

SURVEY ABOUT RESIDENTS' TRAINING THROUGHOUT EUROPE

ESP Trainee Subcommittee

Harmonisation Subdivision

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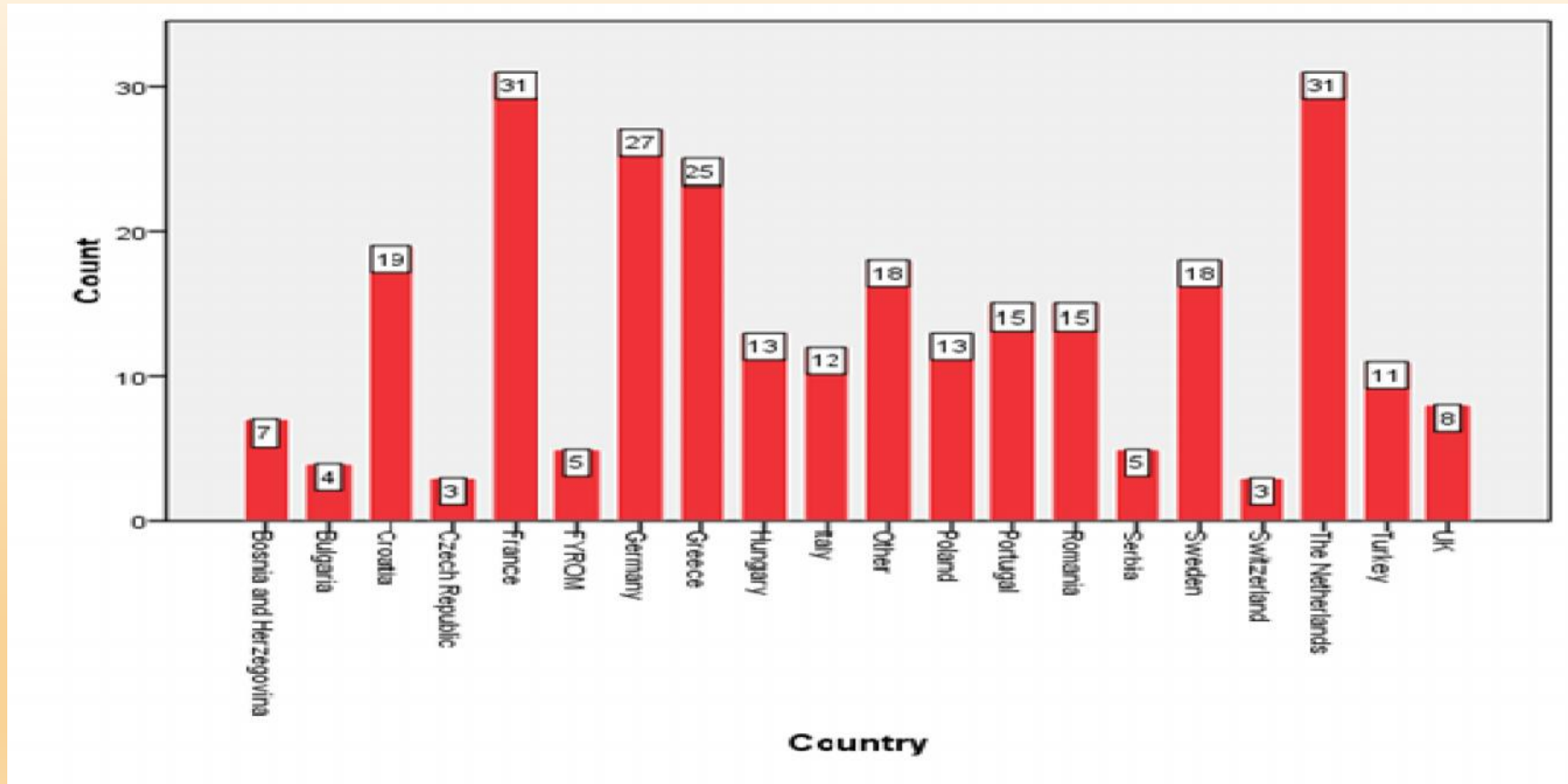
Responses: **293** pathology residents from **33** countries

285 gave permission to use their responses

Statistics: **IBM SPSS Statistics 21**

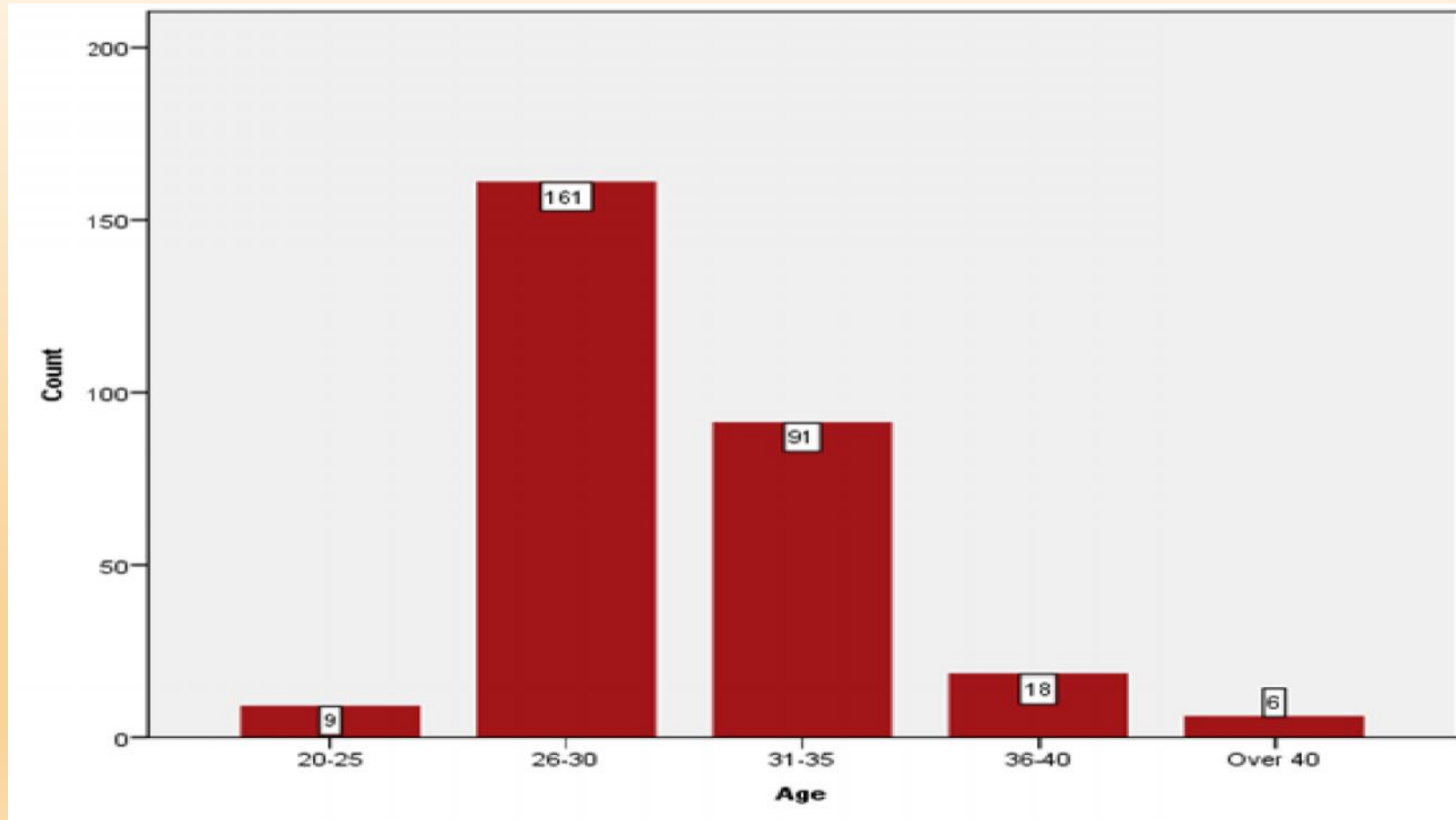
Results were considered statistically significant when **P<0,05**

1) In which country are you doing your residency in Pathology?



