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Nurse to patient ratios in South Africa and its impact on nurse and patient outcomes

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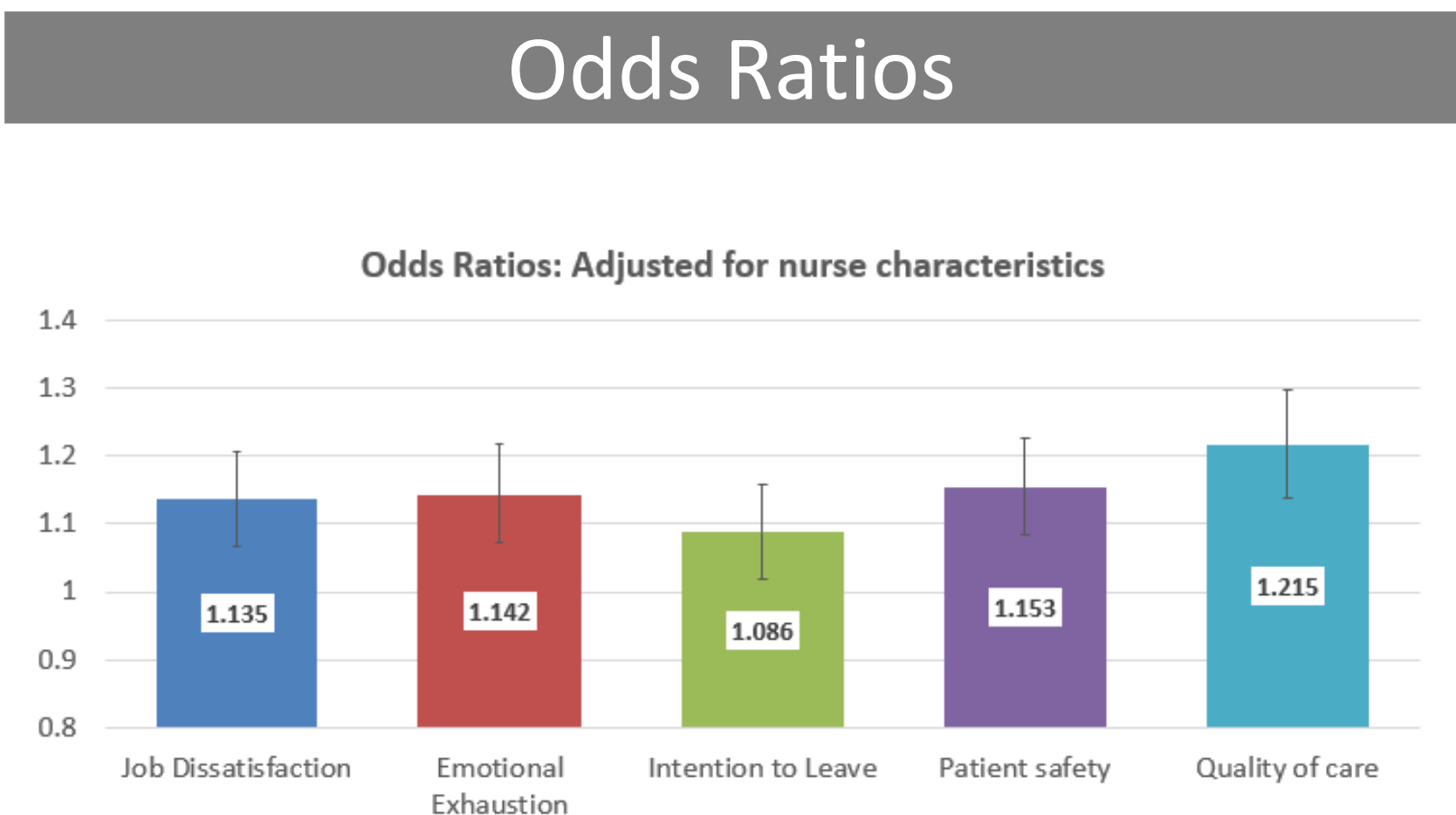
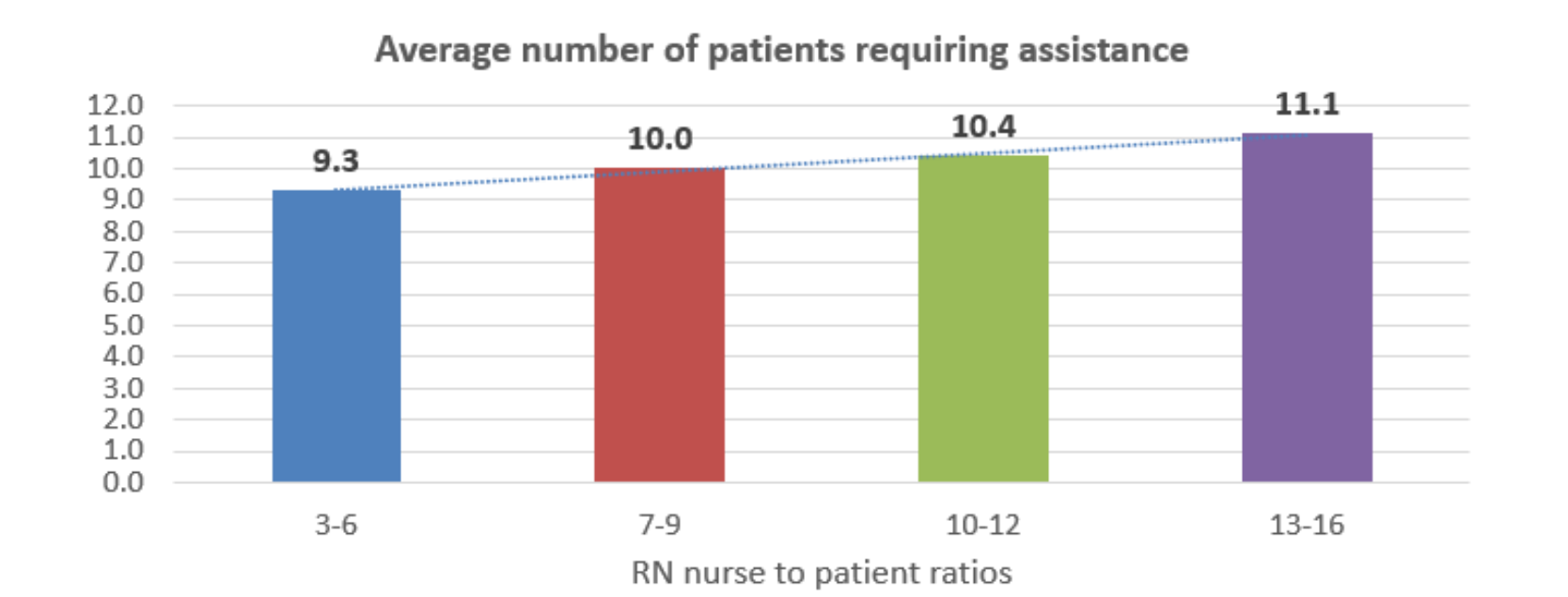
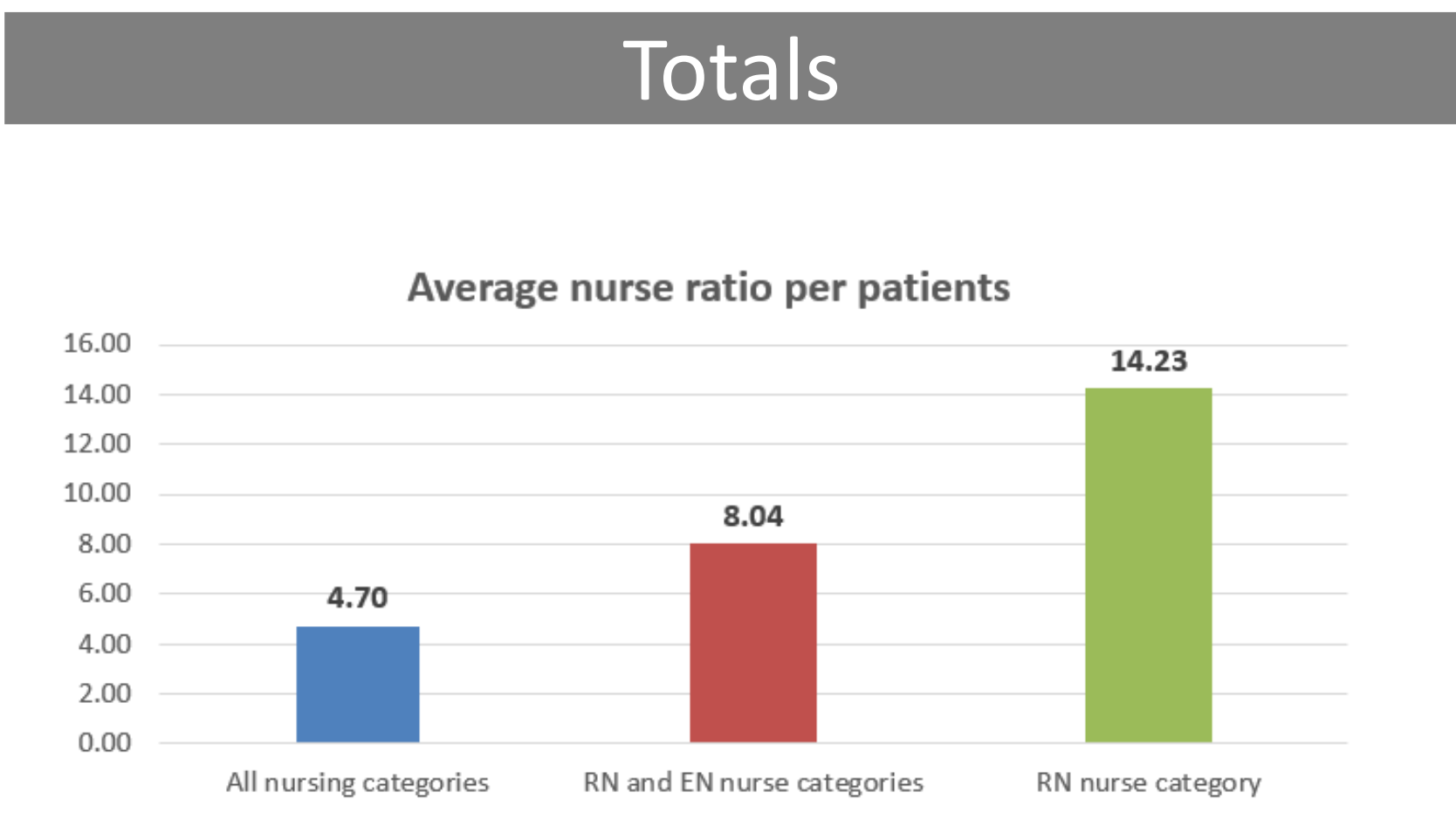
INTRODUCTION

