

Predicted prognosis and prevalence of statin prescription in patients referred to a hospital palliative care service



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Introduction

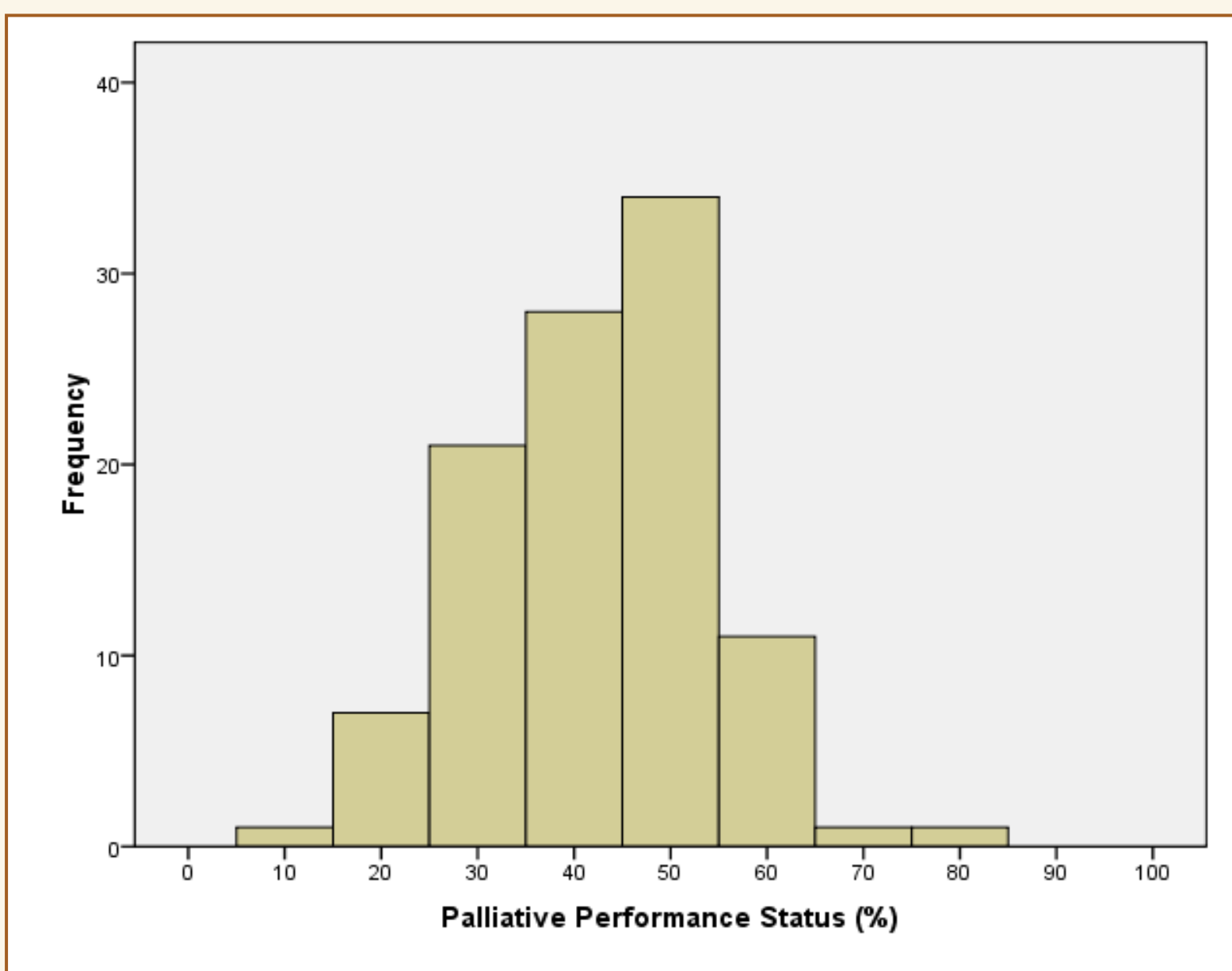
Polypharmacy is a common issue within the hospital population. (1) In the context of limited expected life span, it is incumbent upon the carers to rationalise prescribed medications and to re-evaluate the benefit of risk modifying medications (eg. Statins) prescribed when the patient was healthier. Many patients are being seen further upstream in illness trajectory by the Hospital Palliative Care Team (HPCT). At referral, there is usually generally an acknowledged limited life span and a decision to focus on symptom and QOL issues. It would be expected that in such a population medications are used with deliberate purpose within the context of expected prognosis. The palliative performance status (PPS) and the palliative performance index (PPI) have both been shown to correlate inversely with survival within palliative care patients. (2-3)

