

Maternal Critical Care follow-up: underrepresentation of the socially deprived

Angus Turnbull, Lucy Taylor, Laura Gill, Anna Stout, Katie Marwick, Arlene Wise

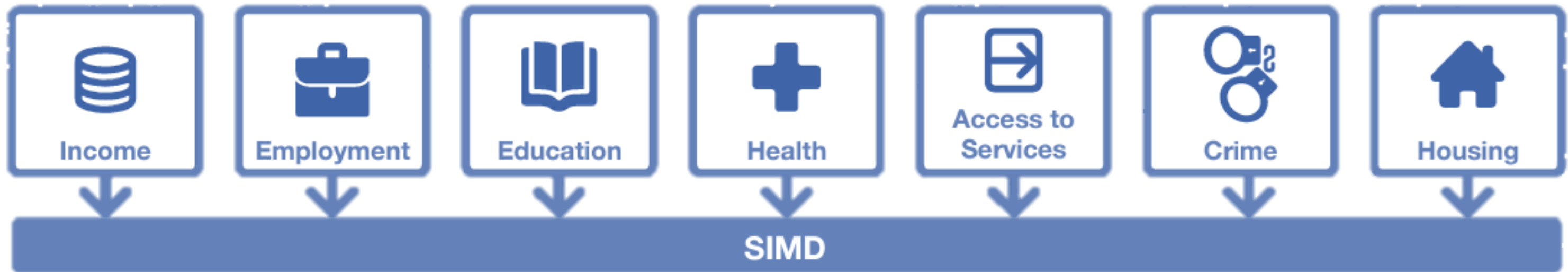
Maternal Intensive Care Unit (ICU) admission carries the burden of increased morbidity and mortality[1]. Socioeconomic deprivation is associated with both increased risk of maternal mortality and admission to ICU [1,2]. We aimed to identify inequalities in follow-up linked to socioeconomic deprivation.

Methods

Maternity patients admitted to ICU at the Victoria Hospital, Kirkcaldy (VHK) in 2019-22 or Royal Infirmary of Edinburgh (RIE) in 2022-23 were identified.

Patients were contacted to ascertain recovery and offered a variety of follow-up opportunities: focus groups, individual structured meetings, or phone consultations. Participation in a focus group or individual structured meeting was recorded as substantial follow-up engagement.

Using patient postcode, we identified social deprivation quintiles (Q1-5) using the Scottish Index of Multiple Deprivation (SIMD). SIMD assigns a measure of deprivation from Q1 (most deprived) - Q5 (least deprived).



We analysed follow-up choices stratified by deprivation. Caldicott approval was obtained.

Conclusions

Maternal ICU admission carries significant mortality or morbidity burden[1,2]. The maternal ICU population is skewed towards those with social deprivation which is itself a risk factor for poor outcome[1]. We identified that socially deprived patients comprise a significant number of maternal ICU admissions yet fewer patients from deprived populations engage with post-ICU follow-up. Future work should focus on strategies to engage these patients given they are most likely to suffer burden from their ICU stay.

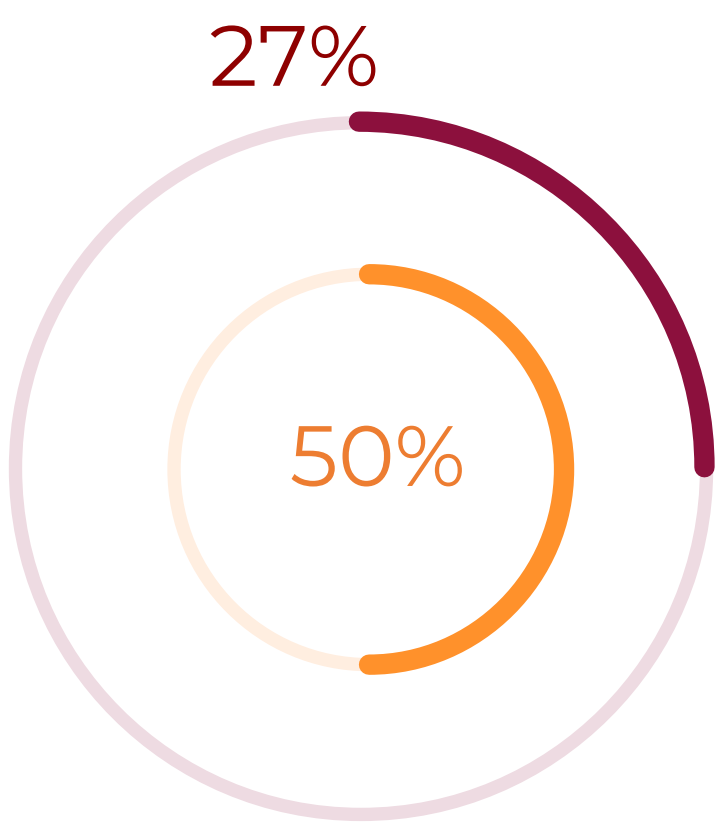
Deprivation = ↑ morbidity + ↓ follow-up

Results

Sixty-one patients were admitted to ICU: 27 at RIE and 34 at VHK.

There was a greater burden of deprivation in maternity patients admitted to ICU at VHK (32% in Q1/2) vs Lothian (18%).

Across both sites a disproportionate percentage of patients with deprivation were admitted to ICU: 27% of admissions from Q1 vs 13% from Q5.



Twelve out of thirty-five patients (34%) contacted engaged in substantial follow-up and uptake was inversely associated with deprivation: 7% in Q1 v 29% in Q5.

Half (50%) of all substantial follow-up participation was achieved from patients in the least 2 deprived quintiles, despite this population totalling only 27% of admissions.

Lack of follow-up engagement was associated with deprivation: 28% in Q1 vs 8% in Q5.