

Accidents involving migrant seasonal agricultural worker.

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Abstract

Migrant Seasonal Agricultural Worker (MSAW) labor is one of the most difficult forms of agricultural labor. There is no national data about number, the accident exposed type and reason of MSAW. This study aims to provide contribution to the literature by analyzing accidents among MSAW in sample of Adana. Data were analyzed with respect to type, cause, result and time of incident, age and gender of victims, and other factors. MSAW always have potential work-related accident dangers such as pesticide poisoning, falls, carbon monoxide poisoning, drowning, run over (etc.) in addition to health problems due to poor living conditions. Further, the most important risk is that transportation to and from places often occurs in unsafe and overcrowded vehicles. This kind of studies will help to develop policies and training programs to eliminate the health risks of these individuals.

Keywords: Accident, Migrant seasonal agricultural worker (MSAW), Occupational health and safety.

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Introduction

Seasonal agricultural workers, defined as the heart of sustainable agricultural production, account for about 450 million of 1.1 billion agricultural workers in the World [1]. 21.1% of the people employed in Turkey are agricultural workers and 5 million 470 thousand people work in this sector [2]. It is estimated that half of the agricultural workforce in Turkey is covered by seasonal agricultural workers [3].

In the seasonal agricultural labor system, there are two types of work, temporary and migrant seasonal agricultural worker [4]. The term "migrant seasonal agricultural worker" means an individual who is employed in agricultural employment of a seasonal or other temporary nature, and who is required to be absent overnight from his permanent place of residence. Temporary agricultural workers work at the places where they reside or on the agricultural land of others nearby, depending on the hourly, daily or during work period. Migrant agricultural workers work with households for a short period of time by leaving the village and coming to new working areas [5,6].

There are no statistical data at national level on the number of migrant workers employed in agriculture. It is estimated that seasonal migrant farm workers whose numbers are estimated at around 300,000 actually cover a population of at least one million with the unregistered and children In the agriculture sector, which employs more than one in five of total labor force, especially migrant seasonal workers work on very severe conditions due to the unique characteristics of agriculture [7]. Migrant seasonal agricultural workers labor is one of the most difficult forms of agricultural labor [6,8]. It is obvious that

migrant and seasonal agricultural workers are employed under the poorest health, safety and environmental conditions. They are exposed to a wide variety of occupational risks and hazards that contribute to injury and death.

There is no national data about number, the accident exposed type and reason of migrant and seasonal agricultural workers who are at the heart of the commercial food production system, and vital to our nation's economy and cultural interaction. The evaluation of accurate and sufficient data is crucial for improving the working and living conditions of migrant seasonal agricultural workers. This study aims to provide contribution to the literature by analyzing accidents among migrant seasonal agricultural workers in sample of Adana.

Materials and Methods

Incident reports between 2002-2013 in rural areas of the province of Adana, in which migrant seasonal agricultural workers are involved, was examined statistically. Data were analyzed with respect to type, cause, result and time of incident, age and gender of victims, and other factors.

Because of climate and soil possibilities in Adana province, plant production is the subject of every month of the year. Harvesting of citrus fruits which continues from August to April is labor intensive and seasonal migratory labor is intensely used. Cotton harvesting continues from the end of September to the beginning of November. Winter vegetable production is carried out in October-January. Seasonal migrants are participating in the germinated vegetable growing process, which requires a considerable number of workers,

especially during the soil preparation, seedling planting and harvesting, from February to September. According to estimates, approximately 65% of the workforce required at the provincial level is covered by migrant seasonal agricultural workers [9].

Results

Migrant seasonal agricultural workers always have potential work-related accident dangers such as pesticide poisoning, falls, carbon monoxide poisoning, drowning, run over (etc.) in addition to health problems due to poor living conditions. Further, the most important risk is that transportation to and from places often occurs in unsafe and overcrowded vehicles.

A total of 607 migrant seasonal agricultural workers are exposed to accidents in 178 incidents during the period (40 people are killed, 34 people are airlifted to hospital with life threatening and 533 people are injured). April is recorded the highest number of accident cases. The monthly accidents are also relatively high during the June, May and September. There is no statistically significant difference between days in terms of accidents. Accidents related to transport are more frequent between 5-8 h in the morning, and accidents are generally concentrated between 15-19 h depending on the workload.