Other Countries: Afghanistan, Algeria, Austria, Azerbaijan, Estonia, Finland, India, Latvia, Lithuania, Morocco, Russia, Slovenia, Spain, Ukraine

2) How old are you?



3) What is your gender?

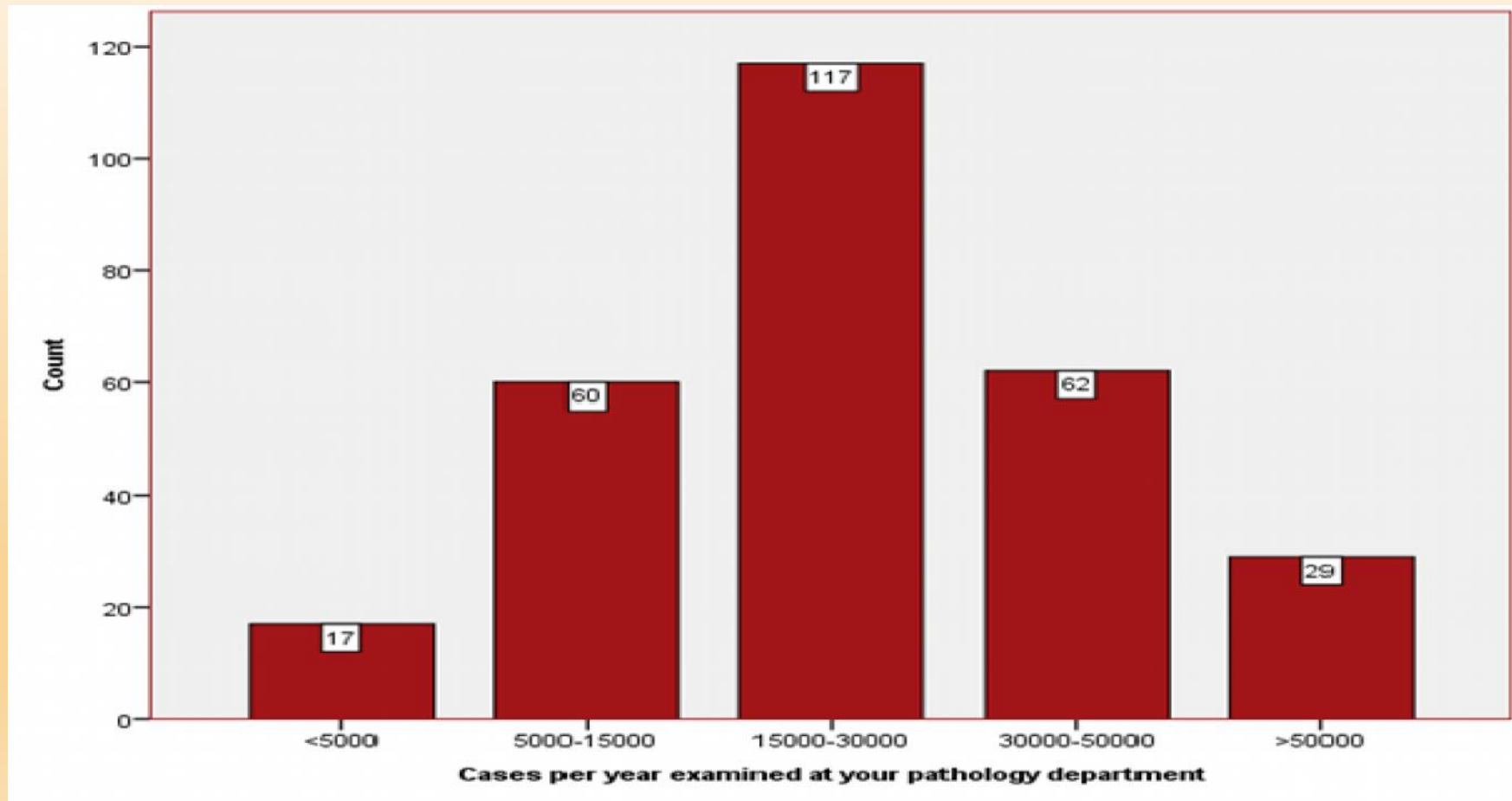
189 Female (66,3%)

95 Male (33,3%)

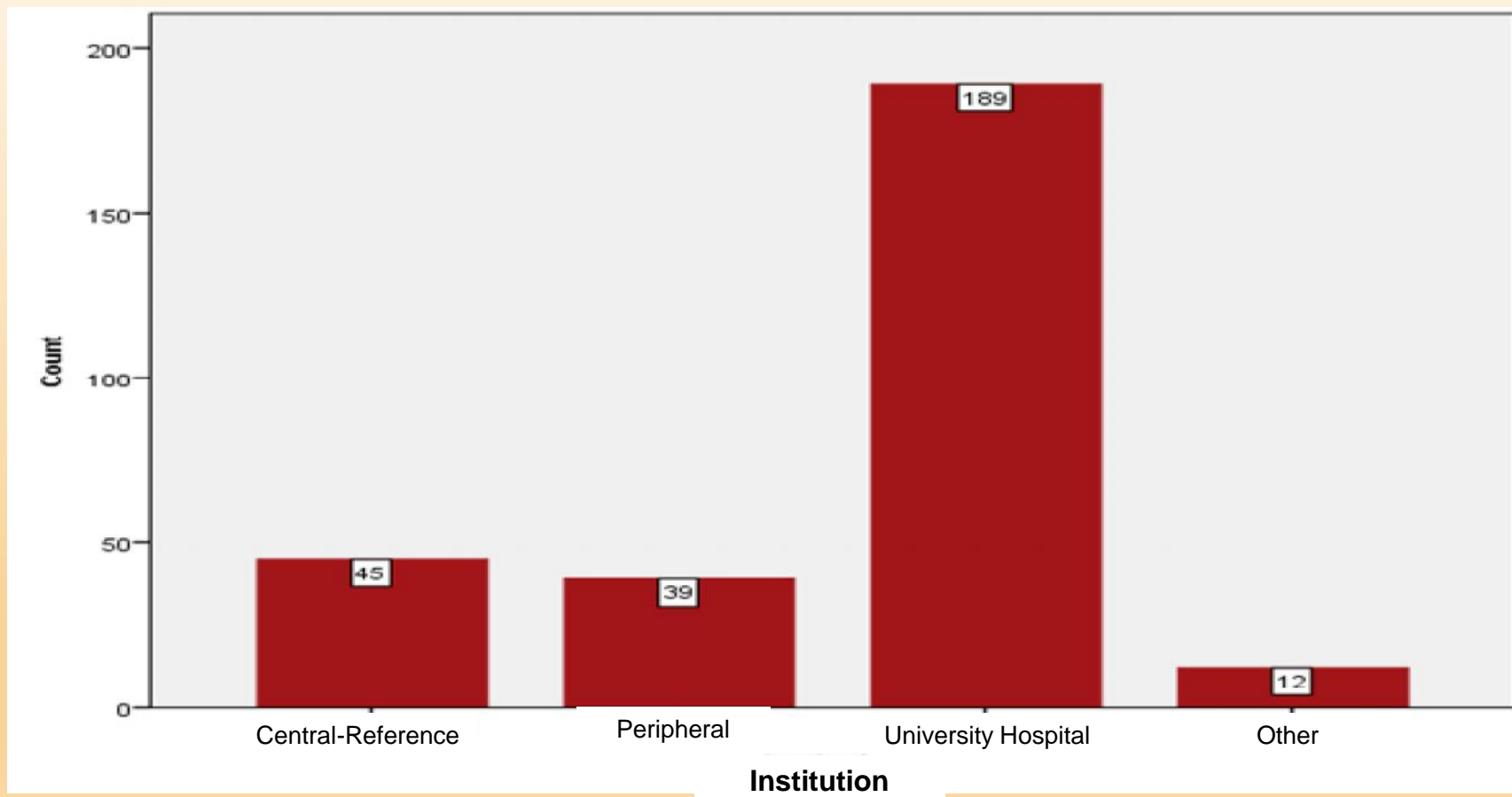
4) How many months have you been a pathology resident?

Mean **31,6** months (range: 1-84)

5) How many cases per year are examined at your pathology department?



