Introduction: In the last two decades much progress has been made in the neurobiological, pharmacological and neuro-imaging research of sexual dysfunctions.

Objectives: to present an overview of current treatment options

Aims: to provide better understanding of underlying (neuro)biological mechanisms

Methods: use of evidence-based research articles

Results: Erectile dysfunction and lifelong premature ejaculation, previously regarded as pure psychological disorders, are currently regarded as (neuro)biologically and even genetically influenced dysfunctions. On the other hand, vaginismus and a substantial part of dyspareunia remain to have mainly psychological causes. Antidepressant and antipsychotic induced sexual side effects remain difficult to be treated. Switching to another drug with less sexual side effect remains the first option of treatment, but may negatively interfere with the underlying psychiatric disorder. Although antidepressant-induced sexual side effects are reversible, SSRI-induced sexual side effect may persist for a very long time after SSRI discontinuation. This so called, post SSRI sexual dysfunction (PSSD) is probably the most serious side effect of SSRI treatment. A new libido-increasing drug is currently investigated in multi-centered trials. Its mechanism of action is totally new in neuropharmacology. In addition, a new antidepressant with a complex neuropharmacological underlying mechanism of action, may be the first manifestation of the advent of newly produced antidepressants without sexual side effects.

Conclusions: evidence-based drug treatment of a number of sexual dysfunctions has replaced non-evidence based psychotherapies. Still, psycho-education and counseling remain essential for an effective treatment of sexual disorders.