

Suburban versus Urban:

A comparison of Emergency Department referrals to Liaison Psychiatry in two tertiary referral centers.

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Introduction

A large proportion of patients present to the Emergency Department (ED) with self-harm {Coshal 2017}; however the typical attendee profile may vary depending on geographical location of the hospital. It is important to have knowledge of who typically presents in order to optimize service delivery to the local community.

The other main categories of presenting psychiatric problems include alcohol and substance misuse, emotionally unstable personality disorder, acute psychosis, and mood disorders {Cassar, 2002}. Studies have identified male patients with Mental Illness or Substance Related Disorder as more frequent ED users than females {Brennan 2014}, {Fleury 2019}.

There is higher utilisation of ED in younger individuals, {Siroitch 2016} but has also been reported among individuals in their forties, and older {Blonigen 2017}. Economic disadvantage is a prevalent characteristic of very high users (12+ ED visits/year, {Chaput 2007} as well as lack of family support {Young 2005}. It has been shown that homeless patients represent a significant proportion of ED attendees and inpatients compared to domiciled patients {NiCheallaigh 2017}

Objectives

To compare ED referrals to psychiatry in a suburban versus an urban setting over a one-month period.

Methods

This was a retrospective cross-sectional study examining ED referrals to psychiatry over a one-month period in two tertiary centres; - one based in an inner-city setting, the other based in a suburban area outside the city. Both centers have a bed capacity of over 800. The anonymised data was collected from the both hospital's electronic patient records and analyzed.

Analyzed data included gender, age distribution, presence of substance use, homelessness, self-harm, time of referral, clinical presentations (presence of self-harm, suicidal ideation, mood/anxiety symptoms, substance-related symptoms, psychotic symptoms or whether the presentation was primarily organically driven) and admissions.

Descriptive data and hypothesis testing were performed where appropriate using Statistical Package for Social Sciences SPSS® version 26.

Results

Table 1. Comparison of demographic and clinical differences between the suburban and urban centre

Total N=213	Suburban N=104	Urban N=109	P-value
Demographics	N (%)	N (%)	
Male (%)	51 (49%)	62 (56.9%)	0.252
Age Mean (SD)	33 (14)	32 (12)	0.098
Homeless	5/104 (4.9%)	30/109 (28%)	<0.0001
Unemployed	70/94 (74.5%)	88/106 (83%)	0.138
Not in relationship	65/96 (67.7%)	81/106 (76.4%)	0.167
Clinical Presentation			
Substance misuse	42/104 (40.4%)	31/109 (28.4%)	0.083
Self-harm	32/104 (30.8%)	33/109 (30.3%)	0.938
Suicidal ideation	27/104 (26%)	34/109 (31.2%)	0.399
Anxiety/mood disorder	27/104 (26%)	32/109 (29.4%)	0.580
Psychosis	9/104 (8.7%)	11/109 (10.1%)	0.719
Organic	7/104 (6.7%)	5/109 (4.6%)	0.498
Assessed on-call	66/104 (63.5%)	74/109 (67.9%)	0.496
Admitted	13/104 (12.5%)	33/109 (30.3%)	<0.002

Chart 1. Demographic and clinical outcome differences between Urban and Suburban centres

