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Background: nutritional status in pediatric intensive care units (PICU)

Malnutrition prevalence rate is high (15-25%)

An optimal nutritional intake is associated by decreased morbidity and mortality

PICU teams face difficulties to reach validated specific nutrition goals

An overall nutrition strategy has a proven positive impact on outcome

Insufficient nutrition care knowledge was confirmed in various studies (both clinicians and nursing staff surveys)

As a result, PICU nutritional support needs urgent improvement



NutriSIP missions and activities

Promotion of Nutrition good practices for the critically ill child:

1. PICU nutrition teaching program implementation
2. PICU nutrition good practice dissemination
3. PICU nutrition research project elaboration

→ Since 2013, the NutriSIP has gathered PICU dieticians and clinicians from 3 French speaking countries (PICU teams from Brussels-B, Lausanne-CH, Lyon-F and Nantes-F are currently leading the NutriSIP, in close collaboration with 5 other PICUs)



Implementation

1. "NutriSIP day teaching course" first edition in october 2015 in Paris, gathering 26 PICU clinicians and dieticians.
 2. NutriReaped survey: international survey on nutrition practices among 44 French-speaking PICUs
 3. NutriReaped study: PICU admission nutritional status assessment among 40 PICUs
 4. Lectures and oral communications in various congresses and meetings (SRLF 2014, JFN 2013-14-15, ESPNIC 2014-15)
 5. Ongoing research study about feeding intolerance
 6. Gastrostomy leaflet elaboration and dissemination, improvement of oral nutrition as development care and post traumatic stress prevention strategies
- Financial support: pharmaceutical industries with interest on nutrition
- Partnership with other French-speaking and international scientific societies (GFRUP, SFNEP, ESPEN)

Results and outcomes

1. Striking positive feedback of "NutriSIP day teaching course", new sessions planned annually in collaboration with GFRUP
2. Further research projects (multicenter RCT assessing feeding tolerance, survey on early mobilisation in PICU)
3. Dissemination of good practice and elaboration of NutriSIP PICU nutrition guidelines
4. Extension of NutriSIP networking programs to welcome new members and encourage local projects and further collaboration
5. First publications (Valla FV et al, J Pediatr Gastroenterol Nutr., 2016; Lefrant J-Y et al, Ann Fr Anesth Reanim, 2014; Valla FV et al, PCCM, 2015; Valla FV et al, Anesth Réanimation, 2015; Hubert A et al, Arch Pédiatrie, 2016)
6. NutriSIP website project: connection to the teaching course, publications and guidelines



Conclusions and perspectives

- Improving PICU nutrition evidence and PICU team knowledge will lead to better nutritional practices and hopefully outcomes of critically ill children.
- NutriSIP is currently looking for fundings to support its education and research future projects (local project support, website construction, communication and meetings, RCT elaboration, etc.)

SRLF: société de réanimation en langue française; JFN: Journée francophone de nutrition; GFRUP: groupe francophone de réanimation urgence pédiatrique; SFNEP: société française de nutrition entérale et parentérale; ESPNIC: European Society of paediatric and Neonatology Intensive Care