

Gerasimidis, K., Hulst, J.M., Chourdakis, M., Huysentruyt, K., Koletzko, B. and Joosten, K.F.M. (2017) The launch of the ESPEN Special Interest Group in Paediatric Clinical Nutrition. *Clinical Nutrition ESPEN*, 19, pp. 45-48. (doi:[10.1016/j.clnesp.2017.01.012](https://doi.org/10.1016/j.clnesp.2017.01.012))

This is the author's final accepted version.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

<http://eprints.gla.ac.uk/138472/>

Deposited on: 20 March 2017

Title: The launch of the ESPEN Special Interest Group in Paediatric Clinical Nutrition

Gerasimidis K¹, Hulst JM², Chourdakis M³, Huysentruyt K⁴, Koletzko B⁵, Joosten KFM²

¹Human Nutrition, School of Medicine, College of Medicine, Veterinary and Life Sciences,
Royal Hospital for Sick Children, University of Glasgow, Glasgow, United Kingdom

²Erasmus Medical Center, Sophia Children's Hospital, Department of Pediatrics, Rotterdam,
Netherlands

³ Department of Medicine, Aristotle University of Thessaloniki, Greece

⁴Department of Pediatric Gastroenterology, Universitair Ziekenhuis Brussel, Vrije
Universiteit Brussel (VUB), Brussels, Belgium

⁵Ludwig-Maximilians-Universität Munich, Division of Metabolic and Nutritional Medicine,
Dr. von Hauner Children's Hospital, University of Munich Medical Centre, Munich,
Germany

Corresponding author

Koen FM Joosten

Erasmus MC-Sophia Children's Hospital

Department of Pediatrics

Wytemaweg 40

3015 CN Rotterdam

21 The Netherlands

22 T: +31107040704

23 E: k.joosten@erasmusmc.nl

24

25 **Keywords**

26 Paediatrics, special interest group, web-based survey, infants, children, adolescents

27

28 **Abstract**

29 **Background & Aims**

30 At the 37th annual ESPEN congress in Lisbon, a new Special Interest Group (SIG) in
31 Paediatric Clinical Nutrition was formed. As a first activity of this group, a survey was sent
32 out to all ESPEN members to collect opinions about the objectives of this SIG, explore the
33 interest of ESPEN members in pediatric related nutrition research and clinical practice and to
34 offer to the opportunity for a wider future participation.

36 **Methods**

37 A web-based questionnaire survey was distributed to all members of ESPEN via the regular
38 society's newsletter.

39 **Results**

40 In total, 123/2828 (4.3%) ESPEN members from 50 countries completed the survey. Fifty-
41 nine of the responders were working in paediatric clinical practice and/or research, 42 in
42 adult medicine, and 20 in both. Fifty-seven (51%) respondents agreed that there is inadequate
43 representation of paediatric nutrition in the current ESPEN activities and 90% of all would
44 like to see more paediatric topics at the ESPEN annual congresses. The development of
45 paediatric clinical practice guidelines should be the scope of this SIG, as indicated by 85
46 (69%) respondents. Seventy-six (69%) believed that the creation of a Paediatric Clinical
47 Nutrition SIG is likely to impact positively on the society's membership.

48 **Conclusions**

49 There is an unmet need for more paediatric related topics and representation with the
50 activities of the ESPEN group. The SIG in Paediatrics aspires to foster multicentre research,
51 development of guidelines and provide a hub for interaction and knowledge exchange.

52

Introduction

In September 2015, at the 37th ESPEN congress in Lisbon, a new ESPEN special interest group (SIG) in Paediatric Clinical Nutrition was formed and approved by the council. The interest to create a SIG focussing on paediatric issues arose out of the need for further involvement of health professionals and scientists with an interest in paediatric nutrition and better representation of paediatric nutrition within the society's broad activities. Although ESPEN has a long-standing tradition in running Paediatric LLL courses and publishing paediatric translational science in the society's primary journal, it was felt that paediatric topics in the annual ESPEN congress, research activities and participation of paediatricians and scientists with an interest in pediatrics were limited. In the period 2011 to 2016, 204 of 3,911 submitted abstracts were registered under the "paediatrics" category ($5.3 \pm 1.1\%$ per year) (Figure 1).

