted by the researchers to determine the level of effect lead can brings to the human's health. Some researchers such Theodore I Lidsky and Jay S Schneider (2003) tried to identify the hazardous effect of lead to the children that may impair their cognitive development. However, human still opted to use lead based substances despite the potential hazards associated with it.

National Safety Council (2007) defined lead as the highly toxic and contributes to adverse health effect to human being. There are many way human would be exposed to lead. Agency for Toxic Substance and Disease Registry (2007) in its fact sheet identified the typical exposure to lead comes from breathing workplace air or dust, eating contaminated food or drinking contaminated drink. The direct exposure to the lead would be hazardous to the health and could cause permanent damage to the brain. Since the usage and exposure to the lead related substances have accumulative effect on the one's health, thus necessary steps need to be considered in order to mitigate it effects to those who have direct contact with it.

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