Assessment in a postgraduate setting

Walter Struhal, MD

@walterstruhal

AKH

Allgemeines Krankenhaus

LINZ

verändert

Assessment in a postgraduate setting

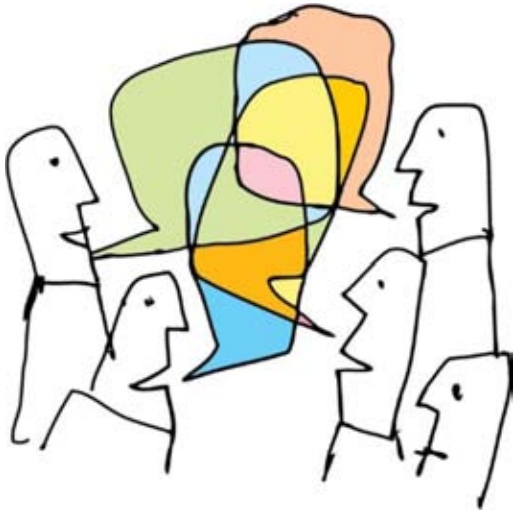
Residents are adult learners

- two main criteria
  - who is determining their needs (learners, educators, or others)
  - what standards are used as the ideal

Assessment in a postgraduate setting

Limits of this presentation

- What this talk will talk about
  - This talk is mainly for trainees
- What this talk will not talk about
  - This talk is not for teachers

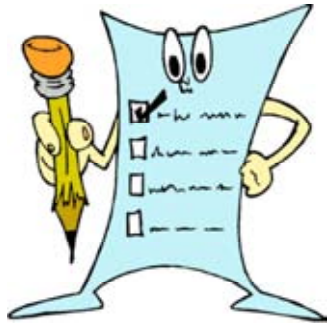


Needs Assessment in Postgraduate Medical Education:A Review

Savithiri Ratnapalan MBBS., and Robert I. Hilliard MD, EdD.

Learners' Needs & Wants	**Focuses on**	**Who Decides**	**Good for**
Normative	The set standards for learners' knowledge	.Professional bodies e.g. American Board of Internal Medicine or Pediatrics Royal Colleges of Physicians and Surgeons of Canada and UK	Board certification. Licensing
Prescribed	deficiencies in current educational program	Program directors Educators	Training residents in a particular program
Perceived	what the students may *think* they want to learn	Learners	For planning educational activities
Expressed	what the students *say* they want to learn	Learners	For planning educational activities
Comparative	needs of 2 groups compared to one another	Program directors Educators	For improving a cohort of residents
Unperceived	what learners don't know that they need to know	Educators Institutions Allied heath professional	For identifying some important educational objectives

Resident needs assessment I - example (one among many)



- Surveys
  - advantages
    - May address a wide target group
    - Anonymous
    - Easy and cheap to perform
  - disadvantages
    - Poor response rates
    - May only cover topics addressed, not perceived needs of the audience
    - Answers only as good as the questionnaire design

Assessment in a postgraduate setting

Resident needs assessment example II - (one among many)

- Interviews
  - advantages
    - In depth insight into someone's thoughts
    - Reveals a broader range of learning needs and perspectives
  - disadvantages
    - Time consuming
    - Not anonymous
    - Not feasible for a large number of residents