The objectives of the newly founded SIG in Paediatric Clinical Nutrition are multiple and related to clinical care, research, networking and educational activities. The SIG in Paediatric Clinical Nutrition Group aims to:

- Coordinate, promote, or develop research projects or programs of studies in clinical nutrition in hospitalized children
- Develop position statements, consensus papers and guidelines in pediatric clinical nutrition
- Collaborate with other ESPEN SIG groups and other paediatric societies
- Regularly report to the Society and its close stakeholders on the SIG activity, using Congresses, ESPEN journals, the website and other communication channels
- Be actively involved and participate in the development and delivery of LLL courses
- Support and advise the committees of the society or the organizational committees of congresses or meetings on any aspect related to pediatric clinical nutrition.

78 • Encourage participation of health professionals and scientists with an interest in
79 paediatric nutrition in ESPEN and its activities.

80 The first activity of the SIG was to survey ESPEN members' opinions about the purpose and
81 objectives of this SIG and to offer to them the opportunity for wider participation and
82 engagement in the group's activities.

83

Methods

A web-based questionnaire survey was distributed to all members of ESPEN using the regular newsletter of ESPEN members. As no pre-existing questionnaire was available, a questionnaire (available from authors on request) was compiled by the founding members of the SIG in Paediatric Clinical Nutrition. The questionnaire was split into four thematic domains:

1. Responder's profession, current country of employment and area of practice.
2. Membership with other paediatric professional organisations (e.g. ESPGHAN, ESPE, ESPNIC).
3. Responder's opinions on how well paediatric nutrition is represented in ESPEN activities and whether they would like to see more paediatric topics appearing in the annual ESPEN congress.
4. The value and the scope of the creation of a SIG in Paediatric Clinical Nutrition and whether its creation would increase ESPEN membership.

In total, there were 11 questions and there was the option for the responders to submit their personal email for future communication and interaction with the SIG. The questionnaire's readability and ease-to-use was additionally assessed by postgraduate nutrition students in UK. The final version was approved by the Executive Committee of ESPEN. No research ethics committee approval was deemed necessary for this members' survey but permission to carry out this was granted by the Executive Committee of ESPEN. Summary statistics are presented as counts and frequencies and differences between categorical data were explored with χ^2 test.

Results

From a total of 2,828 ESPEN members in whom the regular newsletter was sent, 859 (30%) accessed the newsletter, 149 of them (17.4%) opened the electronic link of the survey and in total 123 members from 50 different countries completed the survey. The majority of responders were medically qualified and worked in clinical paediatric medicine (Table 1). Twenty six responders reported that paediatric research was their area of their current employment. Fifty nine (49%) of the responders were occupied in paediatric research/clinical practice, 42 (35%) in adult research/clinical practice and 20 (16%) in both age groups. Half of the responders were members of ESPEN for more than 4 years and 34 (28%) were also members of other international professional paediatric association, with the most common selected being the European Society of Paediatric Gastroenterology Hepatology and Nutrition (www.espgahan.org) (Table 1). The majority of respondents (n=57, 51%) disagreed with the statement that there is adequate representation of paediatric nutrition and research in the current activities of ESPEN, with significantly a higher proportion of responders working in paediatric research/clinical practice disclosing so (Table 2).

When they were asked which they think the scope of a Paediatric Clinical Nutrition SIG should be, the most common response (n=85, 69%) was “*the development of guidelines in paediatric clinical practice across Europe*” (Figure 2).

The vast majority of responders (n=99, 90%) would be interested in seeing more paediatric topics presented in the annual ESPEN congress with a predominance of responders being occupied in paediatric research or clinical practice (Table 2). Seventy six responders (69%) think that the creation of a SIG in Paediatric Clinical Nutrition is likely to increase ESPEN membership and 83 (75%) expressed their interest to join the activities of the SIG and provided their email address for future communication (Table 2).