Methods

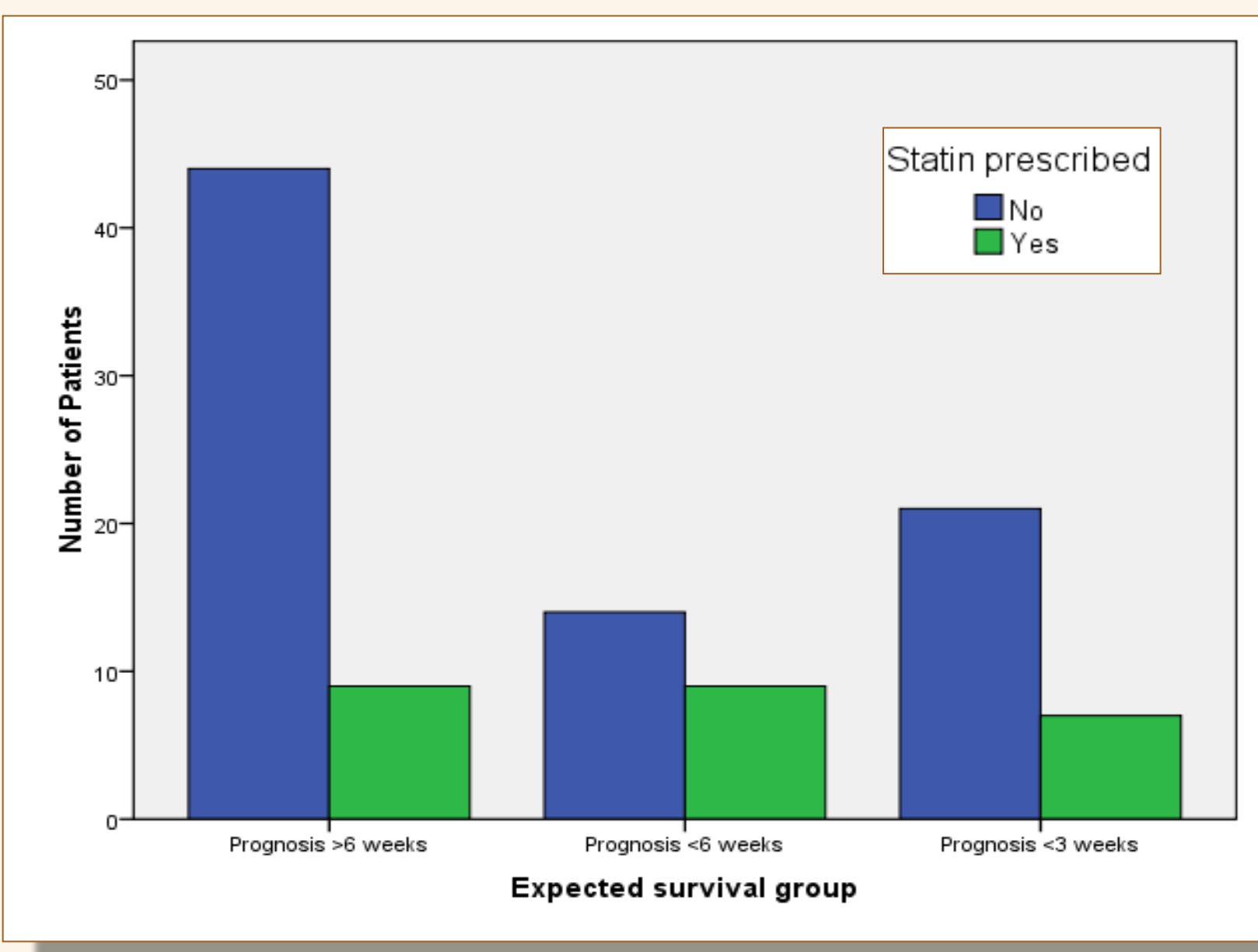
The PPS is an adapted Karnofsky Performance Scale, designed to measure physical performance status in palliative care patients.(2) It is scored in decrements with worsening functional status from 100% (normal) to 0% (death). 60% describes a patient with reduced ambulation, significant disease and disability. The PPI is a clinical prognostic tool which assigns a score according to PPS; oral intake; and the presence of oedema, dyspnoea and delirium. PPI and PPS have been validated for use in hospital patients. (2-3)

The PPS and PPI of all patients referred to the HPCT was assessed and recorded. A review of the drug kardex was carried out at first visit and the presence of a prescribed statin was noted. PPI score were used to estimated the likely prognosis of each patient as: Expected survival greater than 6 weeks (PPI<4), expected survival less than 6 weeks (PPI <6) and expected survival less than 3 weeks (PPI>6). The data was entered into an EXCEL spreadsheet and then further analysed using SPSS.

Results



		Expected Survival			
		Prognosis >6 weeks	Prognosis <6 weeks	Prognosis <3 weeks	Total
Statin	No	44	14	21	79
	Percentage	55.7%	17.7%	26.6%	100.0%
	Yes	9	9	7	25
	Percentage	36.0%	36.0%	28.0%	100.0%
Total	Number of patients	53	23	28	104
	Percentage	51.0%	22.1%	26.9%	100.0%



105 patients had data recorded over a 6 month period 1 patient had incomplete data. (PPS not recorded). The majority of patients had a PPS of 60% or less. (n=102 , 98.1%).

PPS is shown above:

Of the 104 patients with complete data, 53 (51%) of patients scored PPI of <4, 23 (22.1%) scored <6 and 28 (26.9%) scored >6.

In the whole population (n=105), 25 (23.8%) patients were prescribed a statin medication. Prevalence of statins were tabulated according to predicted survival (table 1)

There is no overall difference in statin prevalence across all prognostic groupings (p= 0.115, Chi Squared Test).

This data has been graphed above:

Discussion

Statins are utilised to modify longer term risks and may not be appropriate in patients with short expected survivals. Furthermore, the metabolism of some analgesics may be influenced by the cytochrome inhibition of statins. Although our service receives considered referrals, there was no significant difference in the prevalence of statins across prognostic groups in this sample. Around one quarter of patients were receiving statins, adding to their medication burden.

Conclusions

- Majority of palliative care patients have a low performance status
- Around 1 in 4 patients were receiving a statin at referral, irrespective of performance status or expected survival
- Statins may not be beneficial to patients with a poor prognosis and should be reviewed

References

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2. Morita T, Tsunoda J, Inoue S & Chihara S. Validity of the palliative performance scale from a survival perspective. *Journal of Pain and Symptom Management* 1999;18(1):2-3
3. Stone C, Tiernan E & Dooley B. *Journal of Pain and Symptom Management*.2008;35(6):617-622