April
2024

INSTAND

Academy

Report on Online-Training
Group 901
Preanalytics

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

Düsseldorf, 21-May-24

Expert

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Explanation for the evaluation

In addition to the documents sent to you by mail, you can obtain further information on the training performed here.

Certificate

Each participant receives a certificate of participation and the evaluation. If you reach 60% of the points, you have passed the training and will receive a certificate.

General overview

Here we list the total number of participants, the total pass rate, and the average percentage points achieved.
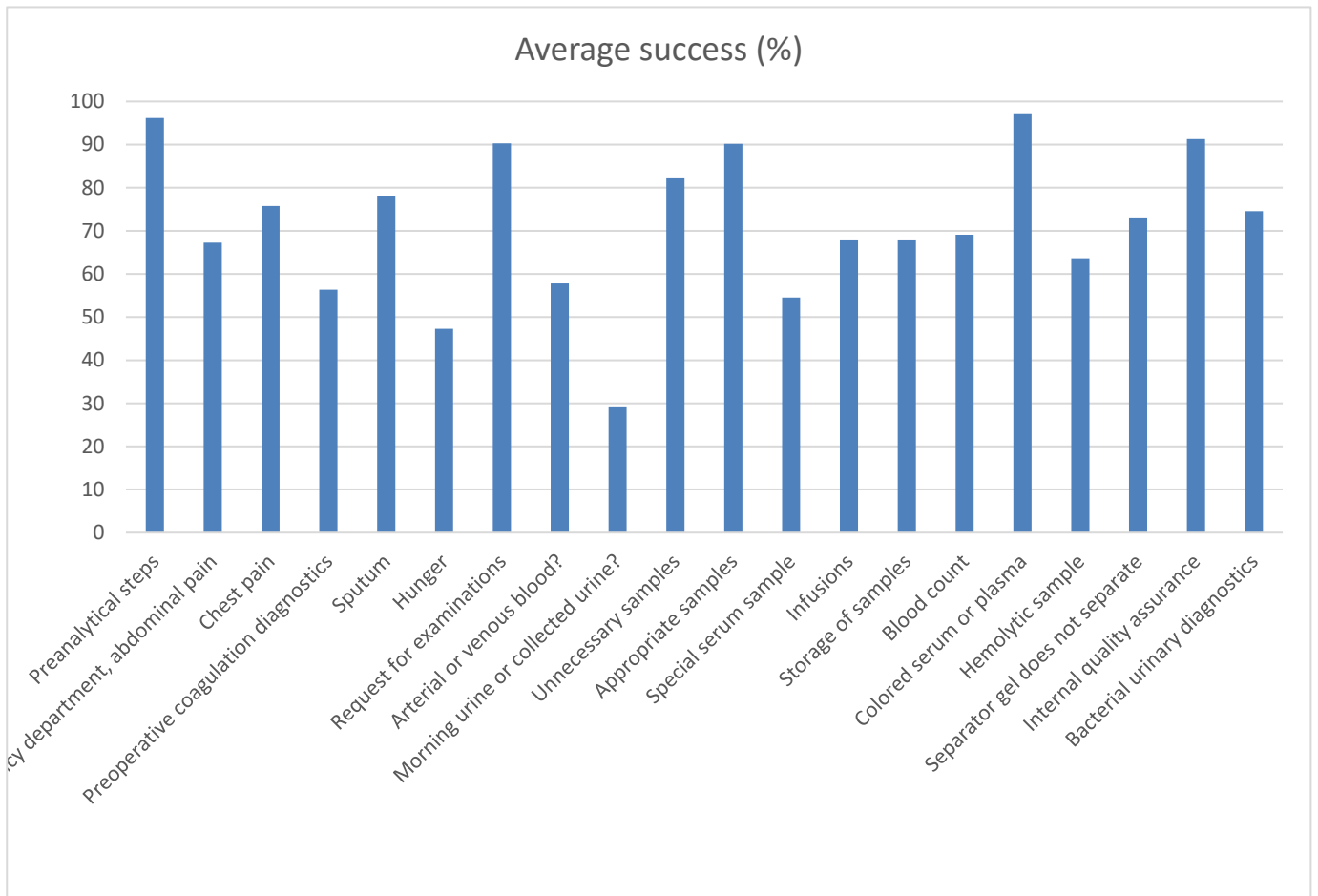
Summary table

Preanalytics April 2024 overview

	result
Number of participants	59
Passed (>60 %)	45 (76 %)
Not passed	14 (24 %)

Statistics of the individual tasks

Card	Average success %
Preanalytical steps	96,17
Internal emergency department, abdominal pain	67,27
Chest pain	75,76
Preoperative coagulation diagnostics	56,36
Sputum	78,18
Hunger	47,27
Request for examinations	90,30
Arterial or venous blood?	57,82
Morning urine or collected urine?	29,09
Unnecessary samples	82,18
Appropriate samples	90,18
Special serum sample	54,55
Infusions	68,00
Storage of samples	68,00
Blood count	69,09
Colored serum or plasma	97,27
Hemolytic sample	63,64
Separator gel does not separate	73,09
Internal quality assurance	91,27
Bacterial urinary diagnostics	74,55

Average success (%)

Training materials

For this training, tasks were provided as an online questionnaire and as a PDF. The tasks were compiled with the collaboration of the above-mentioned expert and the solutions were released by him. Participants were able to view the solutions immediately after completing each task and download the entire training with all tasks and solutions as a PDF after submitting the training.