Discussion

Achieving optimal nutritional support is imperative as not only do children need nutrition for recovery from illness but they also need adequate energy and nutrients for growth and development. The traditional dogma, that children are ‘little adults’ and therefore assessment, diagnosis and management of paediatric patients could rely on adult research evidence and extrapolation from adult clinical practice is known to be wrong. More research and evidence is needed to guide clinical paediatric practice and set the future research agenda in the topic.

Chronically ill children with complex nutritional issues such as congenital heart disease, inflammatory bowel disease and cystic fibrosis now have better clinical outcomes and survival rates. Prevalence of malnutrition remains substantially high in paediatric inpatients and findings from association studies are consistent, proposing a clear relationship between increased nutrition risk and adverse clinical outcomes (1, 2). It is now time to test hypotheses generated from association studies within well-controlled trials and explore the effectiveness of nutritional interventions in improving patients’ clinical outcomes and disease prognosis. A prime example of the required approach to evidence based practice is a recent large RCT, the multicentre PEPaNIC trial, which may impact on the nutritional therapy of critically ill children (3). The trial reported that withholding parenteral nutrition during the first week of critical illness, as compared to starting parenteral nutrition in the first 24 hours of ICU treatment, reduced new acquired infections and accelerated recovery, with a shorter duration of mechanical ventilation and stay on the paediatric intensive care. This study opens a new area of discussions and may lead to redirections of guidelines, which will have to be discussed within the scientific community.

From a public health perspective, there is very little doubt that the quality and quantity of early nutrition is central to the origins of chronic non-communicable disease later in adulthood (4, 5) and this evidence now needs to translate to policy and interventions in

community. There is also the need for large multicentre studies and knowledge exchange between health professionals and scientists with an interest in paediatric nutrition.

The results of this member survey suggest that current representation of paediatric nutrition topics is rather limited and there is an unmet need, particularly from paediatric health professionals and scientists, for more relevant topics with the society's current activities. It is now time to translate evidence from basic science, animal experiments and clinical trials to evidence-based bedside and personalised nutritional therapy. It is also clear that the objectives if this SIG should be diverse and equally prioritise and should span from development of guidelines, knowledge exchange, better research and networking in aspects of paediatric nutrition.

The SIG in Paediatric Clinical Nutrition aspires to materialise these objectives and develop a hub for interaction and knowledge exchange. As an immediate first goal and getting the example and initiative from adult colleagues, the SIG in Paediatric Clinical Nutrition will be working in close collaboration with paediatric societies towards a position statement and practice recommendations on the definition, screening and assessment of malnutrition in paediatric patients.

Acknowledgements

We thank all the ESPEN members that participated in the web-based questionnaire survey. We thank Professor Philip Calder for providing the data on the number of submitted abstracts in the previous ESPEN meetings.

Statement of Authorship

KG analysed the data and produced the first manuscript draft with JH. All authors have made substantial contributions to the conception and design of the study, the acquisition of data, or

182 analysis and interpretation of data. All authors were involved in the final drafting of the
183 article or revising it critically for important intellectual content. All authors have approved
184 the final version.

