- Cox J. Predictors of pressure ulcers in adult critical care patients. Am J Crit Care. 2011;20(5):364-75.
- Braden BJ. The Braden Scale for Predicting Pressure Sore Risk: reflections after 25 years. Adv Skin Wound Care. 2012;25(2):61.
- Lalkhen AG, McCluskey A. Clinical tests: sensitivity and specificity. Continuing Education in Anaesthesia, Critical Care & Pain. 2008;8(6):221-3.
- Park SH, Choi YK, Kang CB. Predictive validity of the Braden Scale for pressure ulcer risk in hospitalized patients. J Tissue Viability. 2015;24(3):102-13.
- Coleman S, Nelson EA, Keen J, Wilson L, McGinnis E, Dealey C, et al. Developing a pressure ulcer risk factor minimum data set and risk assessment framework. J Adv Nurs. 2014;70(10):2339-52.
- 13. Coleman S, Nixon J, Keen J, Wilson L, McGinnis E, Dealey C, et al. A new pressure ulcer conceptual framework. J Adv Nurs. 2014;70(10):2222-34.
- Coleman S, Nelson EA, Vowden P, Vowden K, Adderley U, Sunderland L, et al. Development of a generic wound care assessment minimum data set. J Tissue Viability. 2017;26(4):226-40.
- 15. NPUAP, EPUAP, PPPIA. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Perth, Australia: Cambridge Media; 2014.

Keywords

Nursing Assessment, Portugal, Pressure Ulcer, Risk Assessment, Sensitivity and Specificity.

069

Health literacy: the importance of experimental activities in the 1st cycle of basic education: report of an educational intervention on hand hygiene

Maria C Lamas^{1,2,3}, Carla Lago⁴

¹Escola Superior Saúde, Instituto Politécnico do Porto, 4200-072 Porto, Portugal; ²Centro de Investigação em Saúde e Ambiente, Instituto Politécnico do Porto, 4200-072 Porto, Portugal; ³Centro de Investigação em Tecnologias e Serviços de Saúde, 4200-450 Porto, Portugal; ⁴Escola EB1/JI Pícua, Agrupamento de Escolas de Águas Santas, 4425-143 Águas Santas, Maia, Portugal

Correspondence: Maria C Lamas (mariaceulamas@gmail.com) *BMC Health Services Research* 2018, **18(Suppl 2):**069

Background

Primary school students usually have very little previous knowledge about a number of educational issues. So, it is important to create moments where the students can tell whatever they know about a subject, in order to make an additional scientific explanation. The program of the 1st cycle of basic education aims to develop an attitude of permanent research and experimentation, and the part "The health of your body", to produce knowledge and the application of norms of body hygiene [1]. However, the contents expressed in the textbooks for these levels of education do not justify the need for children to adopt these hygiene habits, which must be acquired as early as possible, to be a systematic routine throughout life. On the other hand, it allows to eradicate some of the alternative conceptions that some 1st cycle students present on some issues [2], as the notion about the morphological view of microorganisms away from reality, idealizing them similar to animals [3,4,5]. There is evidence that children are able to learn about microorganisms at this age [3,4,5] and it is desirable that it occurs as early as possible, avoiding late conceptual changes that are difficult to reconstruct in their entirety [4]. For some authors [6,7], children should realize that the knowledge learned in the classroom can be applied in their daily lives. Objective

In this context and with the purpose of promoting scientific and critical literacy, we developed an activity about hand hygiene because handwashing should be learned and be a properly reasoned behaviour.

Methods

The activities were developed by all 26 students in the class A, 2nd grade of the School EB1/Jl Picua. The students' age ranged from 7 to 8 years, with 54% (14) boys and 46% (12) girls. It started with the question "Handwashing: Why, When, How?". According to the conceptions expressed by the students the appropriate theoretical contents

were presented in a gradual and interactive way. This was followed by the experimental procedure with permanent monitoring and support based on the succeeding steps: role-playing stages for proper handwashing; applied activity; listing expected results; observation of cultures and microscopic observation of microorganisms, recording and reflection about the results achieved.

Results

All groups showed the expected results, *i.e.*, higher microbial growth in the quadrants corresponding to unwashed hands.

Conclusions

Giving the results and the theoretical framework, the students learned proper concepts on the subject, which allowed them a better understanding of the world around them.

References

- DGE Direção Geral de Educação (2004). Organização Curricular e Programas. 1º Ciclo do Ensino Básico. Lisboa, Ministério da Educação e Ciência, 4ª edicão.
- Mafra, P., Lima, N., Carvalho, G. (2015). Microbiologia no 1º Ciclo do Ensino Básico: Uma proposta de atividade experimental sobre a higiene das mãos. Livro de atas do XI Seminário Internacional de Educação Física, Lazer e Saúde.
- Byrne J, Sharp J. Children's ideas about micro-organisms. School science review. 2006;88(322):71-79.
- Byrne J. Models of Micro-Organisms: Children's knowledge and understanding of micro-organisms from 7 to 14 years old. International Journal of Science Education. 2011;33(14):1927-1961.
- Mafra, P. (2012). Os Microrganismos no 1.º e 2.º Ciclos do Ensino Básico: Abordagem Curricular, Conceções Alternativas e Propostas de Atividades Experimentais. Tese de Doutoramento. Braga: Universidade do Minho, Portugal.
- Pro, A. (2012). Los cuidadanos necessitan connocimientos de ciências para dar respuestas a los problemas de su contexto. In Pedrinaci, E. (coord.), Caamaño, A. Cañal, P.; Pro, A. 11 ideas clave. El desarollo de la competência científica. Barcelona: Editorial Graó.
- Lupión, T. e Prieto, T. (2014). La contaminación atmosférica: un contexto para ell desarollo de competências en el aula de secundária. Enseñanza de las Ciencias, 32 (1), 1-18.

Keywords

Hygiene, Handwashing, 1st cycle, Monitored support, Microrganisms.

070

Stand by me! Assessing the risk of falls in community –dwelling older adults

Luís PT Lemos¹, João Pinheiro², Edite Teixeira-Lemos^{3,4}, Jorge Oliveira^{3,4}, Ana P Melo⁵, Anabela C Martins⁶

¹Centro Hospitalar Tondela-Viseu, 3509-504 Viseu, Portugal; ²Faculty of Medicine, University of Coimbra, 3004-504 Coimbra, Portugal; ³Escola Superior Agrária de Viseu, Polytechnic Institute of Viseu, 3500-606 Viseu, Portugal; ⁴Centre for the Study of Education, Technologies and Health, Polytechnic Institute of Viseu, 3504-510 Viseu Portugal; ⁵Laboratory Medicine Unit and Department of Quality and Risk Management, Hospital Distrital da Figueira da Foz, 3094-001 Figueira da Foz, Portugal; ⁶Physiotherapy Department, Coimbra Health School, Polytechnic Institute of Coimbra, 3046-854 Coimbra Portugal

Correspondence: Edite Teixeira-Lemos (etlemos2@gmail.com) BMC Health Services Research 2018, 18(Suppl 2):070

Background

About a third of community-dwelling adults age 65 and older fall each year. Accidental falls are a cause of fractures, traumatic brain injury, and even death. They can also lead to restrictions in participation, eventually resulting in loss of independence in normal activities of self-care. Falls in older adults are multifactorial and can be caused by medical conditions, cognitive impairment, medications, and home hazards. Therefore, a single identifiable factor may account for only a small portion of the fall risk in the community-dwelling elderly population, stressing the need for a multifactorial evaluation in this population.