

## Male Sexual Dysfunction Among Egyptian Patients with Chronic Hepatitis C Virus Infection Before and After Direct-Acting Antiviral Drugs

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### ABSTRACT

**Background:** Chronic hepatitis C virus (HCV) infection is a global health burden that affects quality of life, with a negative impact on sexual functioning (SF)

**Aim:** To study male sexual dysfunction (MSD) among Egyptian men with chronic HCV infection and the impact of therapy with direct-acting antiviral drugs (DAAs) on their sexual health. **Methods:** The self-administered International Index of Erectile Function (IIEF) questionnaire was completed by 400 sexually active male patients with chronic HCV infection without liver cirrhosis before the initiation of therapy with DAAs and then again at the completion of therapy. We compared these baseline questionnaires with those completed by a similar number of age-matched and socioeconomic status matched controls. In the patients with HCV infection, we also compared IIEF questionnaires completed before and after DAA therapy. **Main Outcome Measure:** We determined the proportions of patients and controls who were dissatisfied with their sexual life and the impact of clearing HCV infection on MSD and evaluated the impact of DAA therapy on the total IIEF score and scores in all IIEF domains. **Results:** Men with chronic HCV infection before DAA treatment had significantly higher erectile dysfunction (ED) scores compared with controls, and scores increased with age ( $P < .0001$ ). The average scores in all IIEF domains was significantly lower in the patients compared with controls in all age groups. Men with chronic HCV infection had significantly higher ED scores before cure than after cure ( $P < .0001$ ). **Clinical Implications:** Given the high prevalence of MSD in patients with chronic HCV infection, and given that curing the HCV virus can improve the MSD associated with HCV infection, it is recommended that sexual quality of life in men with HCV be addressed as part of the evaluation protocol before initiation of DAA treatment and again after cure in an effort to improve this particular aspect of quality of life. **Strengths & Limitations:** This is the first study to report on MSD in the era of DAA therapy in Egyptian men with chronic HCV infection before the development of cirrhosis, with a relatively large study population. The use of a

detailed version of the IIEF questionnaire reinforces the validity of our study.

**Conclusion:** Chronic HCV infection negatively impacts MSD, affecting all domains of the IIEF, and effects increase with age. The MSD associated with HCV infection is significantly improved in patients who are cleared of the virus. These findings require further confirmation and need to be addressed as part of a comprehensive therapeutic plan to improve patients' quality of life. Elshimi E, Morad W, Mohamad NE. Male Sexual Dysfunction Among Egyptian Patients with Chronic Hepatitis C Virus Infection Before and After DirectActing Antiviral Drugs. J Sex Rev 2019;16:402e409.

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**Key Words:** Direct-acting antiviral drugs; Hepatitis C; IIEF; Sexual dysfunction

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