- Systematic reviews show that higher nurse-to-patient ratios are consistently associated with poorer nurse outcomes (Shin et al., 2018) and patient outcomes (Driscoll et al., 2018).
- Nurse staffing management varies globally, with some countries implementing standardized levels, such as the United States of America (USA) and Australia; while others having staffing recommendations, such as the United Kingdom and Ireland.
- Developing countries, such as South Africa, still need to provide more guidance.
- Although the idea of optimal nurse-to-patient ratios is a contentious issue, due to the many variables and measurement approaches involved, a basic recommendation is needed, specifically in developing countries where minimal data is available.

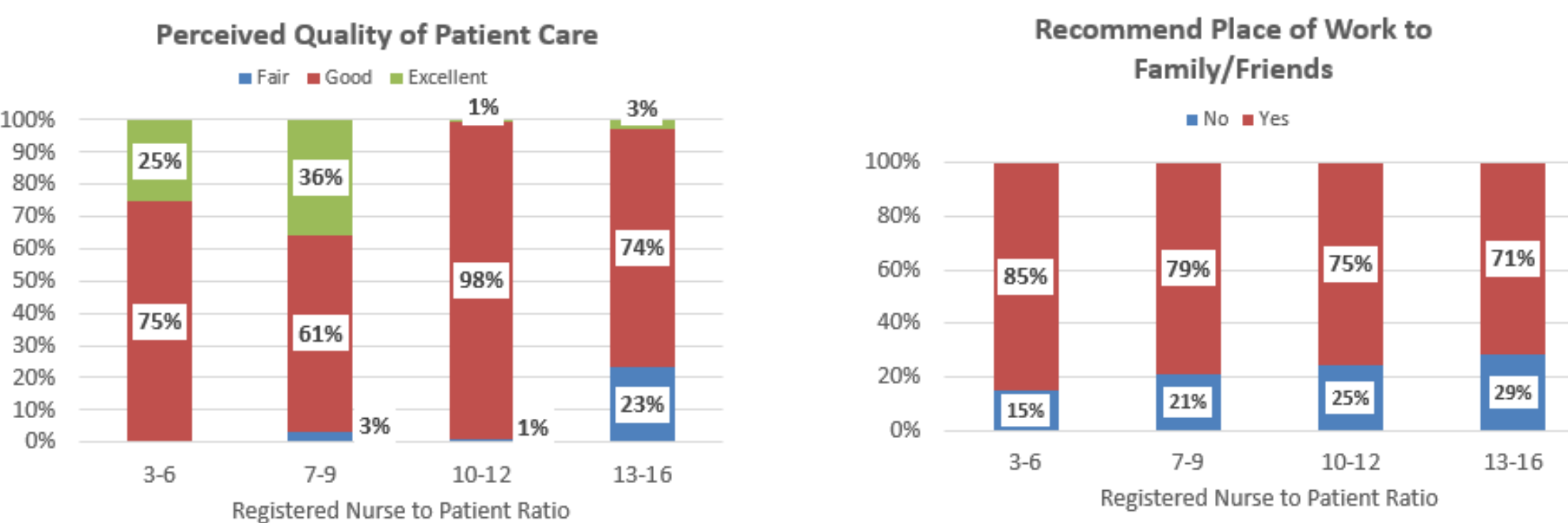
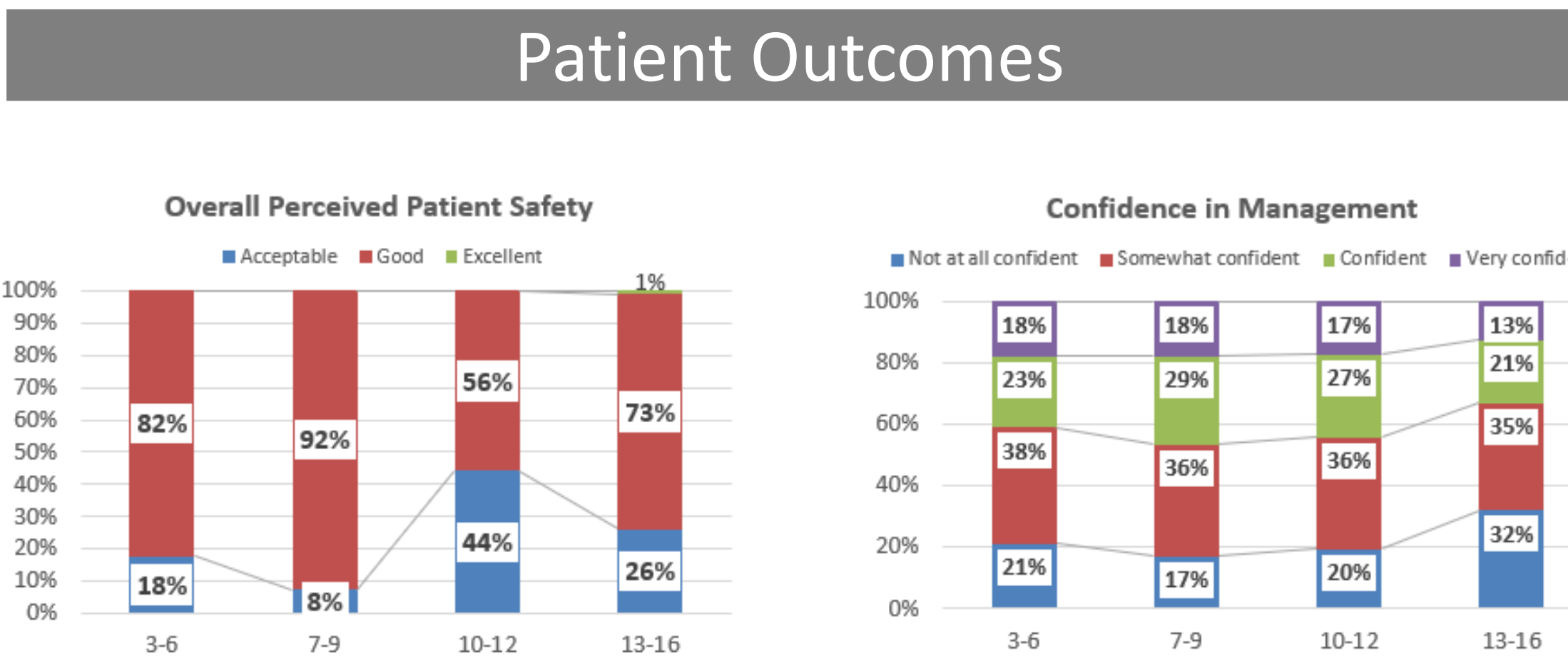
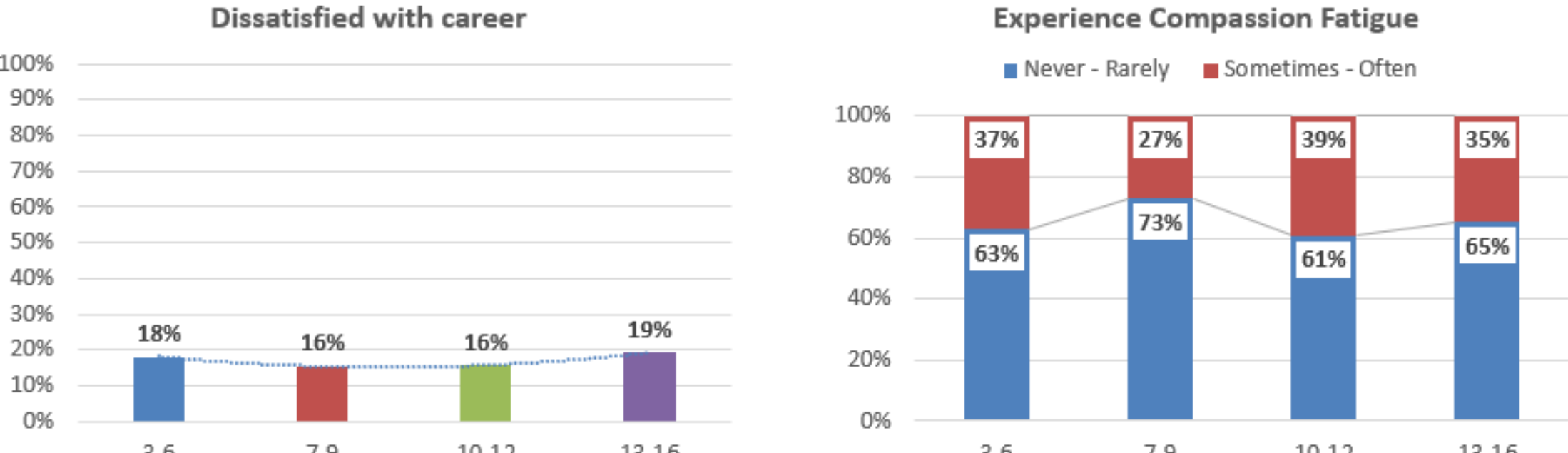
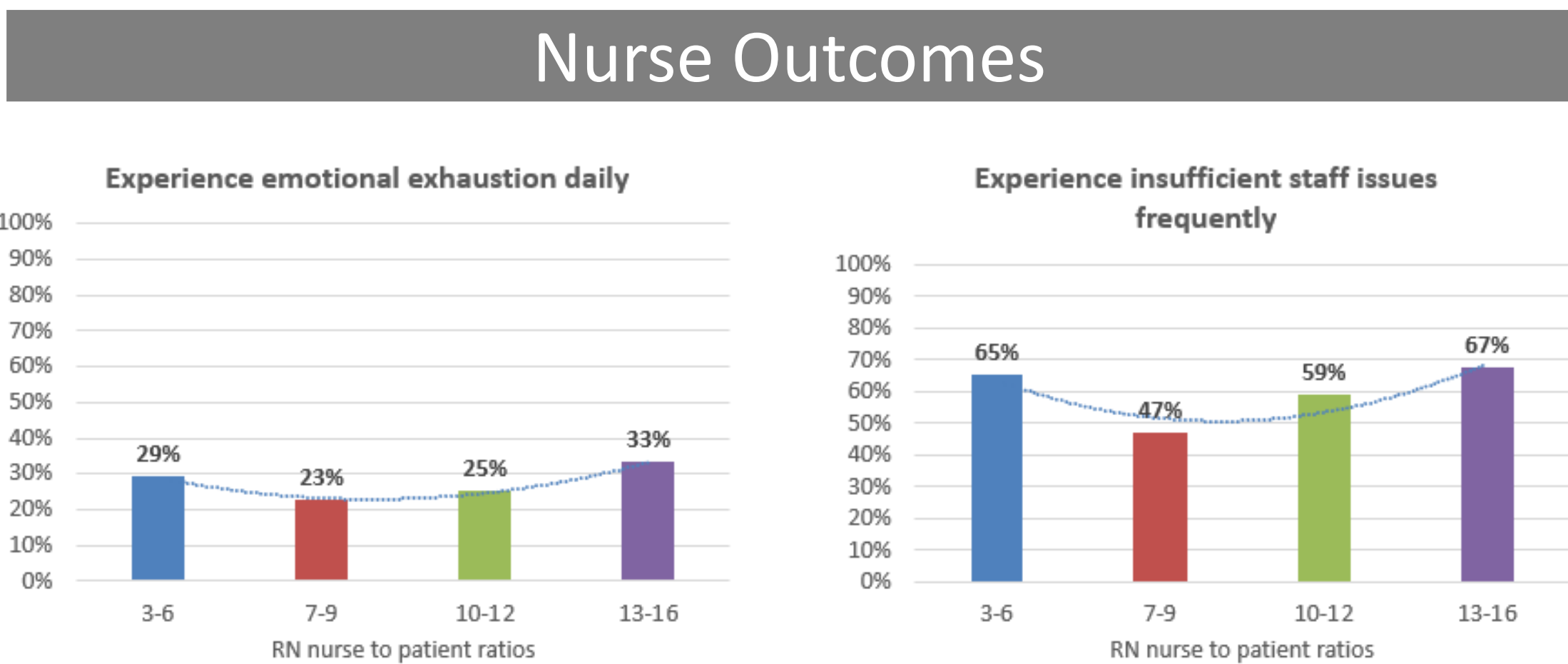
AIM