Your Institution is



Other Answers: Childrens' Hospital, Medical Practice, Oncology Centre, Private Practice, Regional Hospital, Tertiary Care Hospital, Training and Research Hospital, University Clinical Centre

The number of examined cases per year
did not show statistically significant correlation
to the **type of institution** ($P=0,125$)

6) How many residents are now in your department (including you)?

Mean **8** residents (range: 1-50)

The **number of residents in each department** showed statistically significant correlation to the **type of institution** ($P < 0,0001$)

This is due to differences between the number of residents in **Peripheral Hospitals** and **University** or **Central-Reference Hospitals** (post hoc tests)

7) Are there any vacant positions in your department?

Yes: 95 (33,3%)

No: 190 (66,7%)

The **vacant positions in each department** did not show statistically significant correlation to the **type of institution** ($P=0,224$)

8) How were you accepted for residency? Tick all that apply

Exams: 90 (31,6%)

Interview, CV submission: 76 (26,7%)

Interview: 39 (13,7%)

Waiting List: 24 (8,4%)

N/A (none of the answers are suitable): 20 (7%)

CV submission: 7 (2,5%)

Interview, Waiting List, CV submission: 5 (1,8%)

Exams, Interview: 3 (1,1%)

Exams, Waiting List: 3 (1,1%)

Waiting List, CV submission: 1 (0,4%)

Exams, Interview, Waiting List, CV submission: 1 (0,4%)

9) Have you been trained in the pre-analytical phase of pathology examination?

Yes: 106 (37,2%)

No: 142 (49,8%)

N/A: 37 (13%)

10) Was post-graduate clinical practice mandatory for entering a pathology residency program?

Yes: 63 (22,1%)

No: 210 (73,7%)

N/A: 12 (4,2%)

Post-graduate clinical practice was mandatory in Sweden, UK, Portugal, Poland, Bosnia and Herzegovina, Greece, Finland and Serbia

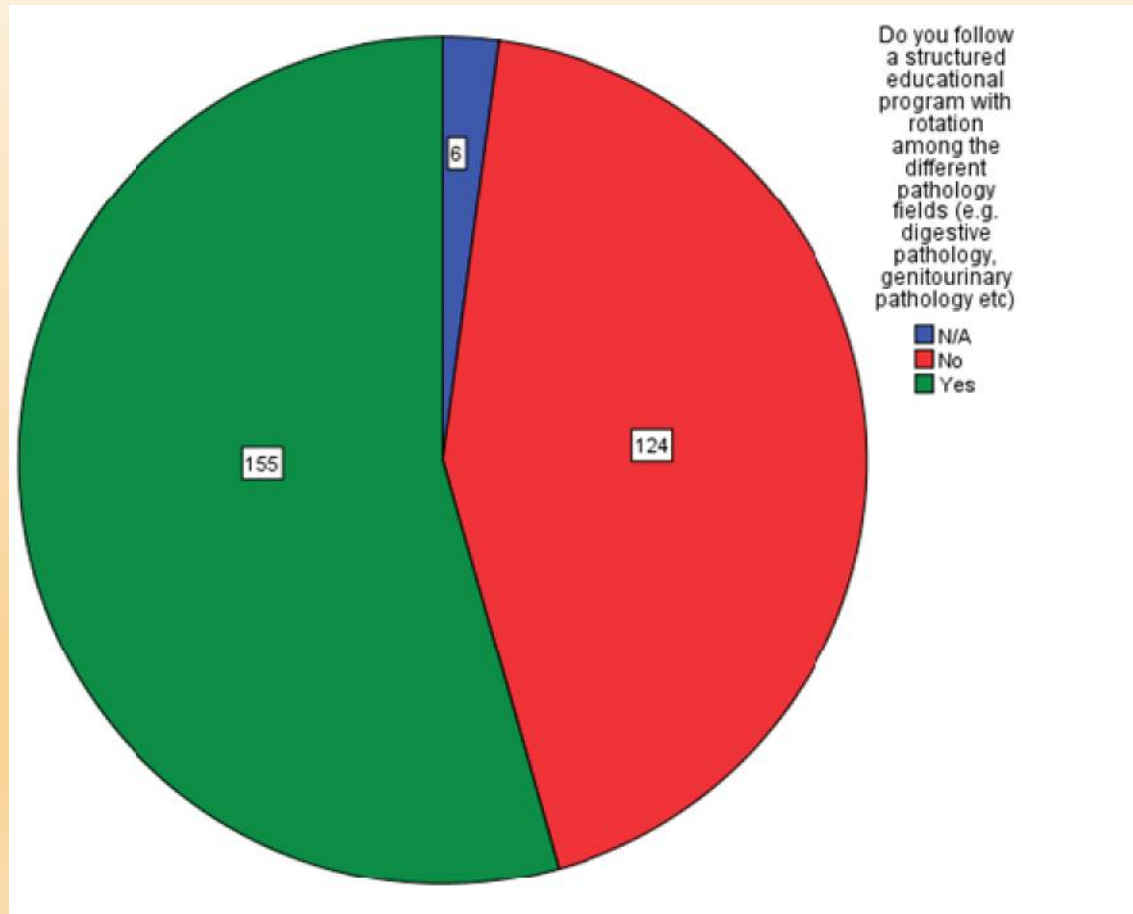
If your answer was Yes in question 10, tick all the following that apply

Foundation: 33 (22,1%)

Rural Doctor: 18 (73,7%)

Other Answers: Rotation through General practice, Oncology, Surgery, Internal Medicine or
Emergency department, Internship

11) Do you follow a structured educational program with rotation among the different pathology fields?



If your answer was Yes in question 11, how many weeks are required for each field?

Range: 2-24 weeks

Variable, depending on the field

12) Do you have frozen sections in your laboratory?

Yes: 267 (93,7%)

No: 14 (4,9%)

N/A: 4 (1,4%)

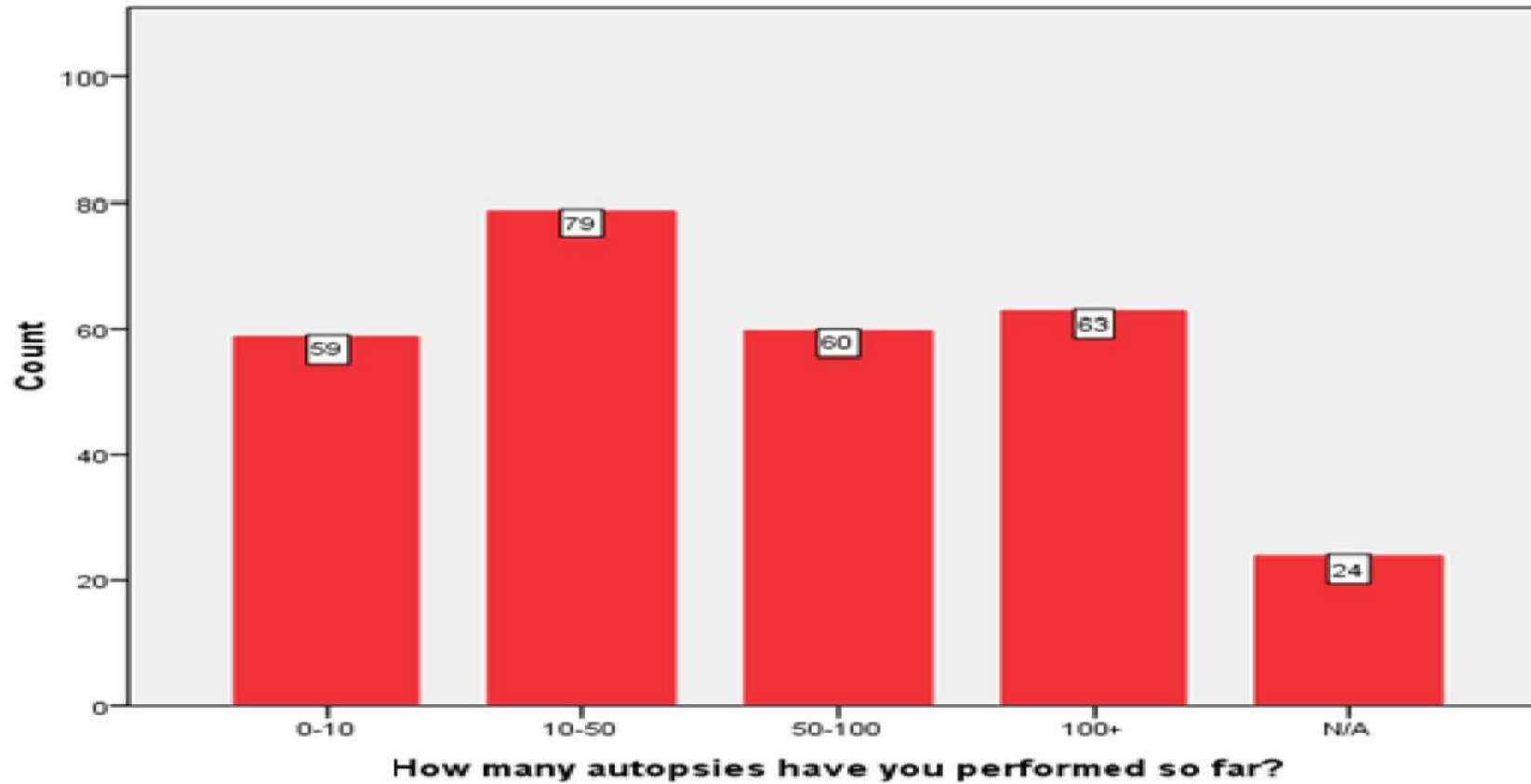
If you answered Yes in question 12, describe your involvement in frozen section procedure

