

Global application of assessment of competencies of pediatric endocrinology fellows in the management of differences of sex development (DSD) using the ESPE e-learning.org portal.

Laura Kranenburg (1,2), Sam Reerds (1), Martine Cools (3), Julie Alderson (4), Miriam Muscarella (5), Kalinka Grijpink (6), Charmian A. Quigley (7), Stenvert L.S. Drop (1).

1. Department of Pediatrics, Division of Pediatric Endocrinology, Sophia Children's Hospital/ErasmusMC, Rotterdam, the Netherlands
2. Department of Rheumatology, Maasstad Hospital, Rotterdam, the Netherlands
3. Department of Pediatrics, Division of Pediatric Endocrinology, Ghent University, Ghent University Hospital, Ghent, Belgium
4. University Hospitals Bristol NHS Foundation Trust, UK
5. International DSD Steering Committee, UCSF School of Medicine, San Francisco, USA
6. Division education and student support, Faculty EEMS, Delft University of Technology, Delft, the Netherlands.
7. Division of Pediatric Endocrinology and Diabetology, Indiana University Medical Center, Indianapolis, N, USA

Co-authors: Shereen Abdelgaffar, Egypt; Amir Babiker, Saudi Arabia; Willie Bakker-van Waarde, the Netherlands; Antonio Balsamo, Italy; Raja Brauner, France; Jean Pierre Chanoine, Canada; Steven Chernausek, USA; Asma Deeb, UAE; Patricia Fehner, USA; Alina German, Israel; Evelien Gevers, UK; Olaf Hiort, Germany; Paul Martin Holterhus, Germany; Lourdes Ibanez, Spain; Violeta Iotova, Bulgaria; Anders Juul, Denmark; Anna Lauber-Biason, Switzerland; Mohamad Maghnie, Italy; Alejandro Martinez-Aguayo, Chili; Berenice B. Mendonca, Brazil; Kristen Neville, Australia; Anna Nordenstrom, Sweden; Wilma Oostdijk, the Netherlands; Rodolfo Rey, Argentina; Stefan Riedl, Austria; Meilan Rutter, USA; Nalini Shah, India; Shubha Srinivasan, Australia; Selma Witchel, USA; Xiaoping Luo, China.

Disclosures: This study is based upon work from COST Action BM1303 DSDnet: and received an educational research grant from Eli Lilly and Company, Indianapolis, IN, USA (Grant ID 100218713).

PART I: Evaluation of global e-learning

The ESPE interactive e-learning portal combines instruction with feedback during the learning process.

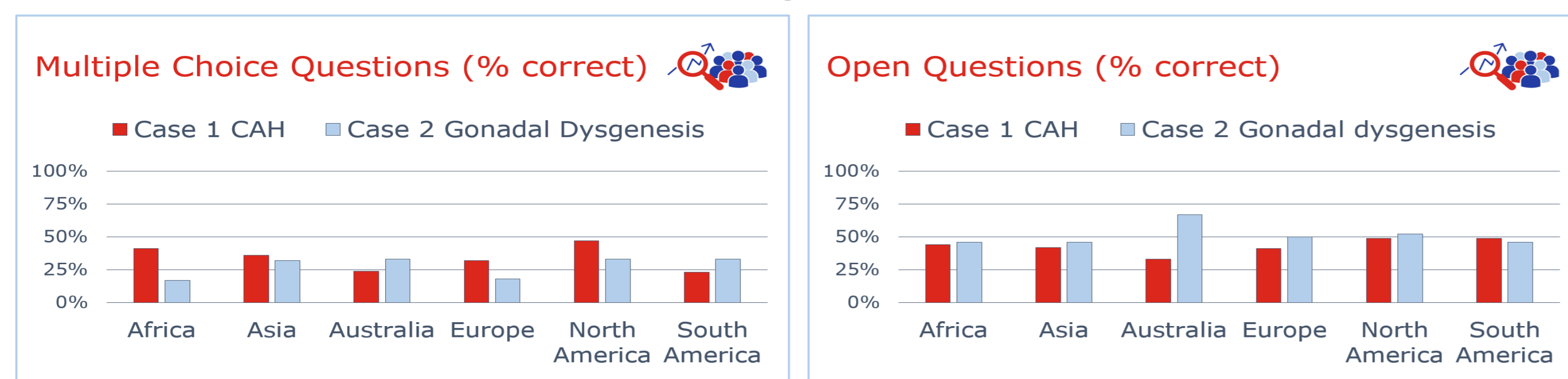
Aim to evaluate the role of e-learning in training of pediatric endocrinology fellows in informing patients and parents about diagnosis and management. Selected cases were 'a new-born with CAH' and 'an adolescent girl with gonadal dysgenesis'.

Methods

Worldwide 68 fellows and 32 experts participated. Fellows answered on-line MC and open questions related to 2 cases. Experts provided personalized feedback, using prepared response formats. Fellows received feedback from three different experts and acknowledged the replies.

Results

Fellows scored around 50% of the correct answers for MC and open questions. Personalized formative feedback to the from 2-3 experts each was highly appreciated.



