Influence of Patient Age and Comorbid Burden on Clinician Attitudes Toward Heart Failure Guidelines

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ABSTRACT

Background: Clinical practice guidelines have been criticized for insufficient attention to the unique needs of patients of advanced age and with multiple comorbid conditions. However, little empiric research is available to inform this topic.

Methods: We conducted telephone interviews with staff physicians and nurse practitioners in 4 VA health care systems. Respondents were asked to rate the usefulness of national heart failure guidelines for patients of different ages and levels of comorbid burden on a 5-point scale and to comment on the reasons for their ratings.

Results: Of 139 clinicians contacted, 65 (47%) completed the interview. Almost half (49%) were women, and 48 (74%) were general internists or family practitioners. On a 5-point scale assessing the usefulness of clinical practice guidelines for heart failure, the mean (SD) response ranged from 4.4 (0.7) for patients younger than 65 years with few comorbid conditions to 3.5 (1.2) for patients older than 80 years with multiple comorbid conditions ($P < 0.001$). The difference in perceived usefulness varied more by patient age than by degree of comorbidity ($P = 0.02$). Four major concepts underlay the perceived usefulness of guidelines across different patient types: (1) harm of treatment and complexity of the patient's clinical condition and pharmacologic needs, (2) expected benefits of treatment, (3) patient preferences and abilities, and (4) confidence in the validity of guideline recommendations.

Conclusion: Clinicians perceive heart failure guidelines to be substantially less useful in patients of older age and with greater comorbid burden. Concerns about the clinical and pharmacologic complexity of these patients and the expected benefits of drug therapy were commonly invoked as reasons for this skepticism. (*Am J Geriatr Pharmacother*. 2012;10:211–218) Published by Elsevier HS Journals, Inc.

Key words: aged, clinical practice guidelines, comorbidity, geriatrics, physician attitudes.

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INTRODUCTION

Research on clinician attitudes toward guidelines has had an important role in guideline implementation. Understanding barriers to guideline-recommended care can inform which interventions are most likely to improve adherence to those care practices.[1–3]

Previous studies have identified a wide variety of factors that underlie clinician practices and attitudes toward guidelines.[4–8] Many of these factors are attributes of clinicians and the health care system, for example, clinician confidence in the validity of guideline recommendations and systemic barriers to accessing care.[3,7,8] However, patient characteristics have also emerged as important predictors of clinician attitudes toward guidelines, with several studies noting clinician concerns about the appropriateness and feasibility of applying guideline-based care plans in patients of advanced age and with multiple comorbid conditions.[4,6,9] These concerns likely contribute to observed variations in care, as older patients, although not necessarily those with multiple chronic conditions, are less likely to receive guideline-concordant care for a number of common diseases.[10–13]

Despite documented concerns about applying guidelines in older adults with multiple comorbid conditions, little previous work has quantified the extent to which clinician attitudes toward guidelines vary across patients of different ages and with different levels of comorbid burden, and few studies have systematically explored the reasons that underlie clinician skepticism toward guidelines in these patients.[14] To better understand these issues, we conducted a mixed-methods study to investigate clinician attitudes about the usefulness of heart failure guidelines in patients of various ages and with different degrees of comorbid burden. We chose heart failure as a model system because the disease is common, guidelines for care are widely disseminated, and these guidelines recommend a multiplicity of medications with substantial benefits and/or harm.

METHODS

Participants

The present study was performed as part of a telephone-based clinician interview study with the objective of understanding why clinicians did not prescribe guideline-recommended medications for heart failure in specific patients under their care. Using computerized clinical data and review of medical records from VA health care systems in San Francisco (California), Iowa City (Iowa), San Antonio (Texas), and West Haven, (Connecticut), including the parent medical center and outlying community clinics, we identified all outpatients with heart failure with ejection fraction ≤40% who were not receiving angiotensin-blocking medications (angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers) or beta blockers. Our study sample comprised the primary care clinicians for these patients, that is, a complete sample of all primary care clinicians at each medical center who cared for at least 1 outpatient who had systolic heart failure and was not receiving angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers and/or beta blockers. Given difficulty contacting the 25 fellows and residents we identified, these trainees were excluded, and only staff physicians and nurse practitioners were included for the telephone-based interviews.

Measurements and Data Collection

The survey questions were organized into 3 sections. First, we collected basic demographic information about the clinicians. Second, we asked them to rate the usefulness of national heart failure guidelines for 4 types of patients: (1) patients younger than 65 years with few comorbid conditions, (2) patients younger than 65 years with multiple comorbid conditions, (3) patients older than 80 years with few comorbid conditions, and (4) patients older than 80 years with multiple comorbid conditions. In asking these questions, we used the terms "few comorbidities" and "multiple comorbidities" without specifically operationalizing these terms. Respondents rated the usefulness of heart failure guidelines on a 5-point Likert scale, with anchors of 1 (not at all useful) and 5 (extremely useful). Next, we used an open-ended question to ask respondents why they gave similar or different ratings of guideline usefulness across patients of different age and comorbid burden, for example, "Tell me why you believe that heart failure guidelines are less useful in older patients and/or patients with multiple comorbidities." One clinician had missing data from 1 patient type. In addition, we were unable to use audio transcripts and thus perform qualitative coding for 2 respondents.

Quantitative Analyses

For descriptive purposes, we present results of our Likert scale analyses as mean (SD). We used the Wilcoxon signed rank test to assess differences in perceived usefulness of guidelines between the youngest/healthiest patient type and the oldest/sickest patient type. To evaluate whether perceived guideline usefulness varied more by patient age or comorbidity, we used ANOVA-based approaches that accounted for repeated measures within study subjects. In doing so, we tested potential interaction effects between patient age and comorbidity.