Most residents take part in collecting the fresh tissue samples and in the microscopic observation, while their supervisor gives the definite answer

Fewer are involved in the frozen cuts and mounting the slides

Very few are not involved at all

13) How many autopsies have you performed so far?



The number of autopsies

showed statistically significant correlation

to the **type of institution** ($P=0,017$)

Who orders the autopsy?

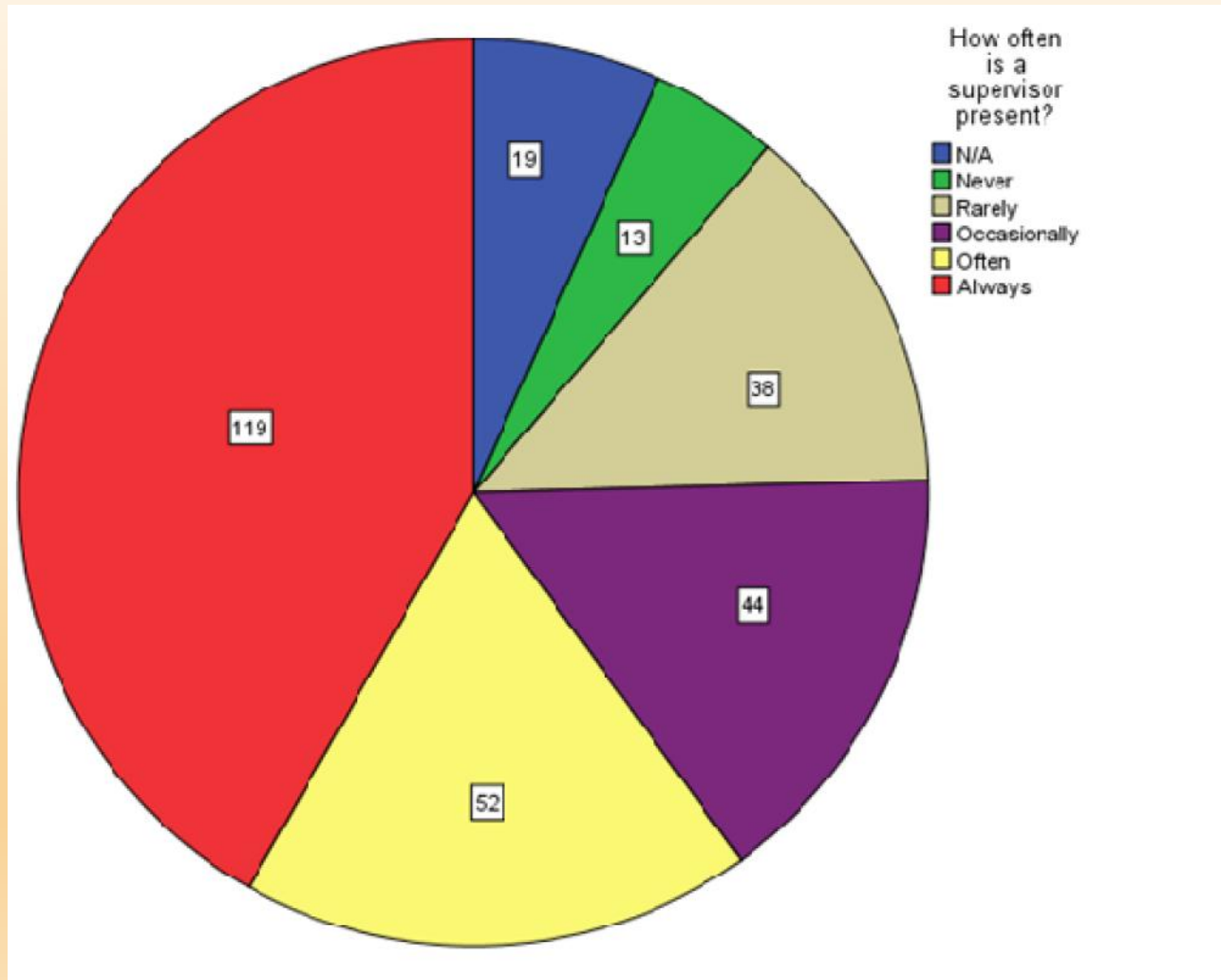
Clinicians: 147 (63,1%)

Other answers: Pathology Specialists, Hospital, Coroner, Legal Department, relatives

Who performs the evisceration?

- Autopsy technician
- Resident
- Autopsy technician and resident together

How often is a supervisor present?