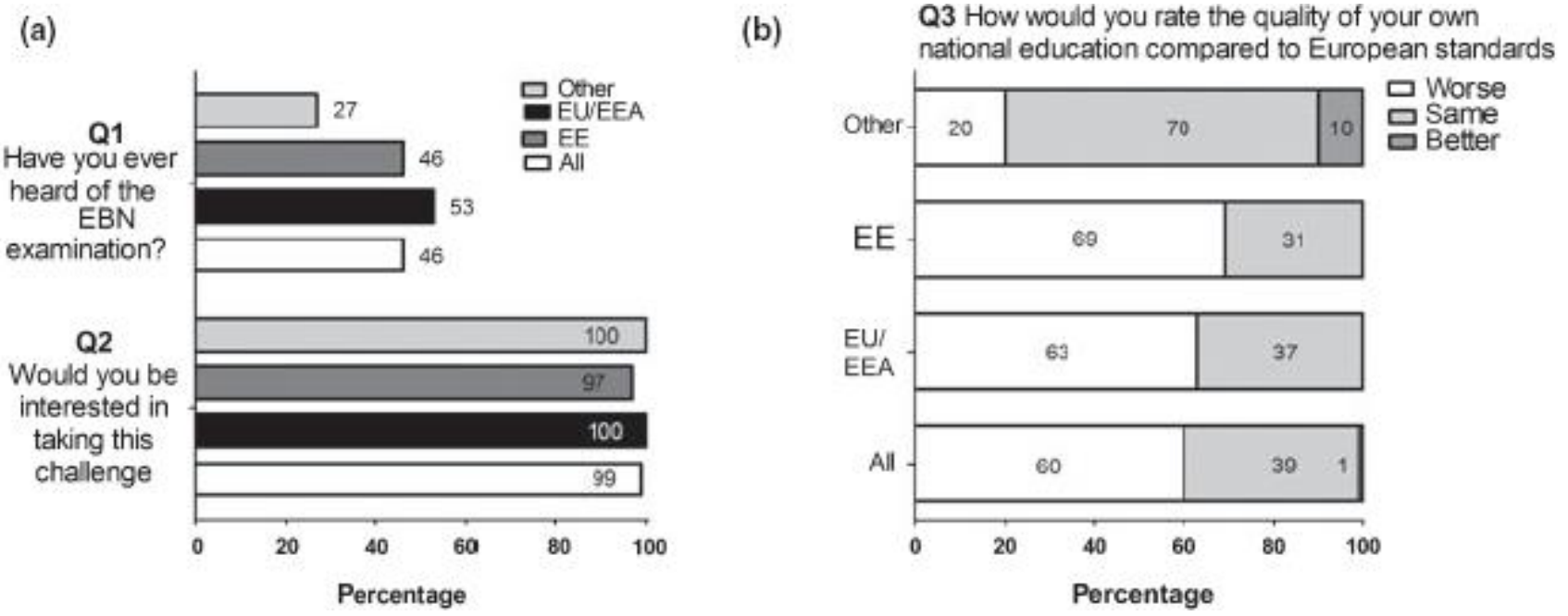
Assessment in a postgraduate setting

Levels of residents assessment

- National
  - TUTORS ON THE DEPARTMENT
  - National boards and professional societies
- International (e.g. EU wide)
  - Expressed needs: EAYNT (eaynt.org)
  - Expressed and Normative needs: UEMS (uems-neuroboard.org)
- Worldwide
  - Expressed needs: WFN and IWGYNT (wfneurology.org)

The European Board of Neurology Examination – junior neurologists are eager to take the challenge

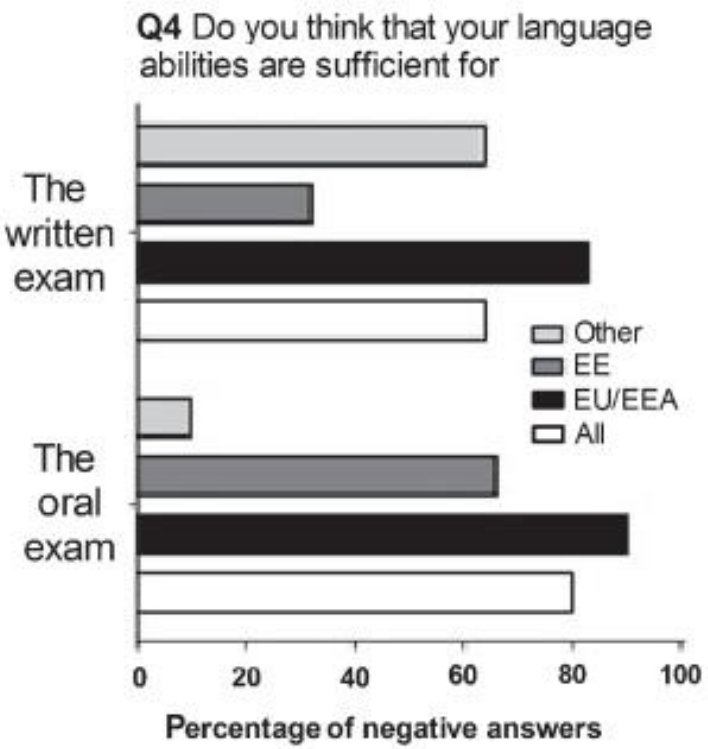
W. Struhal[a], M. Rakusa[b], W. Grisold[c] and J. Sellner[d]

