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INSTAND

Report on Online Training
Group 902
Urine Sediment

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Edited by:
INSTAND
Society for Promoting
Quality Assurance
in Medical Laboratories e.V.

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Explanation for the evaluation

In addition to the documents sent to you by mail, you will receive further information on the training here.

Certificate of participation

All training segments are listed on the certificate of participation.

Individual printout of results

Participants could view the solutions immediately after answering each question and could download the entire training with all tasks and solutions as a PDF file after submitting the training.

General overview of results

Tabular summary:

Analysis Urine Sediment (N=34)	
Passing rate [%]	97.1
Mean of percentage points [%]	78.4
Range of percentage points [%]	30.3-100

Diagnosis Urine Sediment (N=28)	
Passing rate [%]	89.3
Mean of percentage points [%]	70.2
Range of percentage points [%]	0-100

Training materials

For this training, images and questions were made available online and as a PDF document. After each task, the individual result and an expert commentary on the answers could be seen.

Solutions and assessment scheme

The tasks were compiled in cooperation with the above-mentioned expert (Dr. Falbo) and the solutions were approved by her.

The tasks are multiple-choice, single-choice and matching tasks. For multiple choice and matching tasks, the participant receives 1 point if all correct answers are selected. If not all answers are correct, the points are calculated by dividing the number of correct answers by the number of possible answers.

Correctly identified wrong answers are counted as correct answers.

At least 60 % of all achievable points are required to receive a certificate of successful participation in the analysis or diagnosis of the cases.

Comment

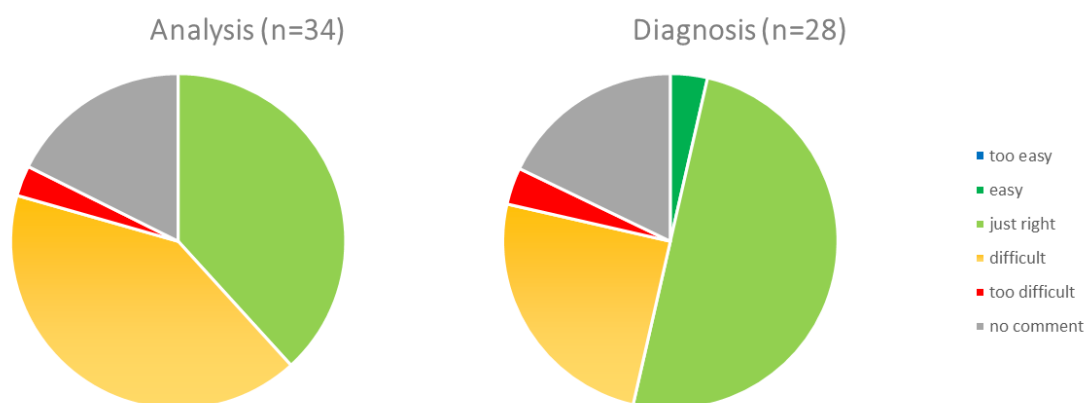
Dear participants,

The current online training course 'Urine Sediment' was again addressed to technicians and laboratory managers.

Thus, the 'Online Training Urine Sediment' is divided into two themes, the analytical part and the diagnostic part. The participants can decide for themselves whether they want to complete only one or both parts. The 'Analysis' and the 'Diagnosis' are evaluated separately.

In this training, the analytical part of the training was completed by 34 participants. 28 participants also answered the diagnostic questions.

About 82 % of the participants gave feedback on the difficulty of the training. Almost 38 % of the feedback for the analytical part of the training was "just right", 41 % "difficult" and 3 % "too difficult". For the diagnostic part of the training, again 82 % of participants rated the level of difficulty: about 50 % found the questions "just right", 25 % "difficult" and 4 % "too difficult". The pass rate in the analytical part (97.1 %) and diagnostic part (89.3%) are pleasing and higher than in the last training.



