Research Week 2023

It's an ED visit! it's an admission! it's...preventable?! examining factors related to preventable utilization in youth with chronic pain following interdisciplinary care

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Keywords

Pain, Pediatrics, Health Disparities, Health Psychology, Treatment

Abstract

Background

Youth with chronic pain are at risk of acute medical utilization, some of which may be preventable if provided greater access to outpatient care, improved pain treatment, alternative coping strategies, or less social risk. Multidisciplinary pain evaluation and treatment has shown efficacy in improving outcomes for this population, but less is known regarding what may be preventable, moderators of evaluation/treatment, and potential drivers of inequity.

Methods

EHR review was conducted for youth (N= 132) with chronic pain who engaged in an interdisciplinary (psychology, anesthesiology, physical therapy) pain evaluation (PE). Mean age of participants = 13.52, mean annual income of caregivers= 69,786, 28% representation beyond the binary framework, 13.6% Hispanic/Latino, 79.5% White, 72.7% of youth reported currently or previously seeing a mental health counselor. EHR data included demographics, youth-reported social risks, and acute medical visits (ED visits and hospital admissions) one year prior to and post PE. Admissions and ED visits were considered preventable if chief complaint was pain-related without known medical complexity (e.g., Sickle Cell Disease), mental health related (MHR), or was an Ambulatory Care Sensitive Condition. Analyses included t-tests and chi squares.

Results

Significant decreases were observed (see Table) in ED visits, avoidable ED visits, and pain-related ED visits ($p<.05$) following PE. Youth report of social experiences was significantly related to utilization (e.g., youth endorsing being teased by other children were more

likely to experience MHR ED visits pre-PE; p<.05). Also, youth of color (N=41) experienced significantly fewer MHR ED visits prior to PE (p<.05). Finally, the number of social stressors in the past year (e.g., divorce, death of family member) was significantly correlated with number of avoidable (.27), pain-related (.29), and overall ED visits (.29; p<.01).

	Admissions				ED Visits			
	Pre-PE		Post-PE		Pre-PE		Post-PE	
	M (SD)	%	M (SD)	%	M (SD)	%	M (SD)	%
Any	.36(.92)	18.9	.17 (.53)	13.4	1.4(1.8)	56.8	1.2 (2.1)	40.9*
Avoidable	.22(.70)	12.9	.10(.39)	7.6	1.1(1.6)	50.8	.86 (1.9)	34.8*
ACSC	.03(.17)	3.0	.02(.12)	1.5	.20(.55)	15.9	.23(.61)	17.4
Pain	.14 (.59)	7.6	.04 (.23)	3.0	.90(1.5)	41.7	.60(1.7)	26.5*
Complex Medical	.17(.57)	9.8	.07(.28)	6.1	.28 (.73)	16.7	.29 (.66)	19.7
MHR	.02 (.12)	1.5	.05(.26)	4.5	.14(.41)	11.4	.17(.59)	11.4

Significant Change Post PE: * <.05 ACSC= Ambulatory Care Sensitive Condition

Conclusions

Given the role of youth social experiences and recent stressors in ED use, screening and intervention efforts should consider the value of specifically assessing these factors and tailoring treatment approaches to address. Also, given that youth of color are less likely to use the ED for MHR prior while still experiencing high levels of utilization before PE access, research examining both disparity in care access and family strengths that inhibit MHR ED use is warranted.