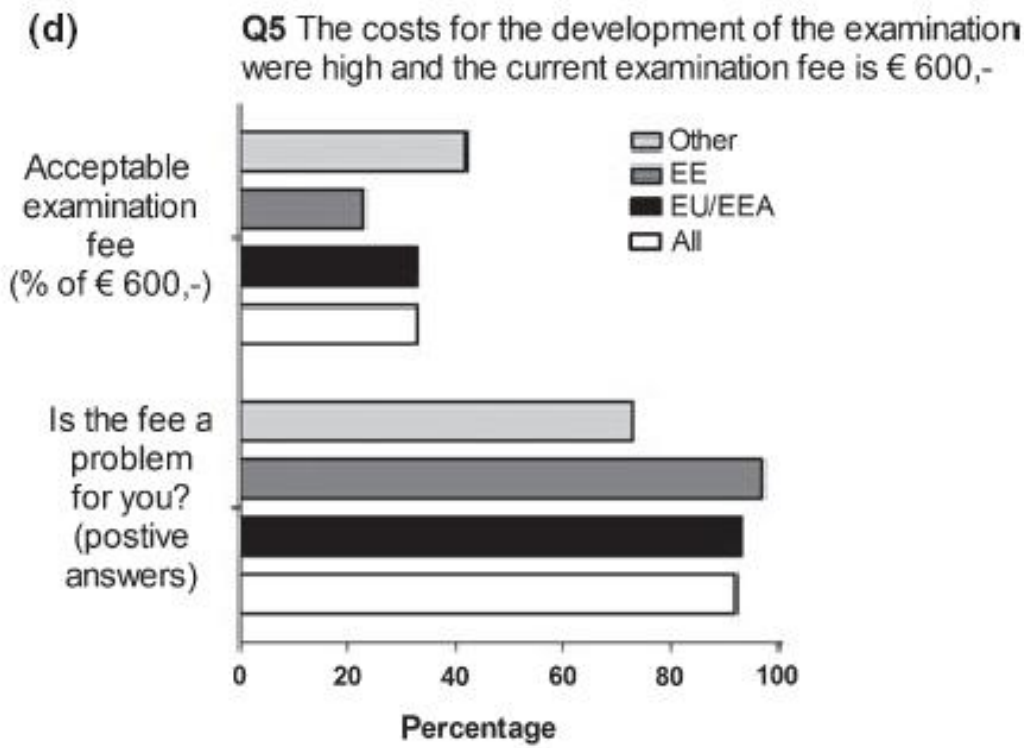


Expressed needs assessment European examination

The European Board of Neurology Examination – junior neurologists are eager to take the challenge

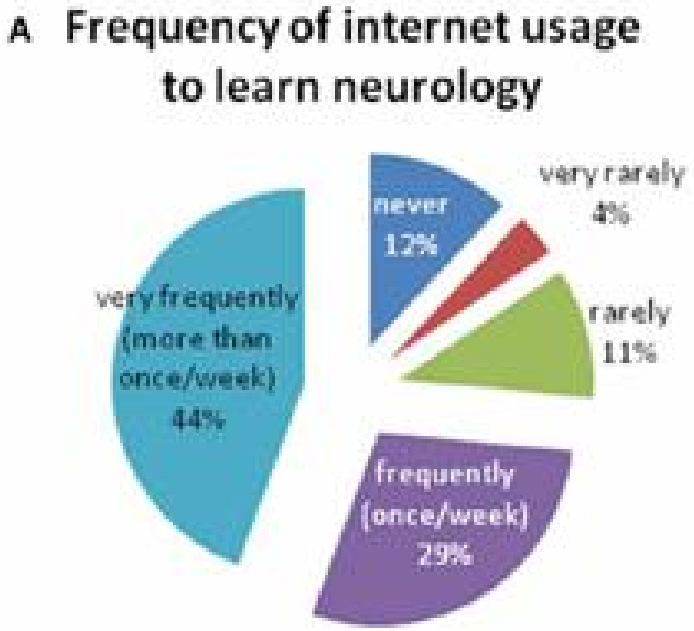
W. Struhal[a], M. Rakusa[b], W. Grisold[c] and J. Sellner[d]

