RCSI Bahrain

RSS PROJECT SUMMARY YEAR 2017

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Project Title	A systematic review of the effect of medications and polypharmacy on falls risk in older adults admitted to hospital.

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Project Summary
Falls are the most common cause of injuries and hospital admissions in older adults (Castro et al., 2014; Milos et al., 2014). A significant number of falls admissions to emergency departments are caused by syncope (Ali and Grossman, 2016). Inappropriate prescribing and poly-pharmacy contribute to falls risk in older adults, and particularly syncope-related falls (Marvin et al., 2017). There has been a recent increase in studies investigating the effect of medications on falls risk in older adults. For example, one study by Milos et al. (2014) explored the effect of falls risk-increasing drugs on occurrence of falls in community-dwelling older adults (n=369). Milos et al. (2014) recommended that interventions to reduce falls in older adults should focus on reducing the total number of drugs and withdrawal of psychotropic medications. Additionally, a recent randomized controlled trial investigated the effects of vasodepressor drugs in reflex syncope in older people (Solari et al., 2017). Results showed that reoccurrence of syncope and pre-syncope can be reduced by discontinuing or reducing vasoactive therapy in older adults. There is a need to review the literature, to evaluate medications such as vasodepressor and psychotropic drugs, on falls risk in older adults. The aim of this project is to conduct a systematic review of the literature on this topic. This would enable the authors to make recommendations for clinical practice such as recommendations to reduce falls risk in older patients attending emergency departments. Additionally, the authors can make recommendations for future research.

Subjected to Ethics Approval	**Yes:** □ **No: X**

Primary References	1. Ali, N.J. and Grossman, S.A., 2017. Geriatric Syncope and Cardiovascular Risk in the Emergency Department. The Journal of Emergency Medicine. 2. Castro, V.M., McCoy, T.H., Cagan, A., Rosenfield, H.R., Murphy, S.N., Churchill, S.E., Kohane, I.S. and Perlis, R.H., 2014. Stratification of risk for hospital admissions for injury related to fall: cohort study. BMJ, 349, p.g5863. 3. Marvin, V., Ward, E., Poots, A.J., Heard, K., Rajagopalan, A. and Jubraj, B., 2017. Deprescribing medicines in the acute setting to reduce the risk of falls. Eur J Hosp Pharm, 24(1), pp.10-15. 4. Milos, V., Bondesson, Å., Magnusson, M., Jakobsson, U., Westerlund, T. and Midlöv, P., 2014. Fall risk-increasing drugs and falls: a cross-sectional study among elderly patients in primary care. BMC geriatrics, 14(1), p.40. 5. Solari, D., Tesi, F., Unterhuber, M., Gaggioli, G., Ungar, A., Tomaino, M. and Brignole, M., 2017. Stop vasodepressor drugs in reflex syncope: a randomised controlled trial. Heart, 103(6), pp.449-455.