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## Process Reliability and Psychological Stress in Urine Sample Collection for Drug Testing: A Pilot Study

K. Baum<sup>1\*</sup>, M. Schüler-Springorum<sup>2</sup> and B. Huppertz<sup>3</sup> Published November 12<sup>th</sup>, 2018

## Abstract

**Purpose:** Drug testing by means of urine samples is part of the standard operating procedures in a wide range of related settings. In order to avoid sample manipulation by the client, samples are almost always collected under direct observation. However, the supervision procedure is handled differently in different countries and settings leading to varying degrees of precision. Moreover, supervision seriously evokes psychological stress to the sample donor and, probably but still not evaluated, to the supervising staff. An alternative control method is the polyethylene glycol (PEG) urine marker system, which excludes the need of supervision during urination.

**Aims:** In the present study we evaluated by means of questionnaires a) the concrete procedure of supervised urine sample collection in a Forensic Psychiatry and b) the beliefs of supervising staffs regarding supervision and marker control with respect to safety, economy, and psychological stress.

Study Design: Descriptive cross-sectional study.

**Place of Study and Methodology:** 116 employees of a public German Therapy Center for Forensic Psychiatry were asked to complete two different anonymous, closed ended questionnaires before and after a three month introduction phase of the PEG marker system. The initial questionnaire focused on real handling and safety aspects of supervision, the second on the comparison between supervision and marker system

**Results:** Even within a given institution, supervision is performed individually different with respect to distance to the genital, direct or indirect view, and accuracy. Supervision evokes serious psychological stress to both patient and staff. The marker system requires less working hours.

**Conclusion:** From the point of view of the acting supervisors, the marker system improves drug screenings at all levels. Employees have more time to carry out their actual duties, safety with respect to manipulations increases, and the psychological stress is significantly reduced on both sides.