

Letter TJH-2018-0065.R1

Submitted: 13 February 2018

Accepted: 17 April 2018

Results of the Haematology Laboratory Survey: What has changed in 8 years?

¹Ilknur Kozanoğlu, ²Türkan Patiroglu, ³Klara Dalva, ⁴Gülderen Yanikkaya Demirel,

⁵Teoman Soysal, ⁶Muzaffer Demir

¹Baskent University Dr. Turgut Noyan Research and Training Hospital Hematology
Laboratory

²Erciyes University Medical Faculty Hematology Laboratory

³Ankara University Medical Faculty Hematology Laboratory

⁴Yeditepe University Medical Faculty Hematology Laboratory

⁵Istanbul University Cerrahpasa Medical Faculty Department of Hematology

⁶Trakya University Medical Faculty Department of Hematology

To the Editor,

The Scientific Subcommittee on Laboratory Standards of the Turkish Society of Haematology (TSH) conducted two surveys (in 2009 and 2017) evaluating the tests, devices and systems used in haematology laboratories (or other laboratories where haematological analyses are performed) in Turkey. The survey was shared online with TSH members as an informational message. Results from the 2017 survey were compared with those obtained in 2009.

The survey was completed by 18 laboratories (14 university hospitals, 2 Ministry of Health Education and Research hospitals, 1 research institute, 1 private hospital) in 2009, and 20 laboratories (12 university hospitals, 6 Ministry of Health hospitals, 2 foundation universities) in 2017.

In 2009, 11 (61%) [PubMed](#) laboratories were independent and 2 (11%) were part of a central laboratory. In 2017, 3 (15%) [PubMed](#) were independent and 12 (60%) were central.

Regarding employed personnel, respondents in 2009 indicated that 24 medical doctors, 71 biologists and 75 technicians worked in their laboratories. Respondents in 2017 indicated that 12 medical doctors, 12 biologists and 16 technicians were employed.

In 2009, only three laboratories conducted internal quality control analyses for all tests. In 2017, internal quality control was conducted for all tests in seven laboratories, flow cytometry in two laboratories, coagulation in two laboratories, and electrophoresis in one laboratory. External quality control programs were utilised in 15 laboratories in 2009 and 9 in 2017. A written haematology laboratory manual was used by 13 (72.2%) and 11 (55%) laboratories in 2009 and 2017, respectively.

Performance of molecular studies, flowcytometry analyses and minimal residual disease tests increased over the 8-year period. Additionally, 12 (60%) laboratories

surveyed in 2017 had automation systems for peripheral blood smears, while none had automation systems in 2009.

In the 2017 survey, eight laboratories responded to the question 'What are your expectations from the Laboratory Subcommittee'? Three respondents expressed their views on efforts to develop regulations pertaining to existing legislation, two indicated a desire for more active training, and three discussed efforts to prepare laboratory guidelines.

Haematology laboratories have not been defined in the Medical Laboratories Regulation (2010, 2013), which regulates procedures and principles regarding the planning, licensing, opening, regulating, classifying, monitoring, controlling and terminating activities of medical laboratories. This has led to the closure of many haematology laboratories and/or their inclusion into a central laboratory system.

Between 2009 and 2017, the number of personnel working in haematology laboratories in Turkey has decreased. The hardware and infrastructure are in a position to match the developing technology but not the standardisation. The Turkish Haematology Association and the Scientific Subcommittee on Laboratory Standards are closely monitoring the current legislation and efforts are continuing to improve the existing legal situation.

Key words: *hematology laboratory, survey, Turkish Society of Hematology and Laboratory Subcommittee.*

References

1. www.thd.org.tr/hematolojikaneti
2. S. Lewis, Barbara Bain, Imelda Bates. Dacie and Lewis Practical Haematology 10th Edition. Churchill Livingstone 2006.

Table: The changes of the Hematology Laboratories in Turkey between 2009 and 2017 surveys.

	2009	2017
The number of independent laboratories	11	3
The number of personnel	24-doctor 71- biologist 75-technician	12-doctor 12-biologist 16- technician
Number of laboratories using internal quality control	3	12
Number of laboratories using external quality control	15	9
The existence of the laboratory manual	13	11
Test variety in hematology laboratories	14	18

The survey was completed by

14-University hospitals
2-MoH hospitals
1-Research institutes
1-Private hospital
Total 18

12-University hospitals
6-MoH hospitals
2 Foundation universities
Total 20

MoH; Ministry of Health

Uncorrected proof