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Indoleamine 2, 3-dioxygenase (IDO) level in leprosy patients with positive serology (Article)

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Abstract

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Background Seropositive leprosy individuals have a tendency to experience a change into leprosy lepromatous type. Previous studies have demonstrated that the activity of indoleamine 2, 3-dioxygenase (IDO) in patients with lepromatous type leprosy is higher than those with tuberculoid type leprosy. However, no study has been available showing how IDO level can be correlated to seropositive subjects. Methods Our observational cross-sectional study was conducted in Brebes, Central Java, Indonesia. Leprosy seropositivity was determined by measuring the level of anti-phenolic glycolipid-1 IgM and IDO level using ELISA. Results Result of The IDO level in seropositive leprosy subjects was higher compared to those who were seronegative ($p = 0.048$). Conclusion In the early stage of leprosy infection, a high level of IDO level can already be found; therefore, it can affect immune response and ultimately affecting further course of the disease.

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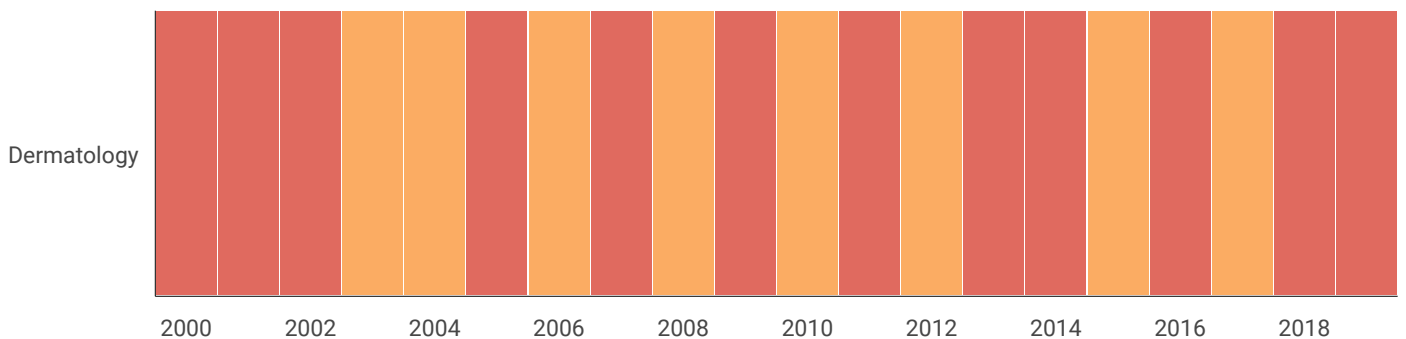