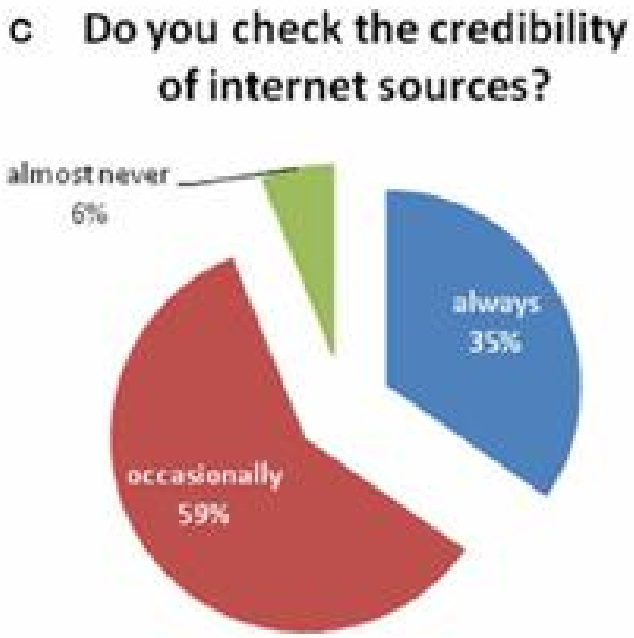




E-learning preferences of European junior neurologists—an EAYNT survey

*Laszlo K. Sztriha[1], Edina T. Varga[2], Krisztina Róna-Vörös[3], Natalja Holler[4], Raluca Ilea[5], Xenia Kobeleva[6], Cristian Falup-Pecurariu[5], Walter Struhal[7] and Johann Sellner[8,9]**





Expressed needs assessment e-learning

VIEWS & REVIEWS

Teaching the next generation of neurologists

Mitchell S.V. Elkind, MD, MS

Table 1 Challenges in educating the next generation of neurologists

Changes in the enterprise of academic medicine	Education competes with research and practice for attention
	Decline in faculty time/reward for teaching
	Decreased funding
	Relationships between commercial sponsors and education
	Inflexible regulatory requirements
Changes in neurology	Rapid pace of growth in scientific knowledge
	Increased subspecialization
	Role of inpatient vs outpatient care
Changes in trainees	Generational differences
	Demographic differences
	General comfort with virtual reality and the information superhighway
	Changing interpretation of professionalism

Prescribed needs assessment residency

Position Paper on Teaching Courses for Generation Y

Walter Struhal[a], Cristian Falup-Pecurariu[d], Laszlo K. Sztriha[e], Wolfgang Grisold[b], Johann Sellner[c, f]

- Changing needs of digital natives („Generation Y“)
- Online teaching resources widely used:
  - Googleing the diagnosis
  - E-learning
  - Emedicine, medscape, itunes u, podcasts, scholar.google…

Prescribed needs assessment teaching courses

The European Union

free movement of people

Consensus document of the EFNS/EBN: Final Draft Paris September 2004

C. Pontes (Chairman)
Serviço de Neurologia, Faculdade de Medicina/Hospital de S. João, Porto, Portugal

Normative needs on the European level

- 60 months min. training; 36 months min. Neurology training
- Training should include research
- Training in more than one institution
- Training abroad should be encouraged

SPECIAL ARTICLE/FORUM FOR EUROPEAN NEUROLOGISTS

One Europe, one neurologist?

W. Grisold[a], R. Galvin[b], V. Lisnic[c], J. Lopes Lima[d], E. Mueller[e], St. Oberndorfer[a], D. B. Vodusek[f] and UEMS-EBN and EFNS Education Committee

requesting specific intervention. There is wide variation in the delivery of neurological services throughout Europe. This is reflected in manpower levels, the place of neurology related to other medical specialties and different mixes of hospital and private office practice. These differences have been thrown into sharper focus by the recent

Assessment in a postgraduate setting

UEMS Chapter 6, 2011

http://www.uems-neuroboard.org/html/docs/Chapter_6_Neurology_2011.pdf

REQUIREMENTS for the Speciality Neurology

To replace the previous document from 2007

1. Definition and scope of neurology
2. European professional advisory organization for neurology at EU level
3. Training and lifelong learning
4. General aspects of training
5. Requirements for training institutions
6. Requirements for the director of training and educational supervisors
7. Training methods and content
8. Requirements for trainees
9. Continuous Medical Education (CME)/Continuous Professional Development (CPD)

