



and relation of the caregiver with the patient. Data regarding disease

Table 3 demonstrates the relation the complications with the patients' characteristics. Pneumonia was recorded among 62.6% of the Saudi cases compared to none of the non Saudis with recorded statistical significance ( $P=0.028$ ). Also 69.1% of the patients who received their medical care in the governmental hospitals had pneumonia compared to 37.9% of those who received the care in private hospitals ( $P=0.003$ ). As for satisfaction relation with pneumonia, it was recorded among 72.9% of the unsatisfied cases compared to 29% of patients with neutral attitude regarding the health

With regard to complications recorded among AD patients, the current study revealed that pneumonia was the most frequent complication which was recorded among nearly two thirds of the cases followed with getting loss and failing down but the least recorded was having bone fractures. Recurrent pneumonia explains the high admission rate to hospitals during the last year with some cases with fractures. The study also revealed that pneumonia was significantly associated with patient nationality as it was more recorded among Saudi patients because they are the main bulk of the sample. Also pneumonia was significantly more among patients who received the medical care in the governmental hospitals which may be explained by that the medical care of lower quality and some of the governmental hospitals don't have the trained staff to deal with AD cases. Also pneumonia was highly recorded among patient with poor satisfaction regarding the provided medical care (most probably those who were treated at governmental hospitals). Fall down was more recorded among illiterate AD patients who were cared by parents or paid persons. Getting lost was more among male patients who may be allowed to be outdoor due to gender nature making them more liable for getting lost.

## Conclusion

In our study population of representing sample of Alzheimer Disease patients, most frequent complications was development of pneumonia which needed hospitalization followed by getting lost, falling down and bone fractures. Risk factors associated with these complications include male gender for getting lost, lower educational level and frequent hospital admissions for pneumonia. Health care providers are advised to be aware of the disease nature and the physiological and behavioral changes associated with the disease to be aware of all possible health related risks.

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