# **Rural and Remote Health**





### LETTER TO THE EDITOR

# One-year incidence of occupational accidents among agricultural workers in Oguzeli, Turkey

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## Dear Editor

Employment and working conditions have powerful effects on health equity<sup>1</sup>. Agriculture is one of the most hazardous sectors, with high rates of accidental death, injury and work-related illnesses; inadequate living and housing conditions; basic sanitation deficiencies,; lack of access to adequate and balanced nutrition; exposure to chemicals such as pesticides, and to extreme heat and cold; and lack of access to services. There is, however, still a lack of knowledge about accidents in agriculture.

The objective of our study was to determine the 1-year incidence of accidents among agricultural workers in Oguzeli district, Gaziantep, Turkey, and to determine the types and causes of injury, and influencing factors, as well as to identify possible intervention issues for prevention.

The first phase of the study (October-December 2013) was descriptive, and the second was a 1-year prospective study (January-December 2014) to determine the incidence of accidents. Participants were contacted via telephone calls at the end of every month for 1 year during the second phase of the study

to get knowledge about all farm-related accidents, 414 agricultural workers were regularly followed up 12 months.

Most of the agricultural workers stated that they carried out regular safety controls for machines. Very few workers had been educated about the risk of accidents. The 1-year cumulative accident incidence rate was 9.9%, while the frequency of accidents among participants in the previous year was 8.7% according to participants' own statements. During follow-up, majority of the accidents were said to have occurred in the field. A very few sufferers, who were referred to a health facility, could be recorded as an 'occupational accident' by medical staff. No death, harm or unintended consequences happened to study participants. Age, gender, social security, education level, income level, working more than 5 days per week, working more than 8 hours per day, total years of working as a farmer or having chronic diseases were not associated with accident incidence (p>0.05). However, the workers who responded 'yes' to the question 'Have you ever had an accident in the previous year?' in the first questionnaire application were more likely to have reported an accident during the follow-up year in comparison with those who reported no accidents in the previous year (p=0.000).

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Reviewing studies on agriculture accident frequency worldwide suggests that the frequency of accidents in agriculture has declined by approximately 50% in the past 15 years<sup>2-5</sup>. Similar frequency results were obtained with the declarations of workers and the prospective study. Therefore, memory can be ignored as a factor, and information about accidents obtained by descriptive studies can be used in planning policy towards agriculture workers in different regions. We suggest establishing 'accident units' in agriculture district offices for training all workers about accidents. Those who have repeated accidents should be assessed by an expert team and assessed for problems relating to roads, equipment and individual errors.

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