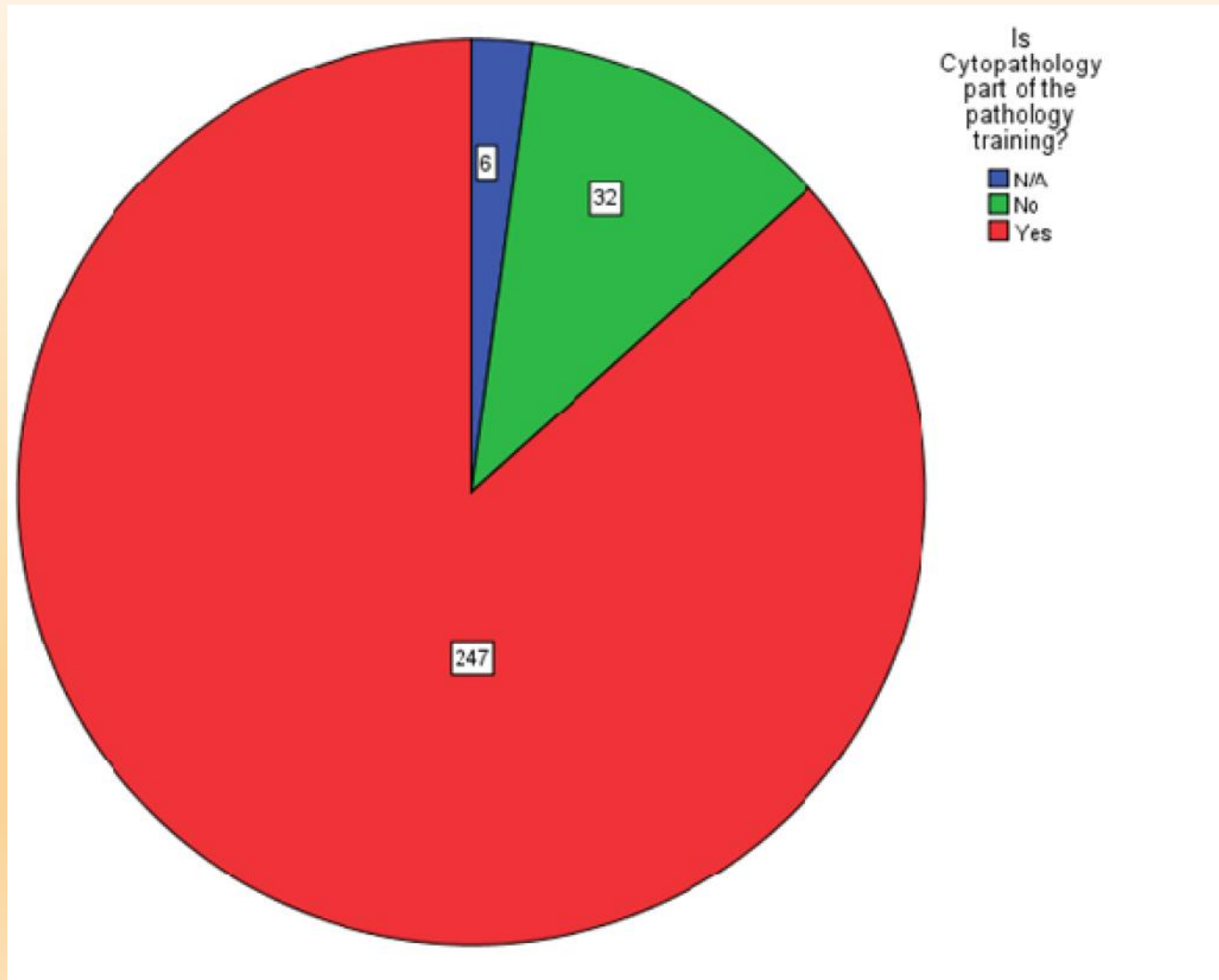


What is your involvement in the autopsy pathology report?

Almost all the residents answered that they write the first draft of the report, which is finalized and signed by the supervisor

Very few resident were not involved in the autopsy report

14) Is Cytopathology part of the Pathology training?



If you answered Yes in question 14, what is your actual practical experience in cervical cytopathology?

Please specify number of cases seen so far

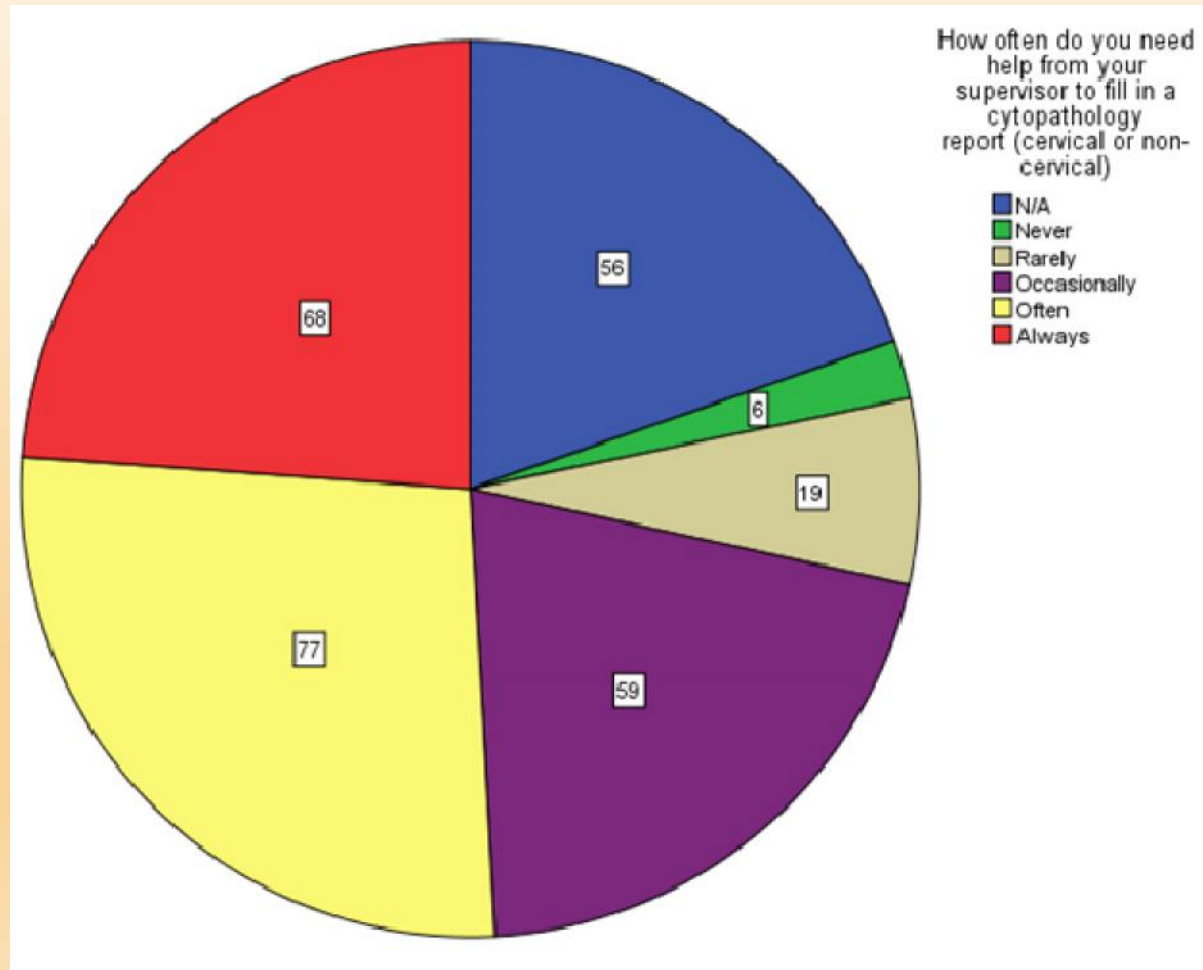
Mean **745** (range 1-30000)

If you answered Yes in question 14, what is your actual practical experience in non-cervical cytopathology?

Please specify number of cases seen so far

Mean **1643** (range 2-12000)

How often do you need help from your supervisor to fill in a cytopathology report (cervical or non-cervical)?



15-23) Actual experience of residents in different fields of Surgical Pathology

Actual experience (number of cases per month)	N	Mean	Std. Deviation
Breast pathology	279	9,99	22,32
Dermatopathology	276	783,84	12538,70
Endocrine pathology	281	7,54	18,87
Digestive pathology	280	43,49	75,34
Gynaecologic pathology	279	773,27	12471,14
Head and Neck pathology	280	9,16	19,64
Pulmonary and Mediastinal pathology	279	11,57	59,82
Genitourinary pathology	281	17,48	34,85
Soft tissue and Bone pathology	280	7446,88	124502,60

24) Have you gained any experience in Neuropathology?

Yes: 138 (48,4%)

No: 147 (51,6%)

If you answered Yes in question 24, please specify number of cases so far

Mean **106** cases

25) Have you gained any experience in Nephropathology?

Yes: 150 (52,6%)

No: 135 (47,4%)

If you answered Yes in question 25, please specify number of cases so far

Mean **486** cases

26) Have you gained any experience in Paediatric Pathology?

Yes: 139 (48,8%)

No: 146 (51,2%)

If you answered Yes in question 26, please specify number of cases so far

Mean **137** cases

27) Have you gained any experience in Lymph Node and Bone Marrow Pathology?

Yes: 203 (71,2%)

No: 82 (28,8%)

If you answered Yes in question 26, please specify number of cases so far

Mean **230** cases

28) Have you gained any experience in Immunohistochemistry?

Yes: 271 (95,1%)

No: 14 (4,9%)

29) Have you gained any experience in Molecular Pathology?

Yes: 147 (51,6%)

No: 138 (48,4%)

If you answered Yes in question 29, please specify the molecular methods?

