Statistical analysis plan

All analyses will follow the intention-to-treat (ITT) principle, including all randomized participants in their originally assigned groups regardless of adherence.

The primary outcome is the *sexual satisfaction scale* of the EORTC SHQ-22, analysed as change from baseline to post-intervention. Secondary outcomes include SHQ-22 single items and scales, EORTC QLQ-C30 summary score, PROMIS SexFS v2.0 domains, PHQ-9, GAD-7, and SEMCD-Swe, analyzed as change from baseline (T1) to post-intervention (T2) and 6 months (T3).

Demographic data will be presented with frequencies and percentages for categorical variables and mean (SD) or median (IQR) for numeric variables depending on the distribution of data. Internal consistency for the measurements will be alpha tested with Ordinal alfa test. In analysing inferential statistics, to examine the difference between the intervention and control groups at baseline, the independent t-test will be used based on fulfilled assumptions. For the categorical variables or non-normal distributed data, the chi^2 test will be used.

A linear mixed-effect model (LMM) for the repeated measures will be used for the longitudinal analysis of all outcomes. The primary estimand is the between group difference in mean change between the baseline measure (T1) to post intervention (T2) in the sexual satisfaction scale (primary endpoint). The secondary estimand will be the difference in mean change from baseline (T1) to the 6 month follow-up (T3). The SHQ-22 singe items and scales, EORTC QLQ-C30 single items, function and symptom scales, PROMIS SexFS domains, GAD-7, PHQ-9, and SEMCD-Swe will be analysed with the same LMM framework.

Effect size will be measured using the Cohen's d. Cohens initial effect sizes have been set at r=0.10 (small), 0.30 (medium) and 0.50 (large) respectively. A censoring analysis will be used to assess the dropouts between the intervention and the control group.

Multiple imputation statistics will be used depending on the amount of missing data. Additional sensitivity analyses will include complete-case models and censoring analyses evaluating differential dropout.

When approximately half of the participants have been recruited, an interim analysis will be performed to determine whether the estimated effect size seems to be correct. A one-sample variance estimator will be used to maintain blinding during the interim analysis. Adherence metrics (modules accessed, logins, self-reported engagement) and treatment satisfaction measures will be summarized descriptively and compared between groups using t-tests or non-parametric equivalents.

All analyses will be conducted in R (latest stable release) by a statistician blinded to group labels.