

## ABSTRACT

Pesticide poisoning is well documented as a major public health problem in Sri Lanka. Pesticide poisoning remained the fifth or sixth leading cause of death during the period from 1993 to 1998, and as the seventh leading cause of death thereafter. It was the first or second leading cause of death in many agricultural districts in Sri Lanka. Even though it was not included in the first 10 leading causes of hospital admissions, hospital inpatient morbidity due to acute pesticide poisoning was high. Most of these acute poisoning cases are intentional. Poisoning due to occupational exposure was also common but less well documented.

In Sri Lanka several studies have been done on knowledge and practices on pesticide poisoning among male farm workers and it has been found that there were no positive relationship with their knowledge and practices.

Women also account for a large proportion of workers engaged in agricultural work and their knowledge and practices have not been studied. Many women have never received any training or information on the chemicals used in the fields where they work. If they are familiar with agrochemical poisoning and preventive measures it will greatly help to reduce agrochemical poisoning in our farming communities.

This study was carried out to determine the primary and secondary preventive measures adopted by women to prevent poisoning by agrochemicals in a farming community. The study included description of women's knowledge on agrochemical poisoning and first aid measures and practices adopted by women as well as their family members in the household and the field.

Community based descriptive cross sectional study was carried out in Tissamaharama Divisional Director of Health Services area. Study population was women residing in Tissamaharama DDHS area and inclusion criteria to the study were married females between the ages of 30 to 45 years whose family members are involved in agricultural activities. Sample size was 357. Cluster sampling method was applied and clusters were identified according to probability proportionate to the size of the population. Study instrument was interviewer-administered questionnaire and observation of practices on storage, disposal and usage of agrochemicals were carried out in selected premises.

It was found that the majority of women had satisfactory knowledge on agrochemical poisoning. They also had a fair knowledge on first aid measures that should be practiced following exposure to agrochemicals. Significant percentage of children aged 10 – 14 years were engaged in agricultural activities including handling agrochemicals. Protective measures practiced by women as well as their family members were poor in the household level. Most of them did not adopt correct practices on storage and disposal of agrochemicals. Personal protective measures adopted by women as well as their family members were also not satisfactory in handling agrochemicals in the field. Women's and their family members' practices in relation to protective measures were not significantly associated with their age, educational level and the income.

Women's knowledge should be further improved on common symptoms of agrochemical poisoning, adverse health effects of misuse of agrochemicals and important first aid measures through awareness programmes. These awareness programmes could be organized and continued with the assistance of agricultural field officers, farmers' organizations and women's organizations. Usage of agrochemicals by children should be discouraged as much as possible and they should be educated about agrochemical poisoning and protective measures through seminars and workshops in schools.

They should be encouraged to form into small groups and buy only the required amount of agrochemicals on the day of spray operation. The use of pesticide traders in this process seems to be practicable. Women can motivate their family members to use protective measures and they can act as change agents to prevent misuse of agrochemicals. Public Health Midwives could assist in this process. Women should be provided with more information and training on protective measures, minimal usage of agrochemicals and organic farming. With the help of agrochemical industry should make available low cost, good quality protective equipments and carry out awareness programmes on usefulness of those. Such programmes and applicants should be supervised.