European Journal of Neurology 2010 doi:10.1111/j.1468-1331.2010.03219.x

EFNS FORUM

Neurology residency training in Europe – the current situation

W. Struhal[a,b,c], J. Sellner[a], V. Lisnic[b], L. Vécsei[b], E. Müller[d] and W. Grisold[c]

[a]*European Association of Young Neurologists and Trainees (EAYNT);* [b]*Education Committee, EFNS;* [c]*European Union of Medical Specialists/European Board of Neurology (EBN); and* [d]*European Federation of Neurological Societies (EFNS)*

- Assessment of European comparative needs

Country	*n*/100 000 inhabitants	National training programme	National training structured	Duration of training (years)	Training in neurology (months)	Structured teaching	Obligatory logbook	Rotation	Assessment	Board examination	Total working hours
Albania	2,9	*	*	4	33				*	*	60
Austria	9,6	*	*	6	48	*			*	*	48
Belgium	6,5			5	60	*	*		*	*	40
Bulgaria	11,7	*	*	4	29		*	*		*	30
Croatia	6,2	*	*	4	42	*	*	*	*		40
Czech Republic	6,3	*	*	5	51	*	*	*	*	*	43
Estonia	9,4	*	*	5	25	*	*	*	*	*	40
Finland	6,3			6	48		*			*	38
Georgia	17,4	*	*	4	44	*	*	*	*	*	80
Germany	5,5	*	*	5	36	*			*	*	40
Greece	10,9	*		5	36	*			*	*	39
Hungary	6,0	*	*	5	42	*		*	*	*	40
Iceland	6,5			5	48		*				40
Israel	4,7	*		5	42	*	*		*	*	45
Italy	5,9	*	*	5	30	*	*		*	*	38
Latvia	12,0	*	*	5	44		*	*	*	*	40
Lithuania	8,9	*	*	4	24	*	*	*	*	*	40
Luxembourg	4,6			4	48						
Moldova	7,2	*	*	3	24		*	*	*	*	
the Netherlands	4,7	*	*	6		*	*	*	*		48
Norway	7,7	*		5	42	*	*	*	*		38
Portugal	3,4	*	*	5	24				*	*	42
Romania	4,4	*	*	5	36	*		*	*	*	35
Serbia	4,3	*	*	5	48	*		*	*	*	35
Slovenia	4,2	*	*	6	48		*	*	*	*	40
Slovak Republic	12,5	*		5	46		*		*	*	40
Spain	4,4	*	*	4	36			*	*		56
Sweden	3,8			5	36						40
Switzerland	5,2	*	*	6	36	*	*		*	*	50
Turkey	2,0	*	*	5	60	*	*	*	*	*	45
UK	0,9	*	*	6	60	*	*	*	*		40

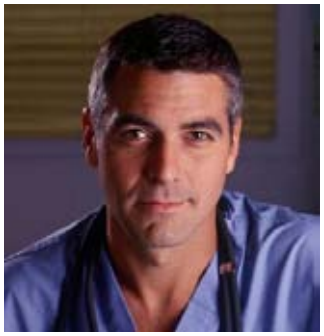
Assessment in a postgraduate setting

Training outlines

- Duration 4,9 years
- Average working hours for residents 43 week (30 in Bulgaria to 80 in Georgia)
  - 33 hours patient work (20 in Italy and Bulgaria, 55 in Albany)
  - 7 hours theoretical training

Manpower in Europe

- 6,6 neurologists available for 100.000 inhabitants (0,9 in UK to 17,4 in Georgia)
- in average 46% women (10% in Italy to 82% in Georgia)
- Average male retirement age 65 years (62 in Moldova, 70 in Georgia, Iceland), female retirement age 63 years (58 in Moldova, 70 in Iceland)



Assessment in a postgraduate setting

Training contents

- national postgraduate training program existed in 26 (of 31) countries
- Practical training
  - Stroke, extrapyramidal diseases, epilepsy and MS: all countries
  - Dementia: 29 countries
  - neuromuscular und spinal disease: 28 countries
  - Neuroinfection: 26 countries
  - neurotrauma and neurooncology: 19 countries
  - genetic disease: 18 countries
  - neurointensive care: 17 countries
  - Neurogeriatics: 14 countries
  - Neuroethics: 9 countries
  - neuropalliative care: 8 countries.