To determine the recommended nurse-to-patient ratio for medical and surgical units in South Africa and the impact of nurse staffing on selected nurse and patient outcomes.

RESULTS



	Unadjusted	P Value	Adjusted for nurse characteristics	P Value
Job Dissatisfaction	1.162 (1.096 - 1.231)	<.0001	1.135 (1.068 - 1.206)	<.0001
Emotional Exhaustion	1.170 (1.102 - 1.243)	<.0001	1.142 (1.072 - 1.216)	<.0001
Intention to Leave	1.099 (1.035 - 1.166)	0.0021	1.086 (1.018 - 1.158)	0.0122
Patient safety	1.212 (1.141 - 1.288)	<.0001	1.153 (1.083 - 1.227)	<.0001
Quality of care	1.257 (1.178 - 1.340)	<.0001	1.215 (1.137 - 1.298)	<.0001



METHOD

A cross-sectional survey design was applied. Data were collected in all nine provinces of South Africa. In the private sector, online self-report survey data was collected from hospitals (n=116) of the four largest hospital groups. In the public sector, paper-based self-report survey data were collected from one hospital from every tier (n=27). An all-inclusive sample of medical-surgical units was obtained. An all-inclusive sample of registered nurses (RN) [4-year diploma or degree], enrolled nurses (EN) [2-year diploma], and enrolled auxiliary nurses (ENA) [1 year certificate] were obtained (n=1188). The survey data was used to analyse current ratios. Odds ratios were calculated to determine the impact of increasing staff levels on nurse outcomes (job dissatisfaction, emotional exhaustion and intention to leave) and patient outcomes (patient safety and quality of care). Trend analysis was applied to the individual outcomes to identify negative decline when compared to increasing nurse staffing ratios.

REFERENCES

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Driscoll, A., Grant, M.J., Carroll, D., et al. The effect of nurse-to-patient ratios on nurse-sensitive patient outcomes in acute specialist units: a systematic review and meta-analysis. European journal of cardiovascular nursing. 2018 Jan 1;17(1):6-22.

CONCLUSIONS

- It is improbable that South Africa, as a developing country, would be able to attain nurse (RN) to patient ratios of 1.4 as in the USA or 1.5 as in Australia.
- Although our overall nurse (all categories) is in a similar range of 1:4.70, our RN-to-patient ratio is triple that of what is recommended in most developed countries at a ratio of 1:14.23. This is not an acceptable practice when one considers the impact on nurse and patient outcomes.
- There is a clear correlation between the RN-to-patient ratio and the number of patients requiring assistance with daily living.
- The researchers, therefore, make a recommendation based on national nurse-reported data of a nurse-to-patient ratio of at least **1:7-9** in medical and surgical units.

ACKNOWLEDGEMENT

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