185

186 **Conflict of Interest Statement and Funding sources**

187 No conflicts of interest pertinent to this study. No funding sources were used.

188

References

1. Chourdakis M, Hecht C, Gerasimidis K, Joosten KF, Karagiozoglou-Lampoudi T, Koetse HA, et al. Malnutrition risk in hospitalized children: use of 3 screening tools in a large European population. *Am J Clin Nutr.* 2016;103(5):1301-10.
2. Hecht C, Weber M, Grote V, Daskalou E, Dell'Era L, Flynn D, et al. Disease associated malnutrition correlates with length of hospital stay in children. *Clin Nutr.* 2015;34(1):53-9.
3. Favez T, Kerklaan D, Mesotten D, Verbruggen S, Wouters PJ, Vanhorebeek I, et al. Early versus Late Parenteral Nutrition in Critically Ill Children. *N Engl J Med.* 2016;374(12):1111-22.
4. Koletzko B, Brands B, Chourdakis M, Cramer S, Grote V, Hellmuth C, et al. The Power of Programming and the EarlyNutrition project: opportunities for health promotion by nutrition during the first thousand days of life and beyond. *Ann Nutr Metab.* 2014;64(3-4):187-96.
5. Koletzko B, Chourdakis M, Grote V, Hellmuth C, Prell C, Rzehak P, et al. Regulation of early human growth: impact on long-term health. *Ann Nutr Metab.* 2014;65(2-3):101-9.

206 **Figure and Table Legends.**

207

208 **Table 1:** Participants' characteristics (N=123)

209 **Table 2:** Participants' responses to the survey (N=123)

210 **Figure 1:** Number of total and paediatric related submitted abstracts at the annual meetings

211 of ESPEN between 2011 to 2016

212 **Figure 2:** Responses on the objectives of a Paediatric Clinical Nutrition special interest group

213

214

215 **Table 1:**

Questions	N
Profession*	
Medical doctor	62
Dietitian	40
Nutritionist	24
Nurse	5
Pharmacist	4
Other	2
Area of current research*	
Adult medicine	51
Adult research	18
Paediatric medicine	69
Paediatric research	26
Membership in other paediatric associations*	
ESPGHAN	17
ESPE	2
ESPNIC	2
Other	16

216 * more than one answer possible

217

218 **Table 2:**

Questions, N (%)	Total	Working in paediatric care	Working in adult care	Working in both adult and paediatric care	p-values
Paediatric representation is well represented in ESPEN					
Yes	20 (18)	9 (17)	8 (22)	2 (11)	0.048
No	57 (51)	33 (61)	12 (32)	11 (58)	
Do not know	34 (31)	11 (21)	17 (46)	6 (32)	
Would be interested in more paediatric topics in ESPEN annual congress					
Yes	99 (90)	52 (98)	28 (78)	18 (95)	0.005
No	11 (10)	1 (2)	8 (22)	1 (%)	
Interested in participating in the					

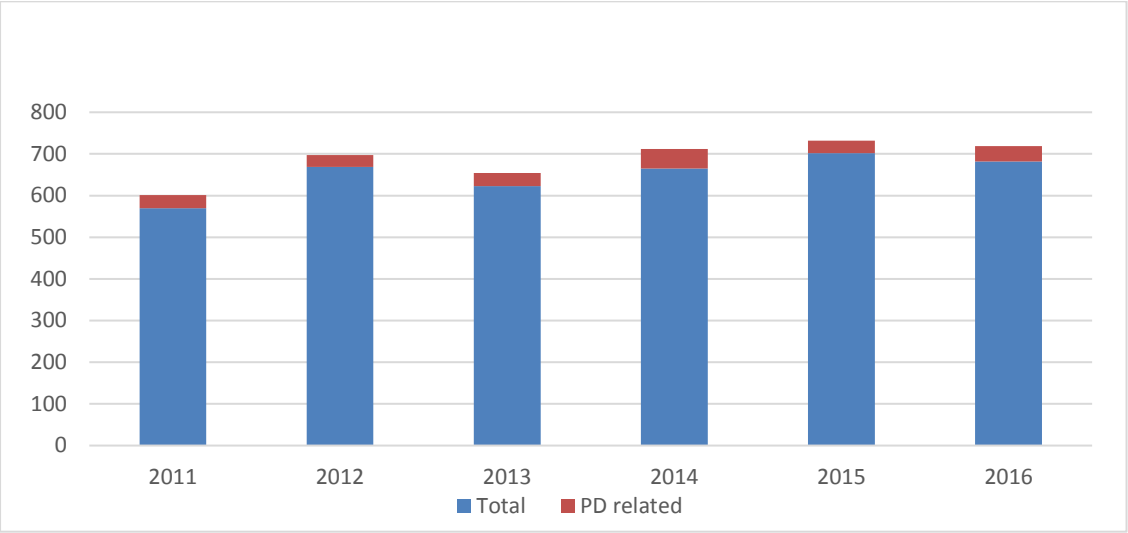
activities of the SIG					
Yes	83 (75)	51 (96)	20 (54)	11 (58)	<0.001
No	28 (25)	2 (4)	17 (46)	8 (42)	
The creation of SIG would increase					
ESPEN membership					
Yes	76 (69)	38 (72)	24 (67)	13 (68)	n/a
No	5 (5)	1 (2)	2 (5)	1 (5)	
Do not know	29 (26)	14 (26)	10 (28)	5 (26)	