When the distribution of the accidents according to the main activity is examined, it is seen that 44% of the accidents occur in the living environment, 30% in the working environment and 26% in activity during the transportation. According to the accident pattern, 34% of the accidents are poisoning, 24% are transportation, 22% are falling from high and 20% are other accidents. The leading actors of poisoning are agricultural pesticides which are responsible most of the injuries, CO, medicinal products and foods. The drivers of the transport accidents are minibuses/buses (37%), tractors (28%) and trucks (28%). Falls from a high are mostly from the car followed by falling from the tree. Vehicle crash, drowning and burning are also important accident types that migrant seasonal agricultural workers and their families are exposed to.

48% of the victims are men and 52% are females. 50% of poisonings, 59% of transport accidents, 29% of falling from a high and 33% of other accidents victims are females. Most victims were involved in transport accidents because many people were affected at the same time. The largest numbers of people were exposed to accidents during the transport in October and November, the poisonings in September, and the falling from a high in June.

Most of the accidents occur in the 21-30 and 15-20 age groups. Especially among women aged 15-24, the number of accidental exposures is quite high. The rate of exposure to accident under 14 y is higher than 51-60 age group and over 60 y of age. This shows that the children of migrant seasonal workers are also at risk and child labor is still widespread. 90% of the victims are primary school graduates, 2% are literate and 4% are not.

Most of victims were poisoned by food (53), medicinal product (26), CO (25) spraying agricultural pesticides (8) and contact with pesticide (8). During the accidents 163 of the accident victims were in minibuses/midibuses, 77 in trucks, 54 in tractors and 54 in buses.

Discussion

Migrant seasonal agricultural workers characterized by adverse life, transport and working conditions all over the world are known all over the world as a group experiencing all the dimensions of social exclusion and exposed to the worst conditions of working life. They live in poor conditions such as inadequacies of living and housing environment (unhealthy shelters, wastes that accumulate in the living space), hygiene (lack of clean drinking water and unhealthy toilet) problems, malnutrition, accidents and injuries, snake, scorpion, insect stings, health issues such as sunburn, reproductive health problems, risks caused by heavy working conditions (long working hours, work in extreme heat and cold, exposure to agricultural chemicals, dust-soil, lack of work safety, etc.), social insecurity, deprivation of children for education, unable to reach social services, early deaths and illnesses due to inaccessibility to services that affect their possibility of having a decent life. Migrant seasonal agricultural workers, who form one of the most disadvantaged groups of society, are emerging as special risk groups in terms of accident, injury, illness and premature death.

Landowners or land holders who are unable to overcome works with the current family labor force due to the time pressure of seasonal jobs prefer seasonal migrant workers to reduce costs by using cheap labor. Generally, families who do not have land to work, who have insufficient land or who cannot process these lands for various reasons are increasingly engaged in migrant seasonal agricultural worker as migrant (non-resident) workers in the agricultural labor force intensive areas in order to ensure their livelihood.

The lack of social security for a large proportion of seasonal migrant workers creates a serious disparity in access to health services for this group. Very low wages for long and vague working hours in difficult natural conditions and heavy working conditions are another big problem added to health and safety problems. Every year in Turkey, dozens of seasonal agricultural workers pay the price of moving in primitive conditions with their lives. Workers who are transported illegally on truck/van trucks, tractor trailers or cargo luggage or transported illegally on other vehicles with goods are forced to bear these non-human conditions for economic reasons.

Inadequate housing and nutrition problems of migrant seasonal workers are an important health risk. The families stay in improper conditions in agricultural areas for 3 and 8 months. Some years they do not return to their permanent residence. They remain in tents built in unhealthy and insecure places on the fields in rural areas outside the city centers. They wait for the next business season, clearly exposed to environmental threats [6,10]. As the findings of this research show, workers'

shelter and working conditions seriously threaten their health [11]. Seasonal workers who are exposed to the effects of agrochemicals in extreme hot or cold environments and work with non-ergonomic working methods in jobs that require physical strength. They also give life struggles under poor working conditions [12,13].

Developing countries, where only 20% of agricultural chemicals are used, are responsible for almost all of the pesticide poisoning because of the uncontrolled and unprepared use of hazardous pesticides [14]. Widespread and uncontrolled use of pesticides in agriculture is a serious threat to migrant seasonal agricultural workers and their families, especially children, who are likely to come into direct contact with chemical substances [15].

Conclusions

Occupational accidents are the biggest damage to loss of manpower the national economy [16]. By increasing awareness and community participation for the solution of problems, it is hope to reduce deaths, injuries, and diseases by improving the health status, living and working conditions of this social minority group. Studies by more detailed data collection about living and working conditions, exposure to risk and accidents of migrant seasonal agricultural workers will help to develop policies and training programs to eliminate the health risks of these individuals.

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