Health Literacy Influences Self-Management Behavior in Asthma

To the Editor:

The interesting study by Patel et al.\(^1\) in an issue of CHEST (November 2012) demonstrated that asthma self-management strategies, patient-physician communication, and patient satisfaction were lower among female individuals who did not have an asthma action plan. Therefore, Patel et al.\(^1\) concluded that the use of asthma action plans may enhance clinical-patient relationships and self-management efforts in patients with asthma. Of note, the authors did not measure the participants' health literacy status in their analysis. In their study, Patel et al.\(^2\) did measure educational attainment; however, Williams et al.\(^3\) showed that years of schooling do not necessarily predict reading ability. Furthermore, studies indicate that lower health literacy is associated with lower satisfaction with asthma status, a lower likelihood of participation in asthma management, and poor metered dose inhaler skills.\(^2,3\) Studies also suggest that low health literacy may serve as a potential mediator of poor patient-physician communication.\(^4,5\) Given this possible limitation, future studies should consider measuring health literacy status when ascertaining self-management behavior and patient-physician communication when dealing with chronic illnesses such as asthma.

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REFERENCES


Response

To the Editor:

Drs S. S. Bains and S. N. Bains point out that health literacy status is an important factor to consider when ascertaining self-management behavior and patient-physician communication among those with chronic illnesses. Although in our study\(^1\) in CHEST we could not measure health literacy when examining relationships among asthma action plans, self-management behaviors, and satisfaction, we agree that adequate health literacy is an important factor in health behavior.\(^2,3\) To date, measures of health literacy are limited in their ability to capture the full array of skills necessary for effective self-management behavior and patient-provider communication.\(^4,5\) The Institute of Medicine has highlighted the need for more comprehensive assessments that include reading, writing, speaking, listening, and numeracy.\(^6\) Better tools with strong psychometric properties are certainly needed. Health literacy is an important area that deserves further study to understand the range of factors that promote or impede self-management and patient-provider relationships.

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Relevance of Serial Interferon-γ Release Assays in Health-care Workers

To the Editor:

We read with interest the study by Park et al1 (see page 1461) in which they nicely evaluated serial interferon-γ (IFN-γ)-release assays (IGRAs) in the diagnosis of Mycobacterium tuberculosis (MTB) infection in health-care workers. Health-care workers, although at high risk for MTB infection, are generally less likely to develop active or severe TB. Considering unexplained fluctuations in IFN-γ levels, along with the high risk of conversions due to false positives in serial assays,2 conducting monthly IGRA in health-care workers may give varied values that may not be of clinical use. Rather, it would be useful for the readers if the authors could discuss the reasons for reversion of IGRAs in a subset of patients in the study or in the calculation of the data, or in the preparation of the manuscript. It has been shown that circulating IFN-γ levels decrease with isoniazid and rifampicin chemoprophylaxis.3 However, the reasons for reversion of IGRAs in a subset of patients in the study was not discussed. It would be helpful if the authors could discuss the causes of such individual variations in IFN-γ response, as well as differentiate nonspecific variations from those associated with new or resolving infection.

Deepak Aggarwal, MD
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References

Response

To the Editor:

We thank Dr Aggarwal and colleagues for their interest in and valuable comments on two of our publications.1,2 Their first comment addressed the article on the high rates of conversion and reversion in monthly interferon-γ release assay (IGRA) results for health-care workers.1 They asked whether any participant with a positive IGRA subsequently developed active TB, which is an important issue. So far, none of the participants has developed active TB. We plan to screen participants for active TB at 1, 2, and 5 years. Their second comment addressed another article describing the change in IGRA results among participants taking medication to treat latent TB infection.2 They asked what is meant by negative conversion of the IGRA with treatment of latent TB infection. Unfortunately, the clinical meaning of such conversions is not clear, and long-term follow-up is required to answer the question.

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