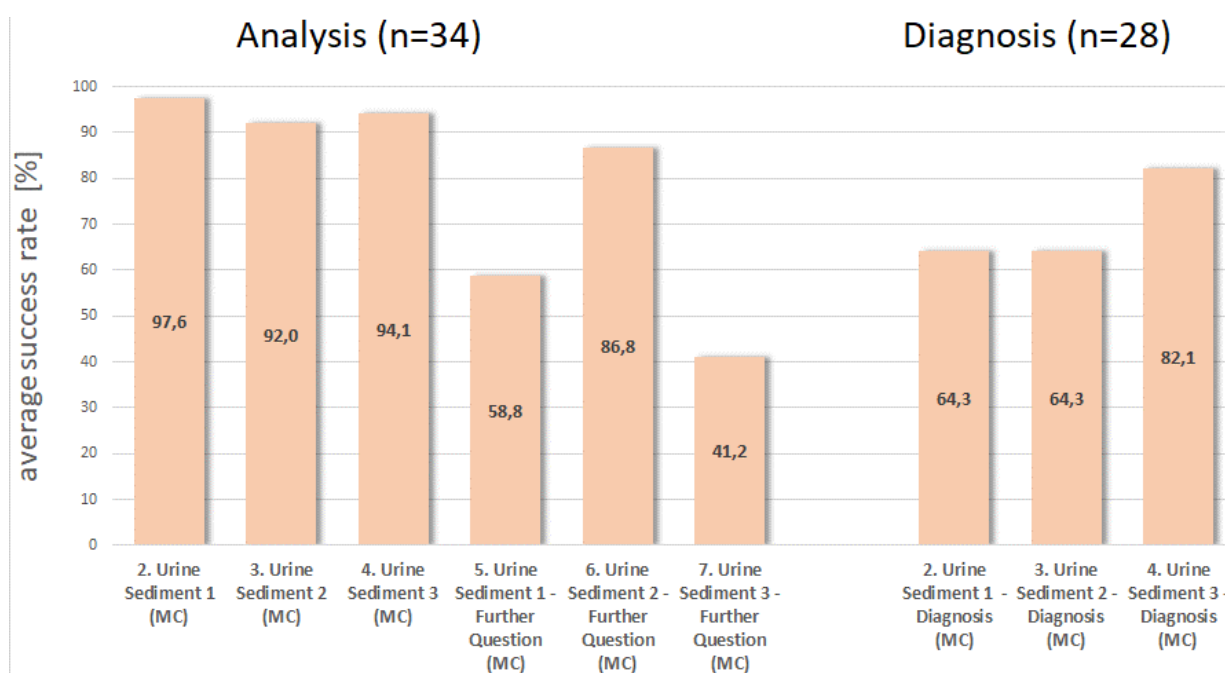
In the analytical part, the average percentage points achieved for the individual questions ranged from 41.2 % to 97.6 %.

Out of the 34 participants, 10 selected "Histiozyt" as the correct answer (Card 3: Urine sediment 2). To clarify, macrophages, arising from monocytes, are highly phagocytic, as illustrated in image A where they engulf yeast. It's essential to note that the term "histocytes" is applicable only when macrophages are situated in interstitial tissues and not when they are present in urine.

Many participants (56 %) stated in the following question (Card 7: Urine sediment 3 - further question) that the granular casts are formed by proteinuria. However, the correct answer is that the degeneration of cells in cellular casts leads to the formation of granular casts. This misconception might arise from a misunderstanding of the role of uromodulin, a protein responsible for casting formation. Uromodulin entraps various elements, such as red blood cells (RBCs), white blood cells (WBCs), or renal tubular epithelial cells (RTECs), within its protein base. In the case of granular casts, these entrapped cells subsequently undergo degeneration, resulting in the transformation into granules, caused by stagnation within the renal tubules. This aging process ultimately gives rise to granular casts, dispelling the notion that proteinuria directly forms them.

In the diagnostic part of the training, the average percentage points achieved for the individual questions ranged from 64.3 % to 82.1 %.

Below you can read the average success rates of the individual subtasks.



We would like to thank all the participants who sent us comments. Your feedback is very valuable for us. We are already looking forward to the next training with you!

Dr. Rosanna Falbo
Mailand

INSTAND Academy
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