Solutions and assessment scheme

The questions are multiple- and single-choice types as well as mapping tasks. For multiple-choice and mapping tasks, the participant receives 1 point if all correct answers are selected. If not, all answers were answered correctly, the points are calculated by dividing the difference between the number of correct and the number of incorrect answers by the number of possible answers. In single-choice tasks, either 1 or 0 points can be achieved.
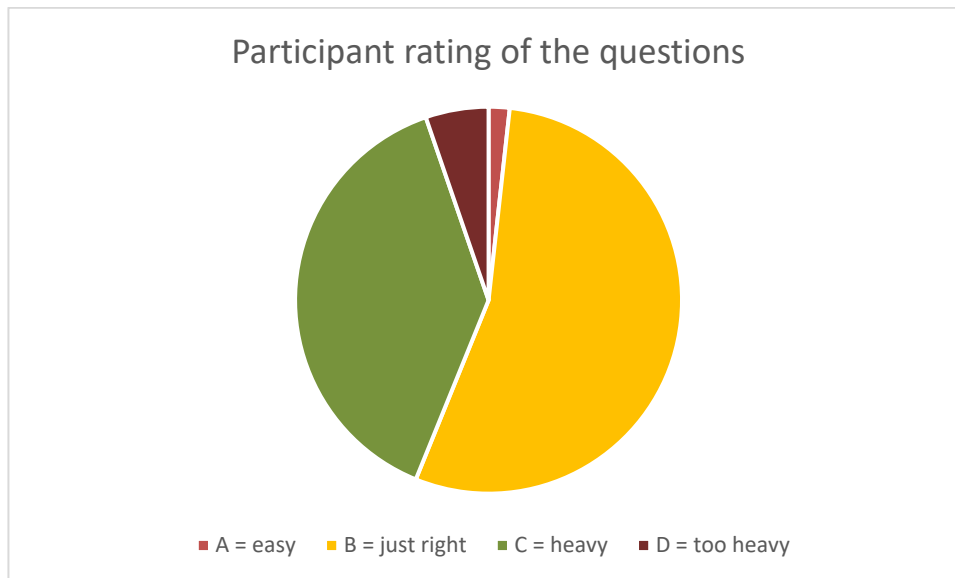
At least 60 % (12 points) of the maximum possible points (20) had to be achieved in order to receive a certificate of successful participation.

Comment

Dear participants,
the current online training course "Preanalytics" is aimed at **MTL and laboratory managers**. 59 participants took part in this training. We would like to thank all participants for their commitment.

With a pass rate of 76 %, this training shows a lower pass rate than the training in November 2023 (83 %). The mean total score achieved by participants decreased from 14,6 out of 19 points (76,8 % of total points) to 14,1 out of 20 points (70,5 % of total points) compared to the training in November 2023.

Rating of the questions preanalytics April 2024 (901) by the participants

In this training, some partially modified questions were used that had been asked before and caused great difficulties for the participants. In this way, on the one hand, it would be possible to estimate the learning effect, and on the other hand, it would also be possible to refer to more current literature. Please refer to the solutions of the individual questions. This format is primarily for continuing education, so participants who did not achieve 60 % this time should not be discouraged at all!

The following questions caused problems:

Question 6 "Hunger":
The increase of uric acid is due to reduced clearance of uric acid as a result of ketonaemia (Guder WG, Narayan S, Wisser H, Zawta B. Diagnostic Samples: From the Patient to the Laboratory. Wiley-VCH Verlag, 2009; p8f). Only after extended starvation plasma proteins start to decrease.
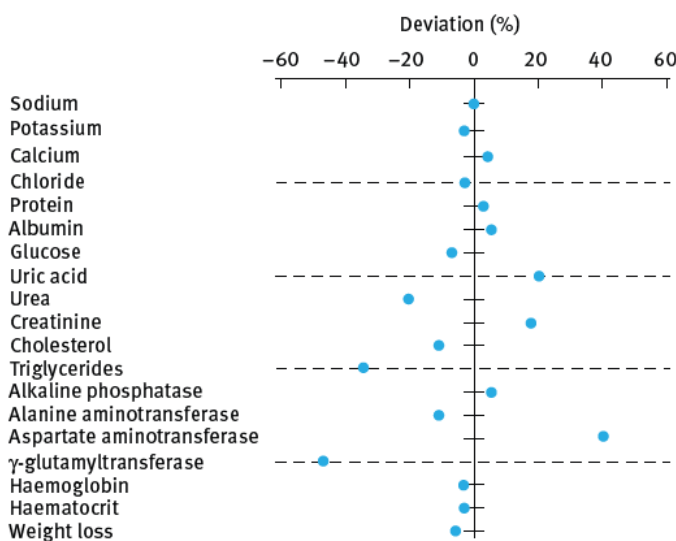

Fig. 3.3.3: Change (%) of clinical chemical analytes after 4 weeks starvation and a daily supply of 33 g protein, vitamines and electrolytes (from Ditschuneit et al [8], Wisser 1995 [9] in Guder et al 2009 [3]).

from: Narayan S, Guder WG. Food, Drinks and Smoking. In Guder WG, Narayanan S. Preexamination Procedures in Laboratory Diagnostics. Berlin: Walter de Gruyter, 2015; pp 117.

Question 9: "Morning urine or collected urine?"
As stated in the commentary, collection urine is no longer recommended for the determination of 5-Aminolevulinic acid, because the collection is too error-prone.

We thank all participants for their comments, they are very important feedback for us.

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Düsseldorf / 08.05.2024