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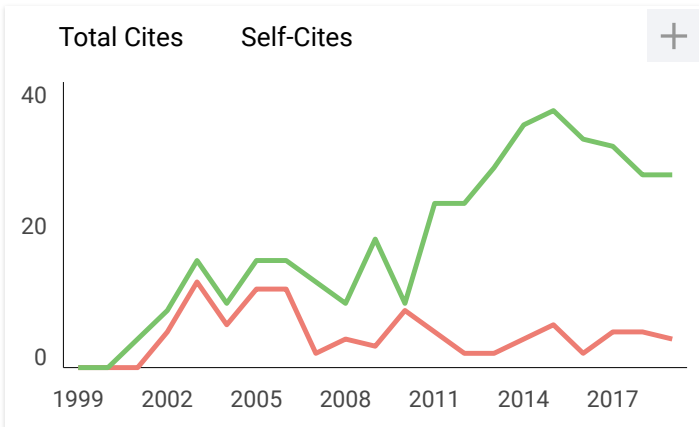
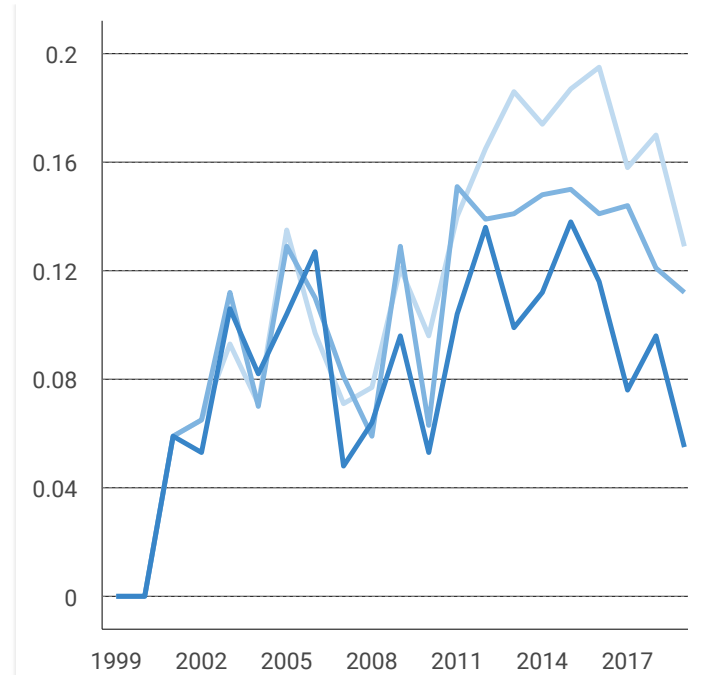
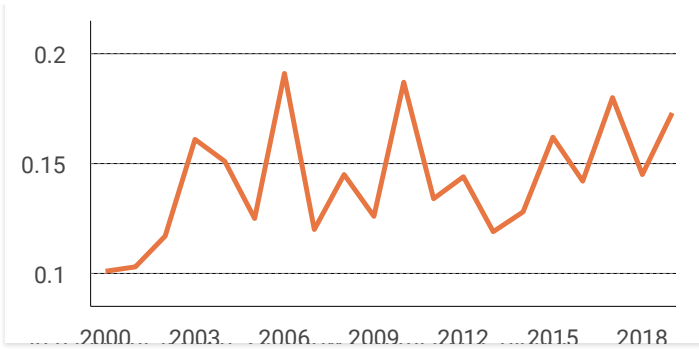
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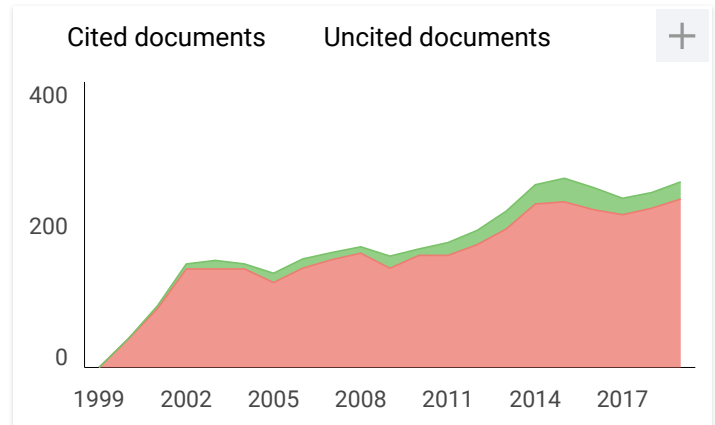
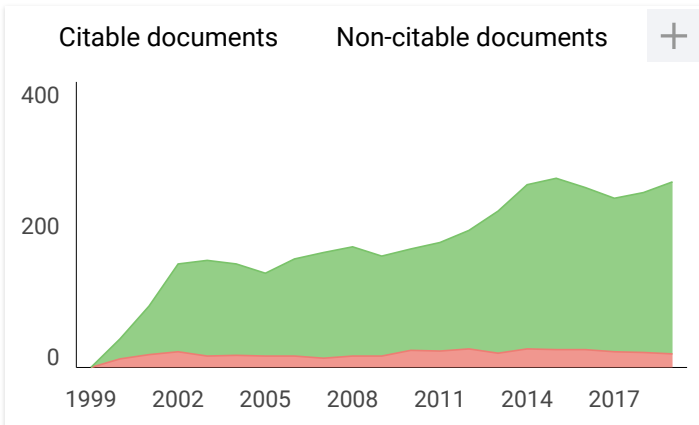
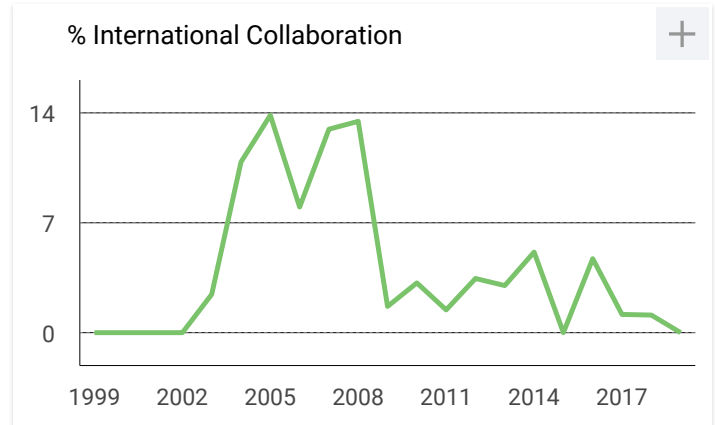
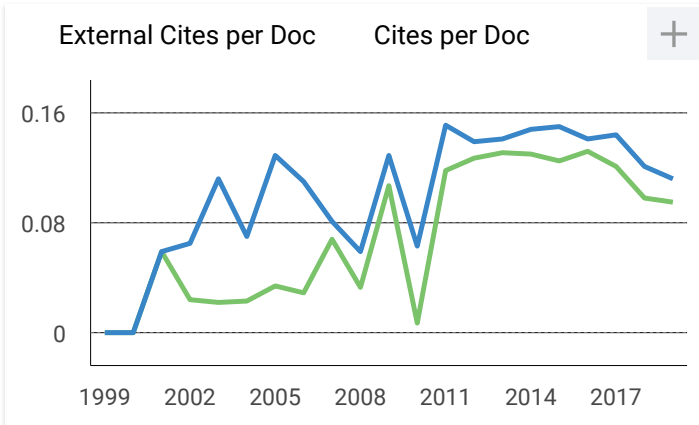


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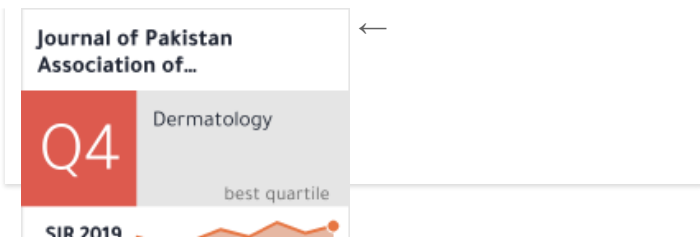


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Abstract

Background Seropositive leprosy individuals have a tendency to experience a change into leprosy lepromatous type. Previous studies have demonstrated that the activity of indoleamine 2, 3-dioxygenase (IDO) in patients with lepromatous type leprosy is higher than those with tuberculoid type leprosy. However, no study has been available showing how IDO level can be correlated to seropositive subjects.

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Conclusion In the early stage of leprosy infection, a high level of IDO level can already be found; therefore, it can affect immune response and ultimately affecting further course of the disease .

Keywords

Seropositive leprosy, indoleamine 2, 3-dioxygenase, anti-phenolic glycolipid-1 IgM

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