Quote provided by one of the participating fellows:

"It was useful to receive varying feedback from people with different experiences. Some experts provided very detailed answers which is helpful in my approach to patients in future."

Conclusions

Global on-line learning offers opportunities to practice situations and to extent learning. Personalized feedback offers opportunities to address religious or local aspects. Fellows value personal feedback of multiple experts.

PART II: Assessment of communication

The communication to parents of new-borns with CAH and patients with Gonadal Dysgenesis showed differences in quality, completeness, correctness and empathy.

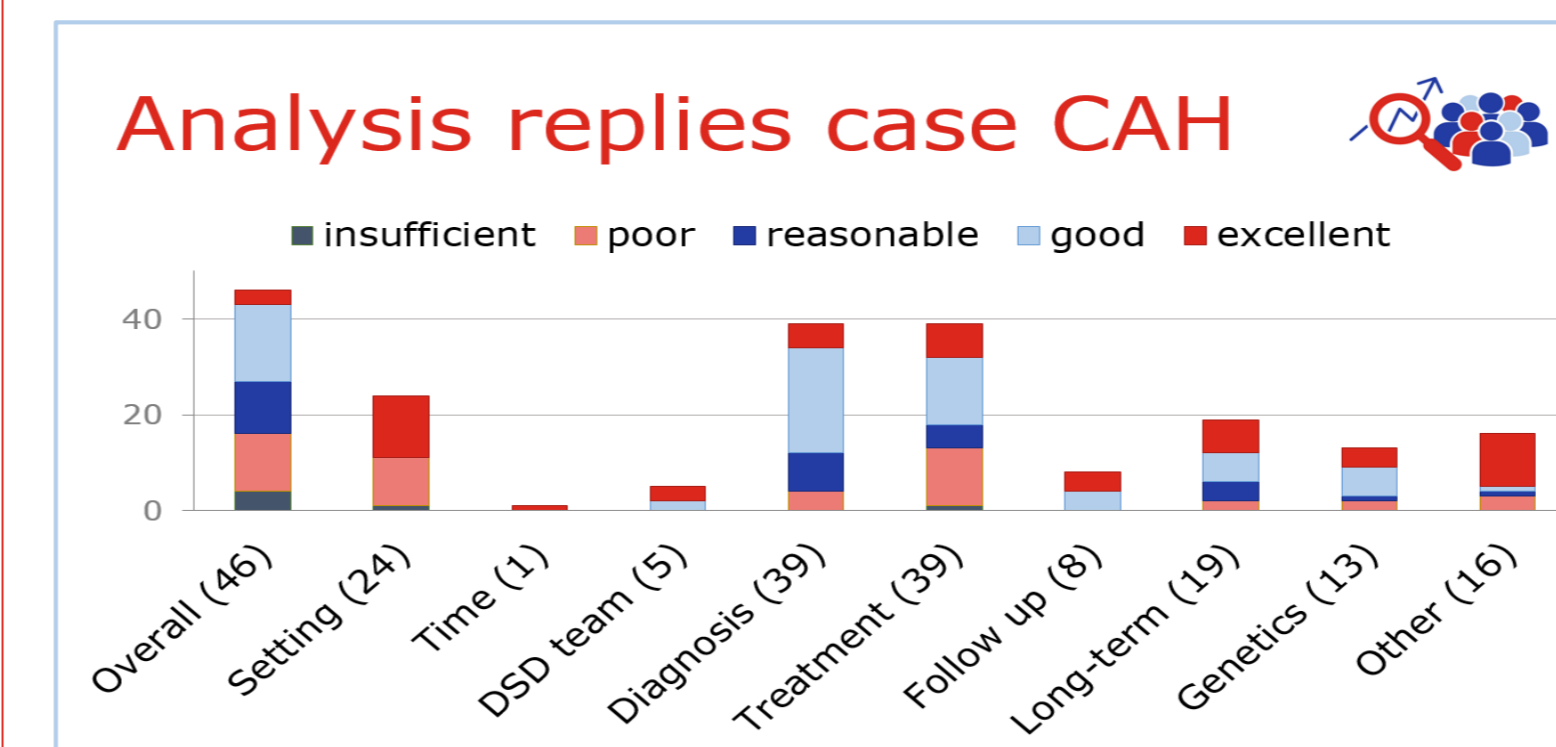
Objective to improve the skills in communication of fellows worldwide by providing guidelines for the assessment of communication.

Methods

The textual replies were cut in text passages relating to key items and rated from poor to excellent on 5 levels. Based on this analysis guidelines were constructed. Guidelines were evaluated by 17 experts by rating 20 replies and 114 text passages. Afterwards, guidelines were adjusted.

Results

Analysis showed that many important items were not mentioned in the replies. There was surprising variation in the rating of the experts with and ICC of 0.408. Finally guidelines were adjusted to three levels to be used for assessment of communication in daily practice.



Conclusions

Substantial variation in textual communication by fellows and surprising variation in assessment by experts. E-learning and personalized feedback are valuable in the training of communication skills of pediatric endocrinology fellows. Guidelines are adjusted to 3 levels and will be distributed to all participating fellows and experts.