

High users of hospital services referred to a case management intervention in primary care: Who are they?



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BACKGROUND

- A number people with chronic disease (CD) require higher intensity care because of personal characteristics that increase their vulnerability, like socioeconomic deprivation [1], comorbid mental health conditions [2] or multimorbidity (two or more CD) [3].
- These individuals may have problems complying with treatment, adopting healthy behaviours and managing their health. This can result in increased services use, such as emergency department visits and hospitalizations [4-5].
- Case management of these frequent users in primary care (PC) have been proposed as a promising intervention to address their special needs [6], but it needs to be adapted based on the characteristics of the referred patients.

OBJECTIVES

To describe the characteristics of high users of hospital services with CD referred to a pragmatic intervention of case management by a primary care nurse in four family medicine groups.

METHODS

- Baseline characteristics of high users referred to receive the intervention (n = 247) were analysed using descriptive statistics.
- Patients were referred based on their utilization of hospital services (emergency room visits/hospitalizations) in the last year and the opinion of their general practitioner about the need for case management.
- Self-reported characteristics were measured during a visit with a research agent before receiving any intervention:
 - Sociodemographic data (age, gender, education, household income, marital status and employment);
 - Multimorbidity (Disease Burden Morbidity Assessment - DBMA) [7]
 - Health literacy (Newest Vital Sign) [8]
 - Patient activation (Patient Activation Measure - PAM) [9]
 - Mental health (Hospital Anxiety and Depression Scale - HADS). [10]

RESULTS

Table 1. Characteristics of the sample

	(n=247)
Age (yr.), Mean	59.8
Male (%)	41.3
Education level (%)	
Incomplete high school	39.3
Completed high school	25.1
College	21.1
University	10.1
Household income in CAD\$ (%)	
< 20,000\$	28.9
20,000\$-49,999\$	44.6
50,000\$ or +	26.5
Marital status (%)	
Married	63.0
Single or Divorced	27.2
Widower	9.8
Employment (%)	
Employed	23.5
Unemployed	32.8
Retired	41.7

Table 2. Clinical profile of high users

	(n=247)
Number of chronic diseases, Mean (SD)	6.0 (±2.7)
DBMA¹ Mean (SD)	13.4 (±8,5)
Health literacy (%)	
Compromised (NVS ² <4)	67.5
Adequate (NVS≥4)	32.5
Patient activation (%)	
Level 1 : PAM ³ = < 47.0	15.9
Level 2 : PAM = 47.1 – 55.1	19.1
Level 3 : PAM = 55.2 – 67.0	34.6
Level 4 : PAM = > 67.1	30.5
Anxiety and depressive symptoms (%)	
Greater likelihood of depression or anxiety (HADS ⁴ ≥ 16)	35.0

¹DBMA : Disease Burden Morbidity Assessment;
²NVS : Newest Vital Sign;
³PAM : Patient Activation Measure;
⁴HADS : Hospital Anxiety and Depression Scale

LIMITS

- No information about specific comorbid mental health diagnosis.
- No information about high-users who refused to participate.

CONCLUSIONS

- Most referred patients presented multimorbidity, compromised health literacy but the ability to manage their health (patient activation).
- Many of them presented socioeconomic deprivation and symptoms of anxiety and depression.
- These results will help decision-makers and clinicians in developing case management interventions in primary care adapted to high users.

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