219 * actual number of responses vary per question

220

221

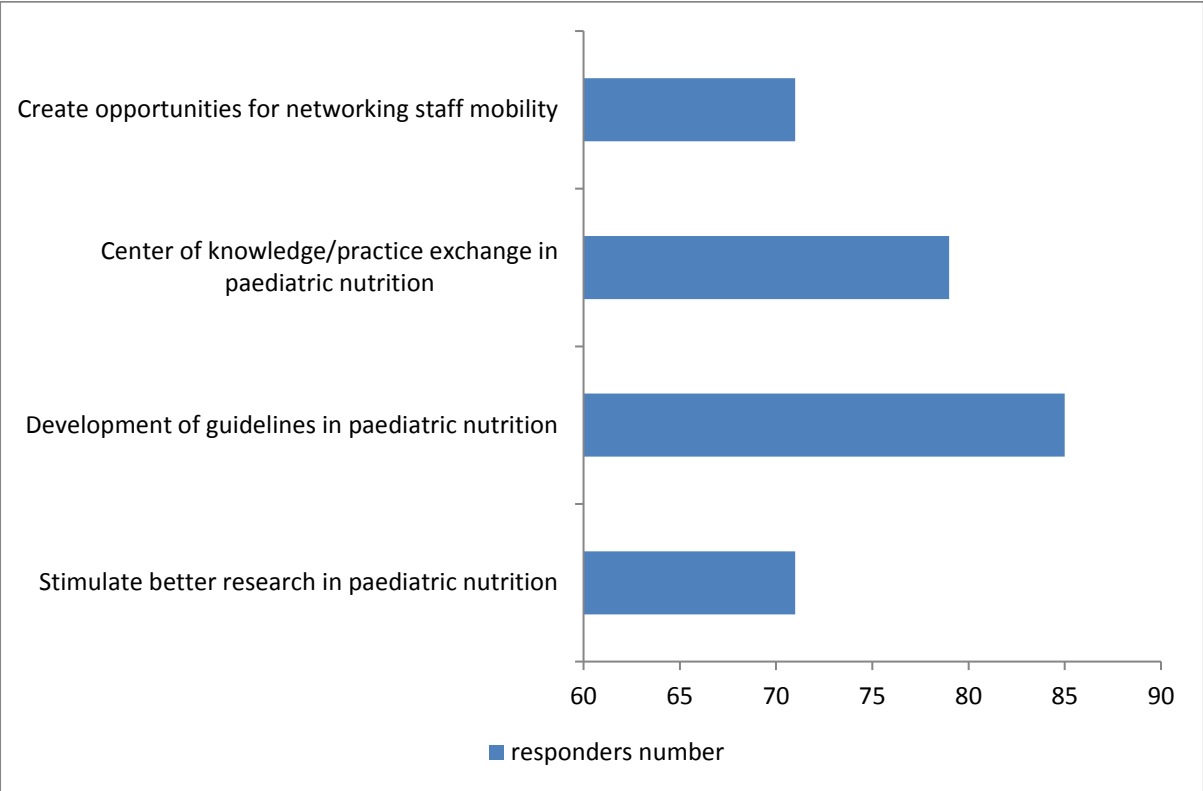
222 **Figure 1:**



223

224

225 **Figure 2:**



226

227

228

229

Figure 1:

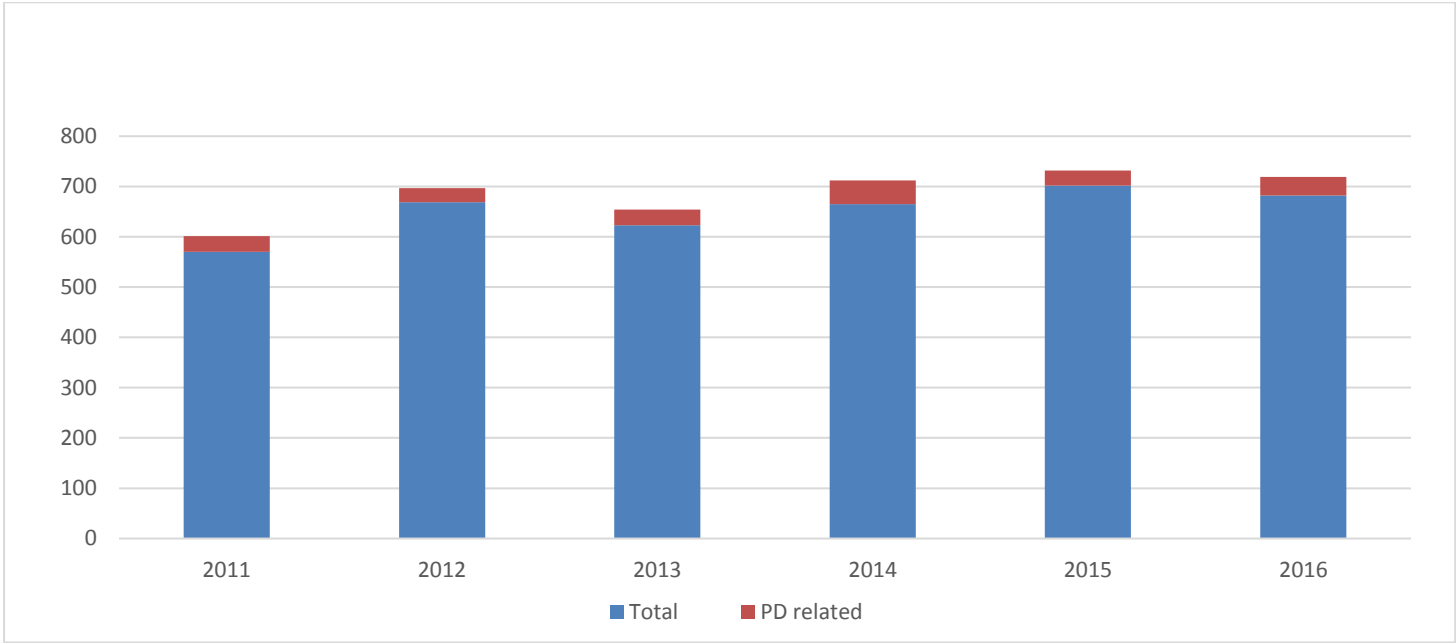


Figure 2:

