

Abstract

Inter-technician and between-laboratory differences, especially during the evaluation of sperm morphology, have been a major cause of concern. The study aimed to develop an intensive training programme with intervals of continuous quality control assessments for sperm morphology. Twenty andrology laboratories from sub-Saharan Africa were invited to participate in a World Health Organization Special Programme of Research, Development and Research Training in Human Reproduction semenology workshop. Following intensive training in strict sperm morphology evaluation, a continuous quality control programme was introduced on a quarterly basis. At baseline, the mean (\pm SD) percentage difference reported between the participants and the reference laboratory reading was $33.50 \pm 11\%$. After training, the mean percentage difference had decreased to $14.32 \pm 5\%$ at 3 months and to $5.00 \pm 5\%$ at 6 months. Pairwise comparison of the differences at each evaluation time revealed the following: Baseline differences (pre-training) differed significantly from the differences at 3 months ($P = 0.0002$) as well as at 6 months after training ($P = 0.007$). The differences at 6 months did not differ significantly from those at 3 months ($P = 0.27$). Training of andrology technicians as well as continuous proficiency testing can be conducted on a national and international level with the support of a referring laboratory. Global quality control measurements in andrology laboratories should become mandatory, since these results indicate that continuous quality control for laboratory technicians can be highly successful.