

# ANALYSIS OF RELATIONSHIP BETWEEN HEALTH RISKS AND OZONE LAYER DEPLETION CASE STUDY IN ANURADHAPURA DISTRICT

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The ozone layer is mainly located in the lower portion of the stratosphere from approximately 15 to 50 km above Earth's surface and its thickness varies seasonally and geographically. Ozone layer acts as a protective shield for the harmful ultra-violet radiation that emits from the Sun. When Ozone Depleting Substances (ODS) are being released to the atmosphere, these substances would damage the ozone layer. According to the scientific revelations, ozone layer depletion has an impact on increase of Skin cancer, eye cataract among human beings. The reason for these health problems could be the increased amount of Ultra Violet (UV) radiations that reach to the Earth.

Most of the people in dry zone of Sri Lanka are farmers and because of their nature of livelihood, they are compelled to work under the condition of intense sunlight. Hence, their vulnerability to develop eye cataract and Skin cancer is higher. The objective of this study is to find out any possibility is existed in increasing of eye cataract and skin disorders among general public in Sri Lanka who are exposed to sunlight during their daily routine activities.

A survey using questionnaire was carried out sample of 550 elderly people in areas of 22 Divisional Secretariat in District Anuradhapura in order to gather information for the study. After collecting the data from questionnaire, a database was developed using Statistical Package for Social Sciences (SPSS) software.

The results of the survey have revealed that the  $1/3^{\text{rd}}$  of the population in Anuradhapura district has a chance of developing eye cataract since they expose to more sunlight. Further, among the total population in the district, farmer population is  $3/4^{\text{th}}$  and 90% of these farmers works daily in open areas. The Mean possibility to develop an eye cataract to any average person who lives in Anuradhapura is 74,000 hours or more, if he exposes to direct sun light in his life time.