In situ hybridization techniques: 129 (87,8%)

PCR: 109 (74,1%)

Sequencing/NGS: 80 (54,4%)

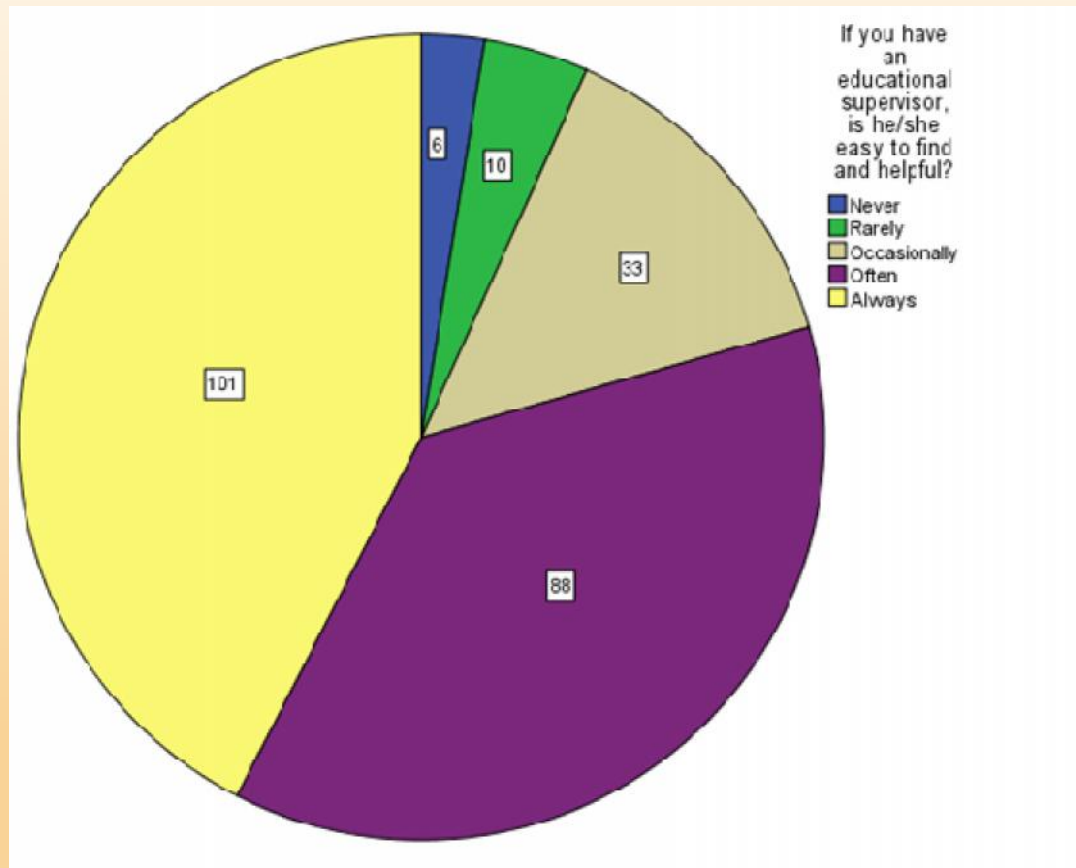
30) Do you have an educational supervisor?

Yes: 238 (83,5%)

No: 47 (16,5%)

The **establishment of an educational supervisor** did not show statistically significant correlation to the **type of institution** ($P=0,350$)

If you answered Yes in question 30, is he/she easy to find and helpful?



The **efficiency of the educational supervisor** showed statistically significant correlation to the **type of institution** ($P=0,002$). The educational supervisors of the residents of **Peripheral Hospitals** were more easy to find and helpful

31) Who trained you initially on gross pathology?

Consultant: 136 (47,7%)

Senior resident: 196 (68,8%)

Other Answers: Other Residents, self-taught, Educational Supervisor, Technician

32) Do you use a manual for gross examination? Which?

Protocols from the service / pathology society / local manuals: 96 (33,7%)

Both Protocols and Textbooks: 44 (15,4%)

Textbooks: 64 (22,5%)

CAP Protocols: 9 (3,2%)

No: 61 (21,4%)

Most Popular Manuals / Textbooks

Rosai and Ackerman's Surgical Pathology: 23 (21,3%)

Susan C. Lester, Manual of Surgical Pathology: 20 (18,5%)

William H. Westra, Surgical Pathology Dissection – An Illustrated Guide: 12 (11,1%)

33) What is your involvement in the microscopic examination of the cases?

I screen the case independently and write a report, which is finalized by the consultant: 170 (59,6%)

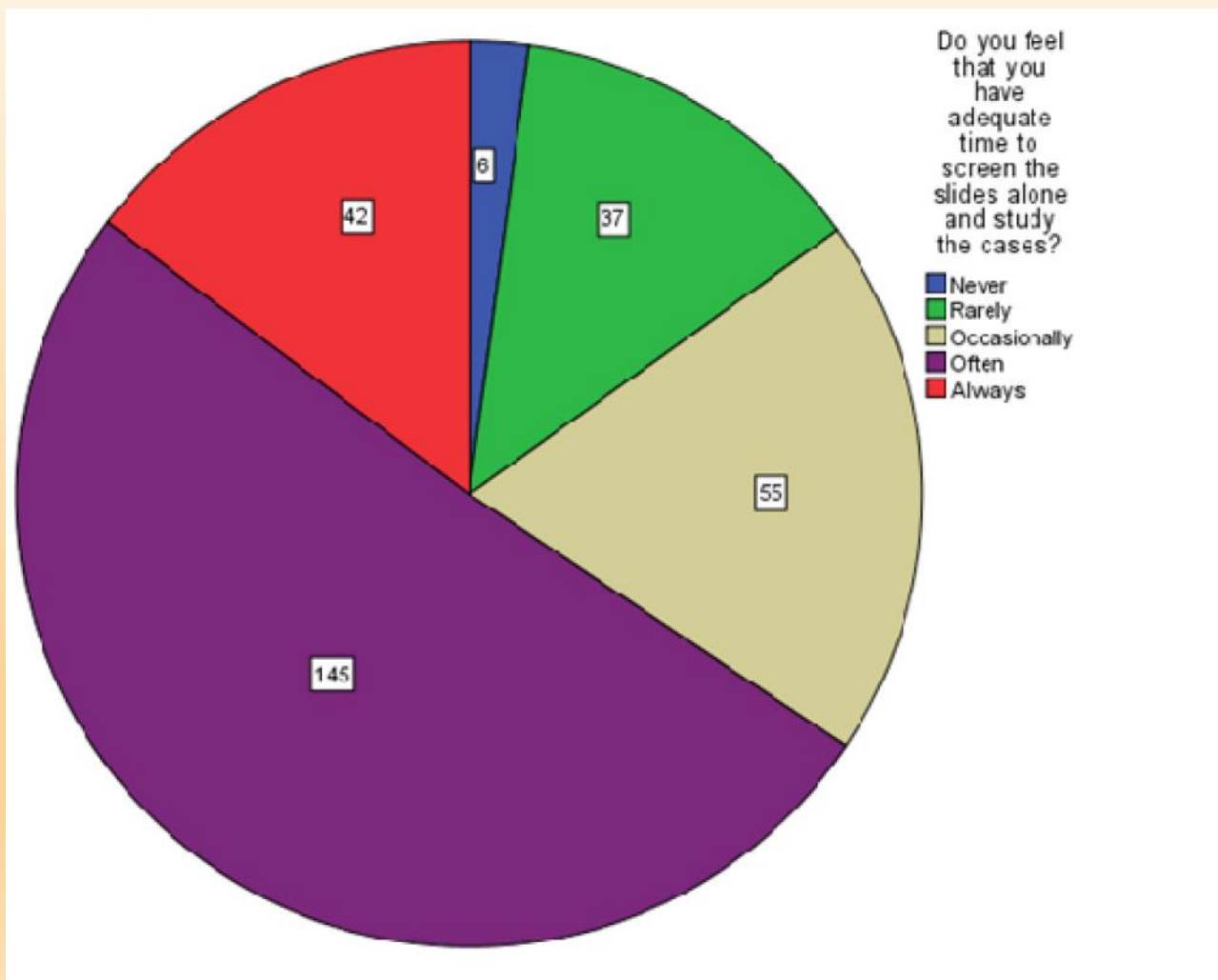
I screen the case in the multiheaded microscope together with the consultant and participate in the formulation of the final report: 29 (10,2%)

Both: 85 (29,8%)

Other Answers: screening of the case after the consultant finalizes the report

The **role of the resident in the microscopic examination of the cases** showed statistically significant correlation to the **type of institution** ($P=0,016$), but not with the **number of examined cases per year** ($P=0,288$). The residents of **University Hospitals** screen the cases independently and write a report, which is finalized by the consultant more often than the residents of **Central-Reference** or **Peripheral Hospitals**

34) Do you feel you have adequate time to screen the slides alone and study the cases?



