



## LETTER TO EDITOR

# Psychological Therapies: The Missing Link in Improving Treatment Adherence in Patients with $\beta$ -thalassemia Major

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## Dear Editor

$\beta$ -Thalassemia Major ( $\beta$ -TM) is the most commonly inherited hemolytic anemia. Patients with  $\beta$ -TM require lifelong adherence to distressing treatment regimen, including regular blood transfusions, daily chelation therapy and frequent medical supervision.<sup>1</sup> Similar to other chronic diseases requiring long-life treatment, adherence to treatment is a major concern for  $\beta$ -TM patients.<sup>2</sup> It has been revealed that poor adherence to therapeutic regimen in  $\beta$ -TM patients is associated with an increased risk of complications, unnecessary health cost, and mortality and morbidity rates. Despite the clinical importance of adherence to treatment in patients with  $\beta$ -TM, poor adherence remains a prevalent and persistent problem in these patients.<sup>2,3</sup> Also, to date, cost-effective interventions to improve adherence to therapeutic regimens in  $\beta$ -TM patients are yet unavailable.<sup>4</sup>

Life-long treatment could make these patients more susceptible to wide array of psychological and psychosocial problems.<sup>1</sup> Evidence clearly shows the high prevalence of psychological problems among  $\beta$ -TM patients.<sup>5</sup> It has been shown that up to 80% of patients with  $\beta$ -TM, at least, from one psychiatric disorder such as depression, body dimorphic disorders, obsessive-compulsive disorder, anxiety disorders, and psychosis. Also, most of these

patients experience some restrictions on their social and occupational functioning.<sup>5-7</sup> Additionally, available evidence suggests that patients' adherence behavior to the prescribed medical treatment regimen can be modified by psychological factors. It has been shown that psychological impairment is a significant predictor of non-adherence among patients with  $\beta$ -TM.<sup>8,9</sup> It is believed that psychological treatments such as psychoeducation, cognitive therapy, problem-solving skills training, distress management, psychodynamic psychotherapy, behavioral therapy and optimization of self-regulatory processes may improve the quality of life of patients with  $\beta$ -TM through better coping with disease, fulfil roles, and their increased adherence to treatment. Also, those interventions are simply available at hospital or community setting and most of them are applicable for a range of different ages.<sup>5,7,8,10</sup> Despite its potential benefits, the results of a current systematic review indicate that there is no study addressing the effect of psychological therapies in patients with  $\beta$ -TM.<sup>10</sup>

In sum, it goes without saying that patients' adherence to treatment in  $\beta$ -TM is a very important topic and many known and unknown psychological factors affect it. Nevertheless, the evidence supporting the effectiveness

of psychological therapies on adherence to treatment among these patients is dearth. Therefore, we believe that further well designed clinical trials should be carried out with a particular focus on psychological interventions to investigate the efficacy of such interventions on the levels of adherence to treatment in patents with  $\beta$ -TM that may result in better clinical outcomes.

**Conflict of Interest:** None declared.

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