Assessment in a postgraduate setting

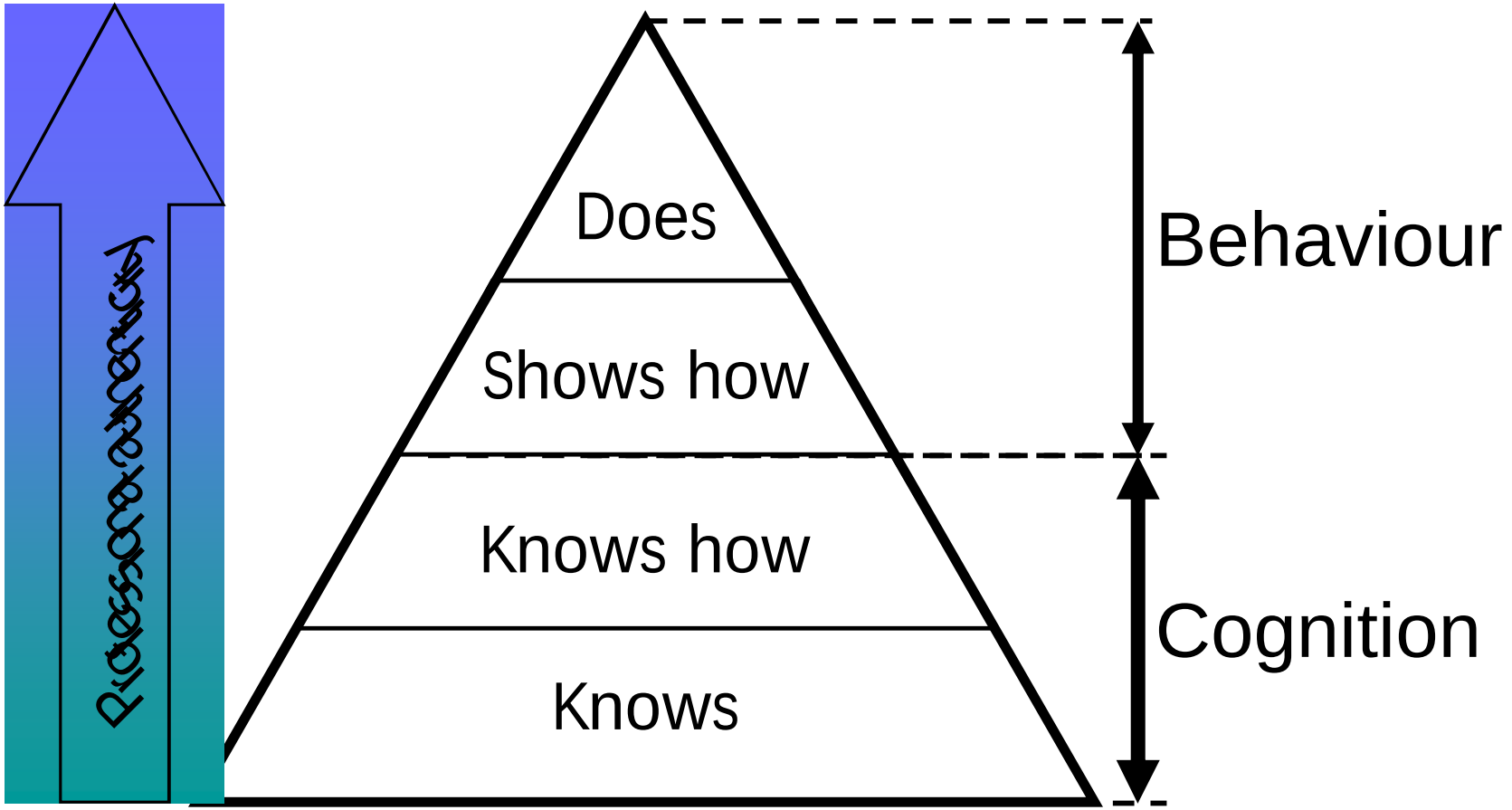
Skills

- Practical skills
  - lumbar puncture: 29 countries
  - evaluation of CT and MRI scans: 19
  - scales and scores: 14
  - EEG: 11
  - NCV and EMG: 10
  - CSF diagnostics and ultrasound investigations in 8
  - intrathecal treatment and genetic counselling: 7
  - neuropsychology: 6
  - autonomic nervous system investigations and speech trainings: 3
  - botulinum toxin therapy: 2 countries