The adequacy of time for the microscopic examination of the cases as judged by the residents showed

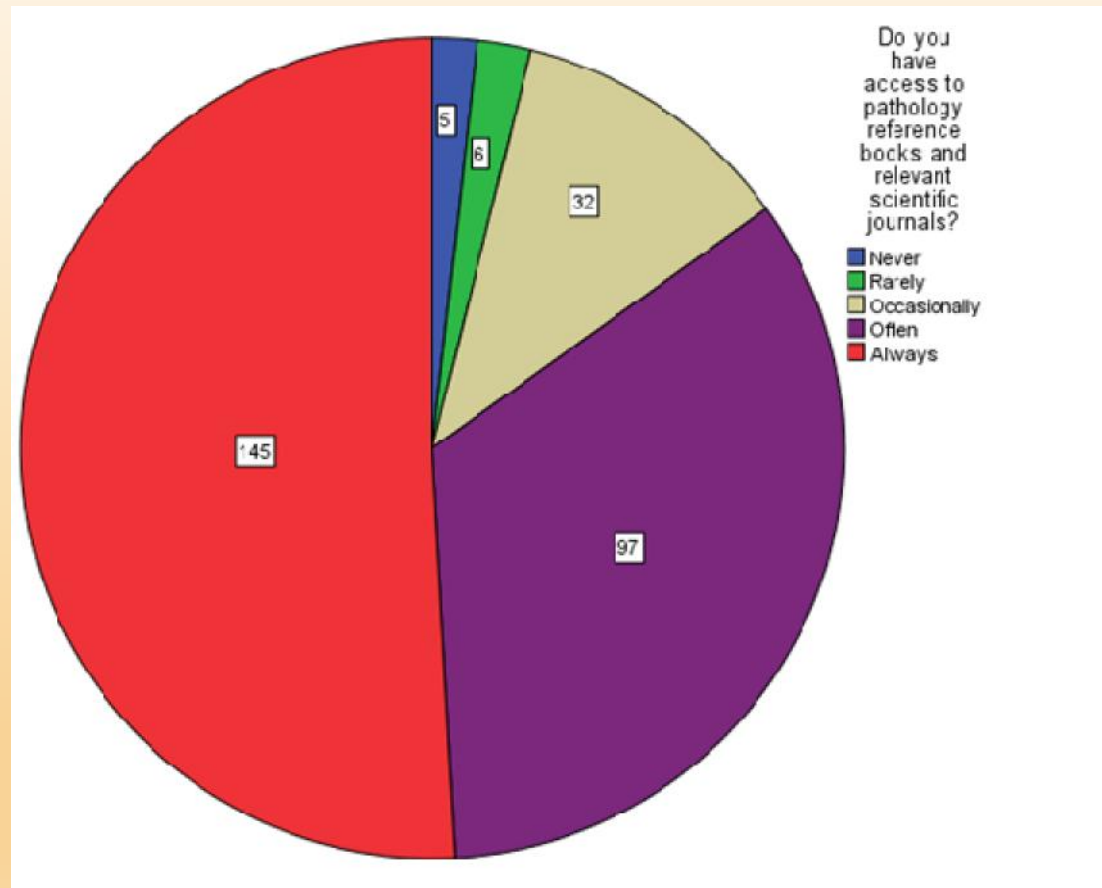
statistically significant correlation to the **type of institution** ($P=0,033$), but not with the **number of examined cases per year** ($P=0,063$)

35) Do you have your own microscope? (provided by your service)

Yes: 194 (68,1%)

No: 91 (31,9%)

36) Do you have access to pathology reference books and relevant scientific journals?



The access of the residents to pathology reference books and relevant scientific journals showed statistically significant correlation to the type of institution ($P=0,012$)

37) Are you encouraged to participate in research?

Yes: 179 (62,8%)

No: 85 (29,8%)

N/A: 21 (7,4%)

The **motives for participation of the residents in research** showed statistically significant correlation to the **type of institution** ($P < 0,0001$)

The residents of **University** or **Central-Reference Hospitals** are more often encouraged to participate in research than the residents of **Peripheral Hospitals**

38) Are you encouraged to participate in educational seminars and congresses?

Yes: 223 (72,2%)

No: 55 (19,3%)

N/A: 7 (2,5%)

The motives for participation of the residents in educational seminars and congresses did not show statistically significant correlation to the **type of institution** ($P=0,206$)

If you answered Yes in Question 38, who covers the cost?

Me: 90 (40,4%)

The Department / Sponsors / Bursaries / Education Funds: 74 (33,2%)

Me or The Department / Sponsors / Bursaries / Education Funds: 52 (23,3%)

39) What is the minimum time necessary, anticipated to complete the Pathology training residency program? Please specify the time in months

Range 23-96 months

60 months: 148 answers

48 months: 90 answers

72 months: 22 answers

40) Is there a minimum practical experience on surgical pathology, autopsy pathology, cytopathology or other?

Yes: 157 (55,1%)

No: 70 (24.6%)

N/A: 58 (20,3%)

41) How are you awarded the Certificate of Pathology Specialty?

Diagnostic test on slides, test on theoretical knowledge : 62 (21,8%)

Diagnostic test on slides, test on gross examination, autopsy skills, theoretical knowledge : 59 (20,7%)

Diagnostic test on slides, test on autopsy skills, theoretical knowledge : 30 (10,5%)

No test: 24 (8,4%)

Diagnostic test on slides, test on gross examination, theoretical knowledge : 23 (8,1%)

Test on theoretical knowledge : 13 (4,6%)

Diagnostic test on slides : 11 (3,9%)

Other Answers : portfolio, thesis, final year dissertation, regular evaluation of progress,
based on number of cases

42) Are there any subspecialty fellowship programs in your country?

Yes: 45 (15,8%)

No: 162 (56,8%)

N/A: 78 (27,4%)

If you answered Yes in Question 42, specify the subspecialties' field and the training duration

Portugal : Neuropathology, Dermatopathology, Fetal Pathology

Poland : Neuropathology, Forensic Pathology, Dermatopathology

France : Forensic Pathology, Dermatopathology, Neuropathology, Fetal Pathology, Nephropathology

Germany : Neuropathology, Nephropathology, Hematopathology, Paediatric Pathology

UK : Neuropathology, Forensic Pathology, Paediatric and Perinatal Pathology

Austria : Gastrointestinal Pathology, Hematopathology, Molecular Pathology

Hungary : Cytopathology, Neuropathology, Molecular Pathology

Finland : Neuropathology

Turkey, Serbia : Cytopathology

India : Neuropathology, Nephropathology

Subspecialty Certificate : Exams

43) How many hours do you work per week?

Mean **46** hours (Range: 8-90)

The **work hours per week** did not show statistically significant correlation to the **type of institution** ($P=0,108$), but they did show statistically significant correlation to the **number of cases examined per year** ($P=0,017$)

44) How many cases do you examine per month?

Mean **241** cases (Range: 10-3000)

The **examined by the resident cases per month** showed statistically significant correlation to the **type of institution** ($P=0,043$) and to the **number of cases examined per year** ($P=0,003$).

This is due to differences between **University** and **Peripheral Hospitals**

45) Do you work overtime?

Yes: 218 (76,5%)

No: 67 (23,5%)

If you answered Yes in Question 45, are you compensated for your overtime work? How?

No compensation : 198 (69,5%)

Money : 11 (3,9%)

Day off : 4 (1,4%)

46) Are you on call?

Yes: 54 (18,9%)

No: 231 (81%)

If you answered Yes in Question 46, how many days per month?

Number of days on call per month	N
1	10
2	7
3	9
4	11
5	5
6	2
7	9
8	1

What are your responsibilities as an on call doctor?