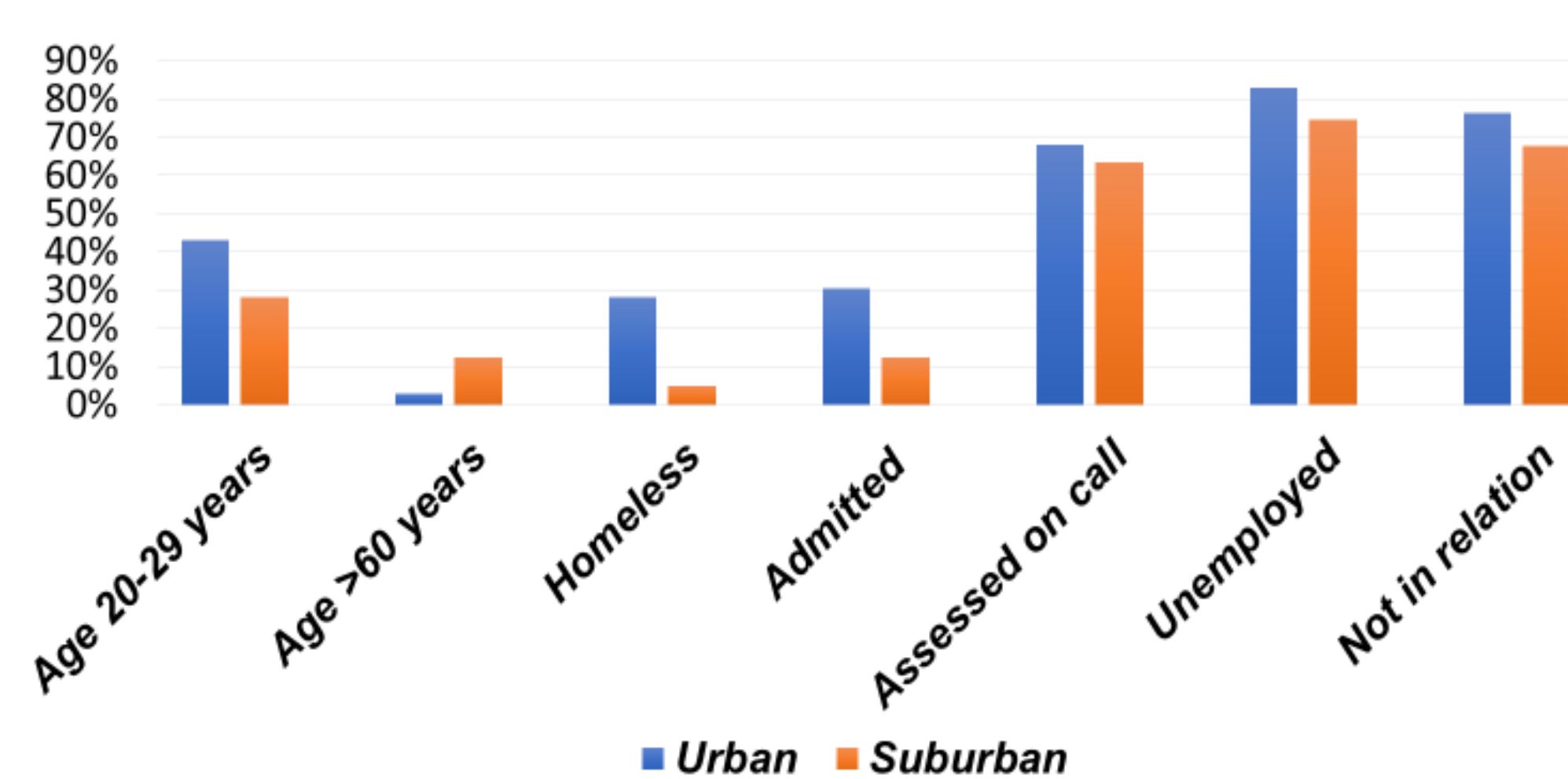


Chart 2. Clinical presentations across two centres Urban Vs Suburban

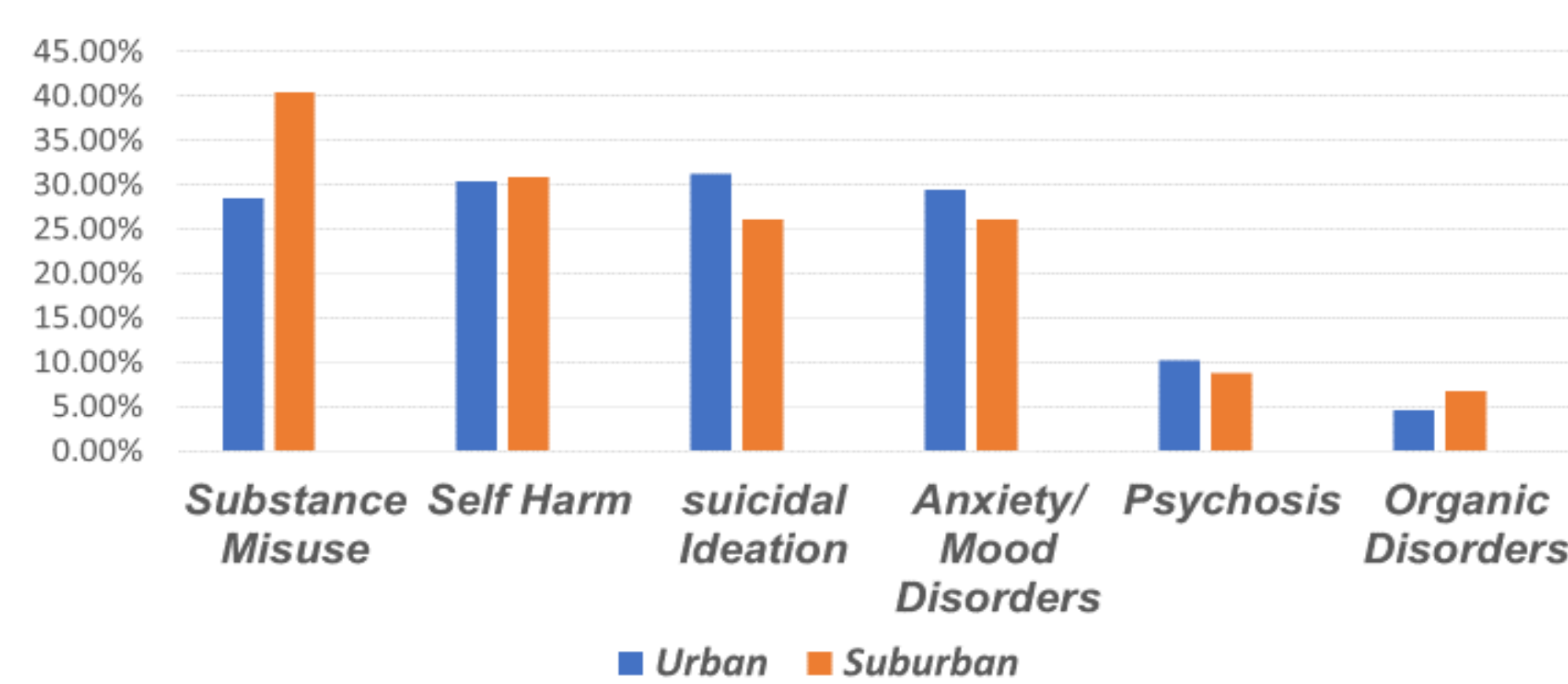


Chart 3. Admissions during on-call period across both centres

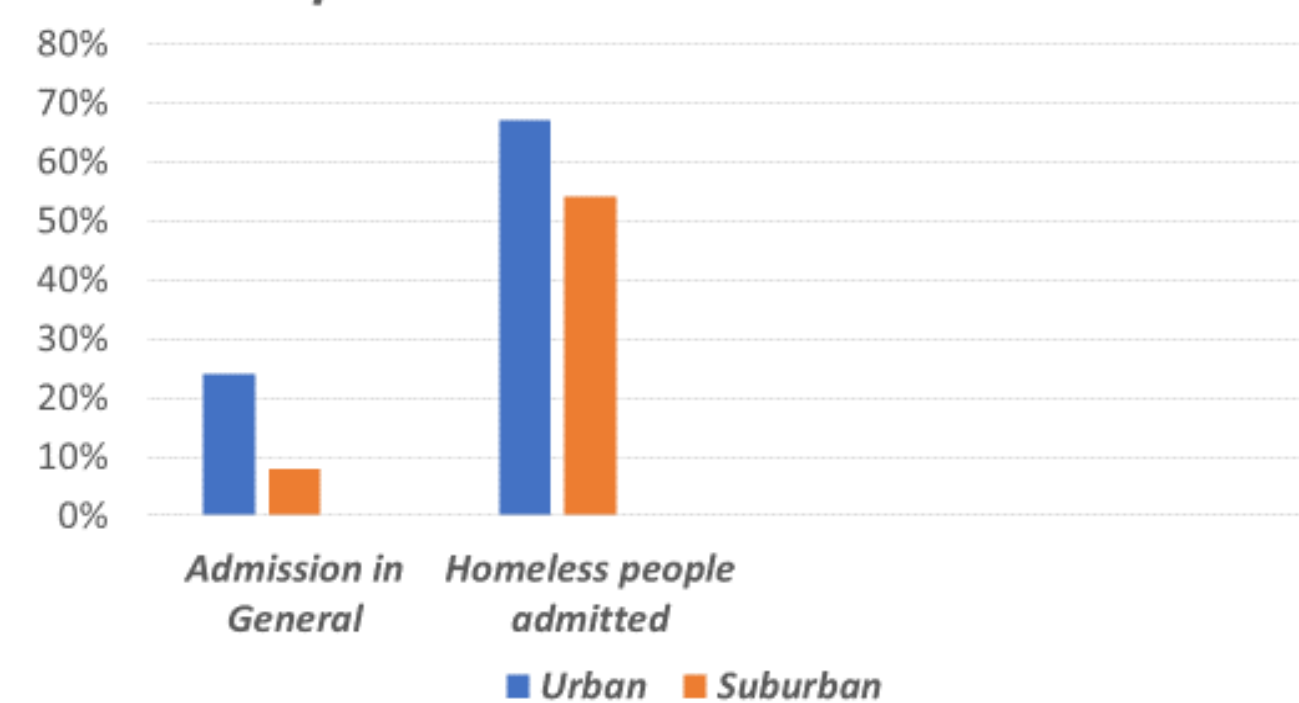


Chart 4. Admissions during on-call period based on clinical presentations to Urban center

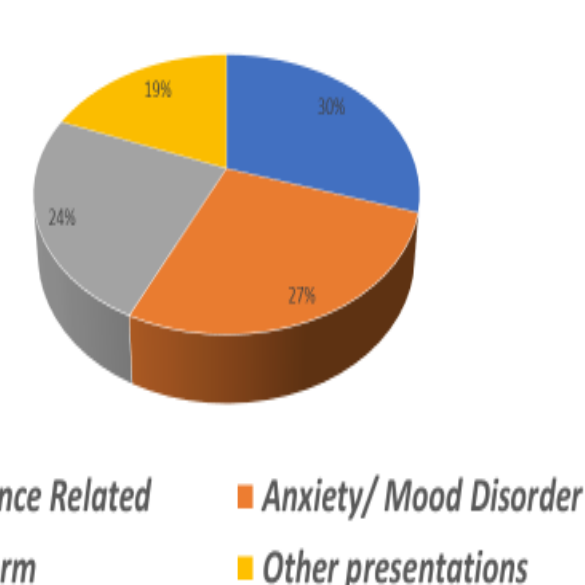
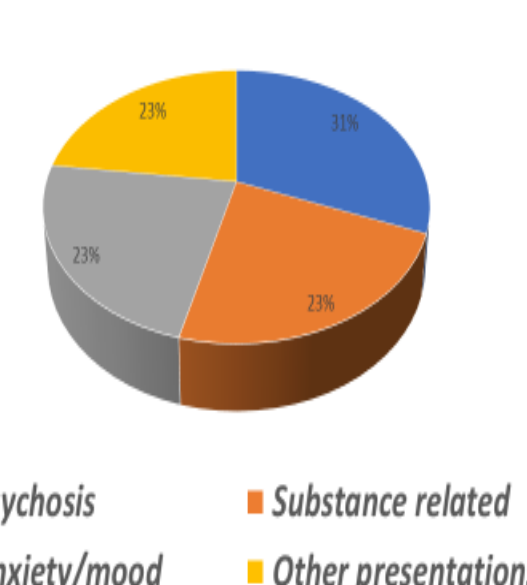


Chart 5. Admission during on-call period based on clinical presentation to Suburban center



Result summary

The urban centre saw slightly more males, a younger population and more homeless people. Unemployment status and substance misuse were considerably high in both centres. The main statistically significant differences between the two centres were the level of homelessness and admission rate, both significantly higher in the urban center. (For the details see Table 1 & Charts 1 to 5)

Conclusions

A large proportion of ED referrals to psychiatry constitute patients with unmet social and addiction needs. The variance in capabilities of liaison psychiatry (LP) and ED services means the needs of the local population may not always be adequately catered for within a typical LP setting, which in the Irish context is predominantly driven by medical and nursing staff.

This study highlights there are many patients who attend the ED who may be better assessed directly by the community; and as per our national Emergency Program policies, prompting the need for review of available community care pathways for mental health patients with no emergency physical need. Whilst acknowledging that psychological and social issues are overlapping and intertwined, it is likely that there is a disproportionate strain on LP and ED services to deal with cases where mental health issues may not be salient and primary. This prompts consideration of expanding both ED and community services to comprise a more integrated, multidisciplinary-resourced, 24/7 care model

Limitation

This is a snapshot only, and a more detailed evaluation of trends over time is required.

Ethical Approval

This study was approved as a Quality Improvement initiative by the Joint Research and Ethics Committee of St. James's Hospital and Tallaght University Hospital and a service evaluation project by the Clinical Governance, Audit and Service Evaluation Committee in Beaumont Hospital.

Further Information

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