Assessment in a postgraduate setting

- European standards exist – but not in reality

A simple model of competence

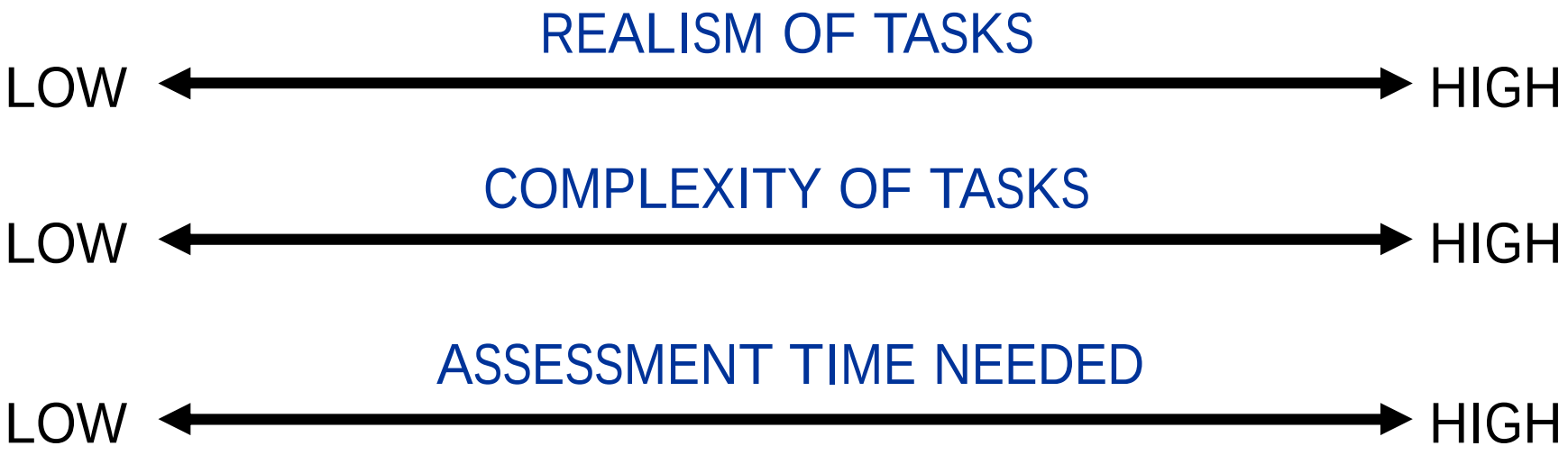


Miller GE. The assessment of clinical skills/competence/performance. Academic Medicine (Supplement) 1990; 65: S63-S7.

with kind permission of S. Ayhan ÇALI?KAN MD, PhD

Testing Performance assessment

Selected response	Supply response	Restricted performance	Extended performance
- MCQ - Matching - True-False…	- Essay - Short answer - Oral exam…	- Maneq. Model exam. - Procedural skills - Laboratory skills	- Standardized patient - MiniCEX - Portfolio…



Norman E. Grounlund. (2006) Assessment of Student Achievement

Constructing Written Test Questions For the Basic and Clinical Sciences

Third Edition
(Revised)

Contributing Authors
*Susan M. Case, PhD and David B. Swanson, PhD**

National Board of Medical Examiners
3750 Market Street
Philadelphia, PA 19104

Assessment in a postgraduate setting

Assessment of normative needs
European board of Neurology examination

- 3 Steps to pass

Assessment in a postgraduate setting

Step I

- Eligibility
- Fulfilment of national training plan, sufficient to achieve specialisation documented
- Skills! – National issue

Assessment in a postgraduate setting

Step II

- 120 written multiple choice questions (5 answers, one correct)
- Basics
  - Eg neuroanatomy, neuropathology, neuropharmacology
- Clinical
  - Eg Movement disorders, infections, sleep disorders
- List of topics online at
    - www.uems-neuroboard.org/html/docs/ExaminationQuestions.pdf

Assessment in a postgraduate setting

Step III

- Extended matching questions (EMQ) test
  - A set of 30-40 EMQs
- Bonus
  - bonus points may be achieved by a max. 5 min. presentation of his/her own work/publication