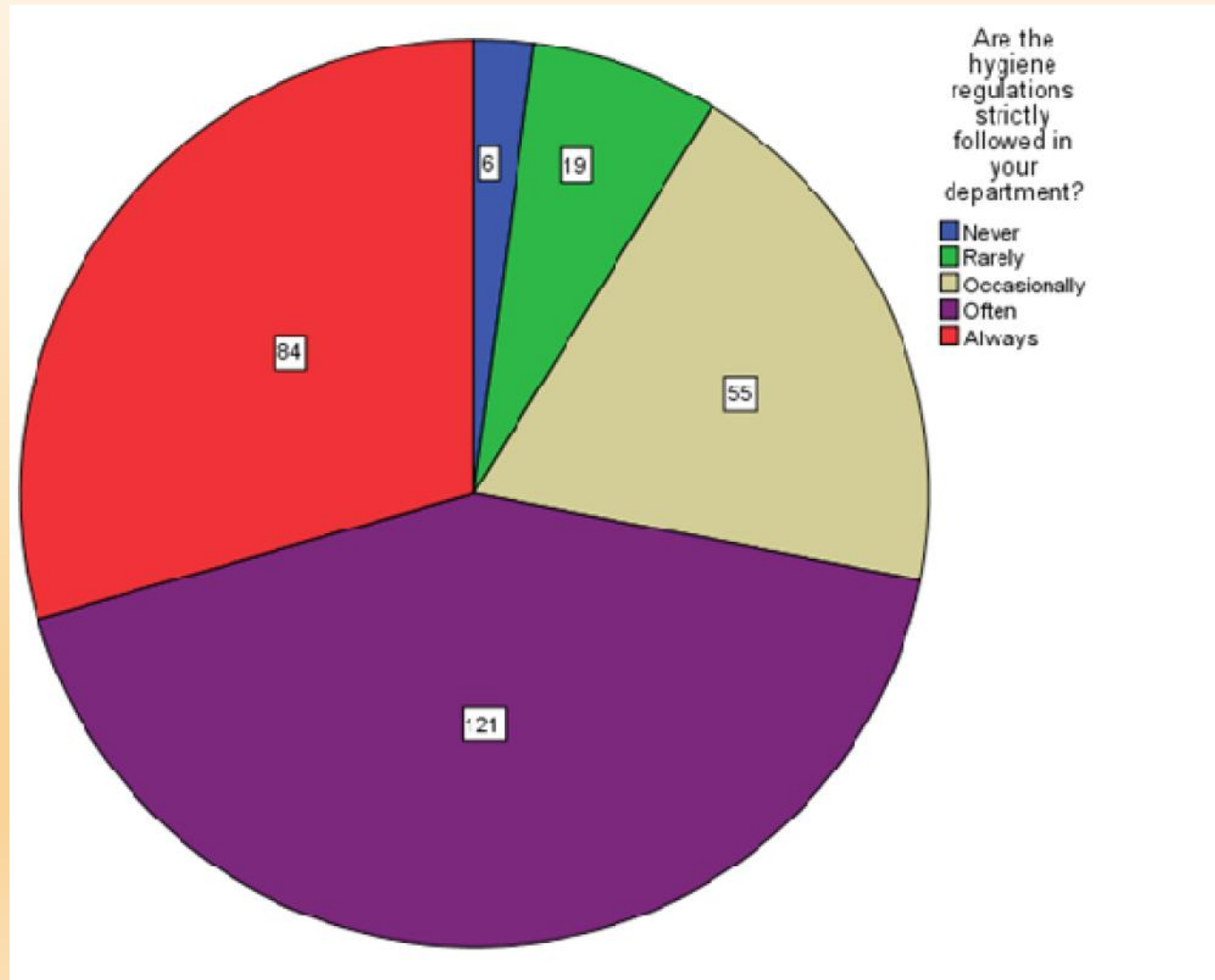
- To perform frozen sections
- The gross examination and fixation of urgent cases
- To color and mount slides
- To be available for consultation by clinicians on the phone
- To perform an autopsy on weekend

Are you paid extra for your on call services?

Yes: 31 (57,4%)

No: 23 (42,6%)

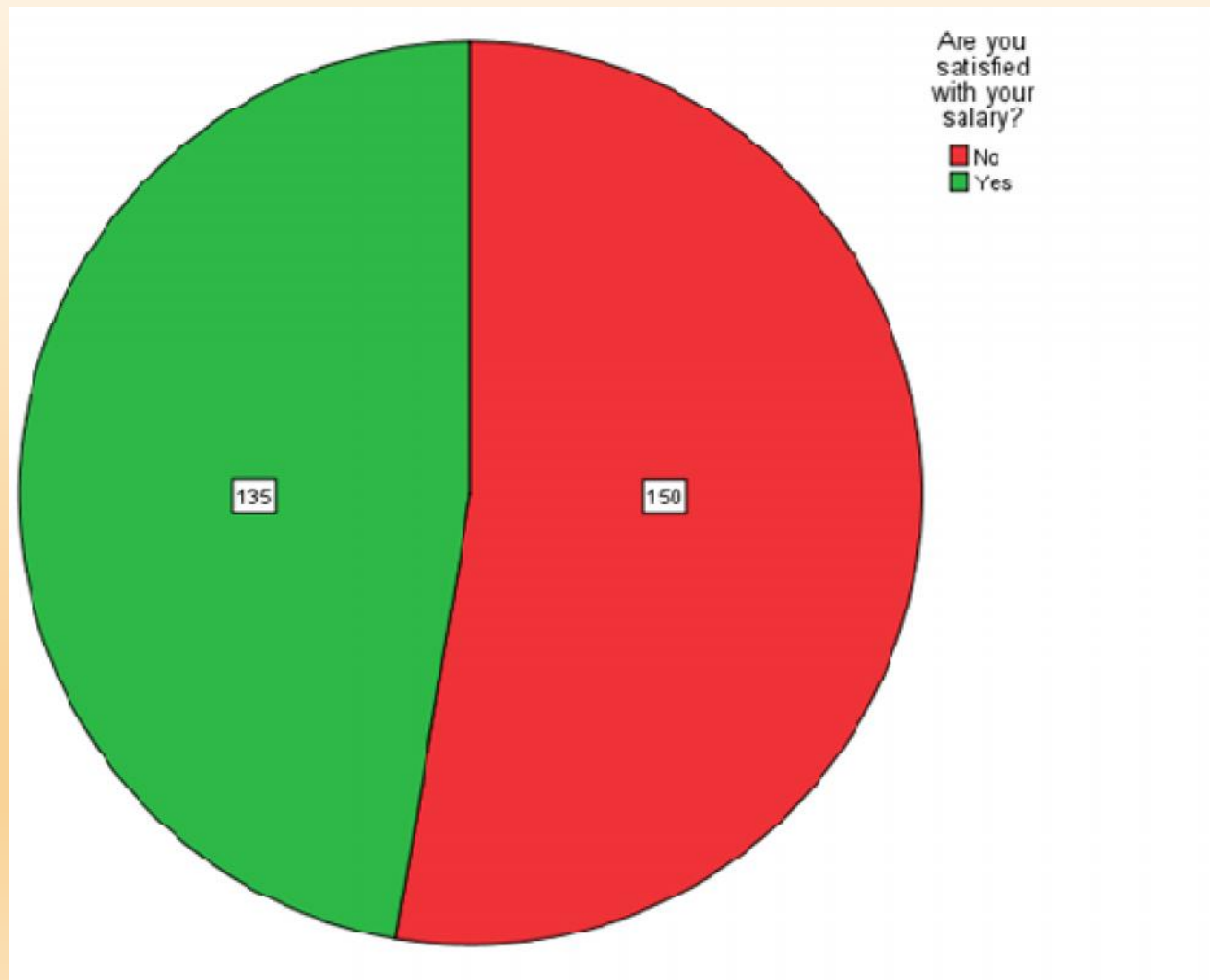
47) Are the hygiene regulations strictly followed in your department?



48) What are your areas of interest? Tick all the following that apply

- Cytopathology : 84
- **Breast Pathology : 96**
- **Dermatopathology : 116**
- Endocrine Pathology : 55
- **Digestive Pathology : 146**
- **Gynaecologic Pathology : 107**
- Head and Neck Pathology : 49
- Pulmonary and Mediastinal Pathology : 70
- **Genitourinary Pathology : 97**
- Soft tissue and Bone Pathology : 57
- Neuropathology : 54
- Nephropathology : 49
- Paediatric Pathology : 42
- Lymph Node and Bone Marrow Pathology : 78
- Molecular Pathology : 89
- Immunohistochemistry : 90
- Digital Pathology :51

49) Are you satisfied with your salary?



The **satisfactory salary** showed statistically significant correlation to the **type of institution** ($P=0,010$), but not to the **number of cases examined per year** ($P=0,949$).

The residents of **Peripheral Hospitals** seem more satisfied with their salary than the residents of **University** or **Central-Reference Hospitals** (42% vs 71,8%)

WHAT ARE YOU
LOOKING AT?



THANK YOU!!!

Galoo