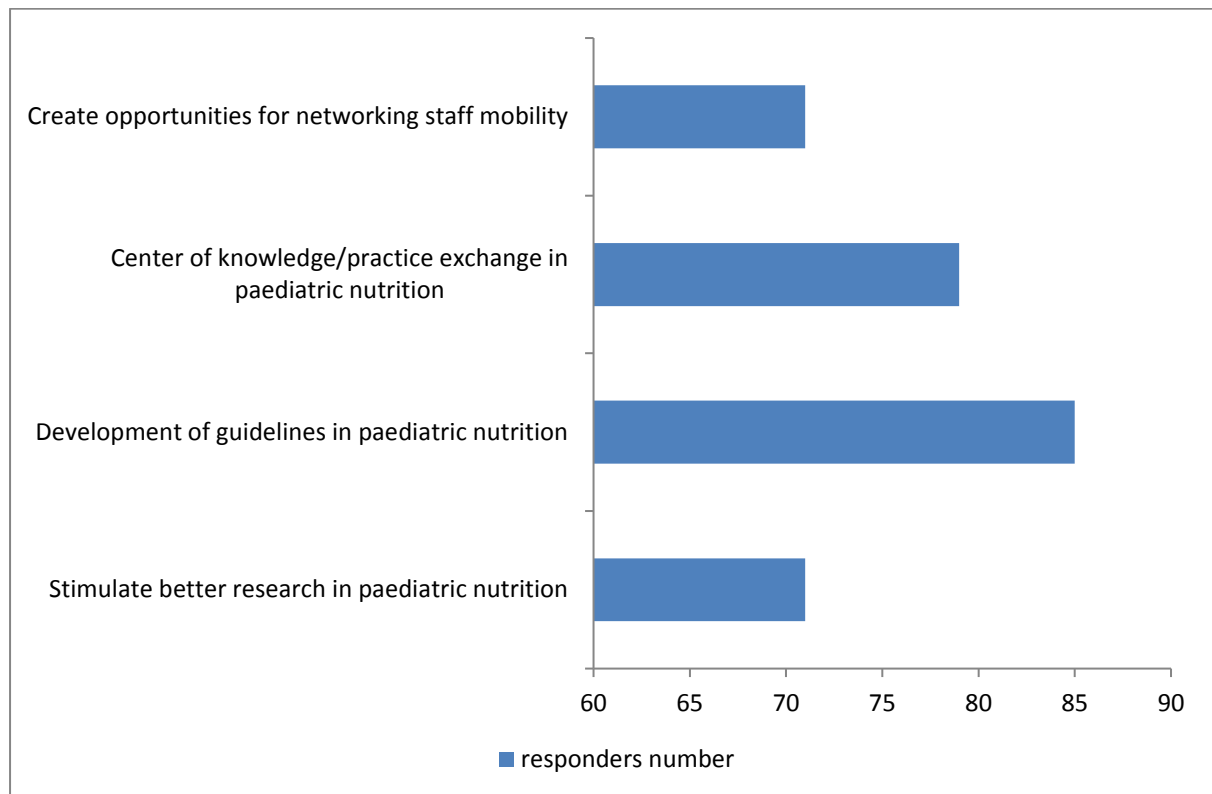


Table 1:

Questions	N
Profession*	
Medical doctor	62
Dietitian	40
Nutritionist	24
Nurse	5
Pharmacist	4
Other	2
Area of current research*	
Adult medicine	51
Adult research	18
Paediatric medicine	69
Paediatric research	26
Membership in other paediatric associations*	
ESPGHAN	17
ESPE	2
ESPNIC	2
Other	16

* more than one answer possible

Table 2:

Questions, N (%)	Total	Working in paediatric care	Working in adult care	Working in both adult and paediatric care	p-values
Paediatric representation is well represented in ESPEN					
Yes	20 (18)	9 (17)	8 (22)	2 (11)	0.048
No	57 (51)	33 (61)	12 (32)	11 (58)	
Do not know	34 (31)	11 (21)	17 (46)	6 (32)	
Would be interested in more paediatric topics in ESPEN annual congress					
Yes	99 (90)	52 (98)	28 (78)	18 (95)	0.005
No	11 (10)	1 (2)	8 (22)	1 (%)	

Interested in participating in the activities of the SIG					
Yes	83 (75)	51 (96)	20 (54)	11 (58)	<0.001
No	28 (25)	2 (4)	17 (46)	8 (42)	
 The creation of SIG would increase ESPEN membership					
Yes	76 (69)	38 (72)	24 (67)	13 (68)	n/a
No	5 (5)	1 (2)	2 (5)	1 (5)	
Do not know	29 (26)	14 (26)	10 (28)	5 (26)	

* actual number of responses vary per question