Assessment in a postgraduate setting

2009
Dr. Joao Cerqueira (PT)
Dr. Daniel Kondziella, PhD (SE)
Dr. Ulf Sören Raasch (GB)
Dr. Sitthided Reymond (CH)
Dr. Irene Villegas Martinez (ES)
Dr. Sandra Weiss (DE)

2010
Asst. Prof. Dr. Kadriye Agan Yildrim (TR)
Dr. Timothy Counihan (IE)
Dr. Ruth Geraldes (PT)
Aysegul Gunduz, MD (TR)
Pinar Kahraman Koytak, MD (TR)
Baris Metin, MD (BE)
Dr. Pedro J. Modrego (ES)
Simona Petrescu, MD (RO)
Manuel Seijo Martinez, MD (ES)
Gul Yalcin Cakmakli, MD (TR)
Dr. Sreedharan Harikrishnan (UK)
Serpil Yildiz, MD (TR)

2011
Dr. Hasan Balcin (SE)
Dr. Hacer Durmus (TR)
Neslihan Eskut, MD (TR)
Dr. Gregory Helsen (BE)
Murat Kurtuncu, MD (TR)
Dra. Laura Lacruz Ballester (ES)
Dr. Maria Mallia (MT)
Merce Martinez Corral, MD (ES)
Dr. João Martins (PT)
Dr. Sohrab Mostoufizadeh Ghalamfarsa (FR)
Ass. Prof.Dr. Zerrin Pelin (TR)
Ricardo Taipa, MD (PT)
Aslihan Taskiran, MD (TR)
Dr. Malcolm Vella (MT)

2012
Karen Aegidius, MD, PhD (DK)
Dr. Imtiaz Ahmed (UK)
Dr. Iordanis Dimitrios Avramidis (SE)
Dr. Marc Boix Codony (ES)
Devrimsel Harika Ertem, MD (TR)
Nurbanu Grubuzer, MD (TR)
Klaus Hansen, MD (DK)
Hans Ulrik Jorgensen, MD (DK)
Odysseas Kargiotis, MD, PhD (CH)
Mette Lindelof, MD (DK)
Dr. Dimitrios Papadopoulos (GR)
Dr. Hawraman Hamakarim Ramadan (UK)
Dr. Sarvnaz Shalchian Tehran (BE)
Salvador Sierra San Nicolás (ES)
Dr. Maria Jesus Sobrido Gomez (ES)
Dr. Saeid Taghizadeh (AE)

2013
Dr. Hind Alnajashi (SA) diploma
Dr. Rashid Alshahoumi (CA) fellow
Leyla Baysal Kirac, M.D (TR) fellow
Eva Brandão, M.D (PT) fellow
Dr. Suresh Chandran C J (IN) diploma
Dr. Diwan Anand (IN) diploma
Amber Eker, M.D (CY) fellow
Dr. Walid Eltantawi (SA) diploma
Dr. Majed Hbahbih (JO) diploma
Tassanai Intravooth, M.D (DE) fellow
Dr. Mamdouh Hasan Kalactawi M.D, FACP, MSCS(SA) diploma
Dr. Sasikumar Kallivalappil (AE) diploma
Dr. Bahar Kaymakamzade (CY) fellow
Dr. Dominique Peter Kehrer (DE) fellow
Dr. Amanj Khidhir (IQ) diploma
Dr. Claudia Morelli (IT) fellow
Dr. Rekan Othman Awni (IQ) diploma
Dr. Remy Phan-Ba (BE) fellow
Patrícia Pita Lobo, M.D. (PT) fellow
Dr. Rosa Maria Sanchez Galvez (ES) fellow
Dr. Nicola Ticozzi (IT) fellow
Dr. Kirsten Van De Velde (BE) fellow
Dr. Jay Vijayan (SG) diploma
Pinar Dikmen Yalinay, Assistant Prof. (TR) fellow
Dr. Laetitia Yperzeele (BE) fellow

5th European Board Examination in Neurology – June 7, 2013 Barcelona – Spain

Normative assessment of the teacher - Department visits

- Visits on national basis implemented in many countries

- International approach by UEMS
  - Structured European department visits

Conclusion

- Assessment of postgraduate neurology residents needs - important to plan educational initiatives
- Normative assessment of training and teaching prerequisite for
  - national and international quality assurance
  - eventually national/international training harmonization

  even more in the setting of the European union