

Experiences in the Promotion of Foot Health Among School Children

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Abstract

We believe that the health of the feet must continually be encouraged, for it has implemented a program of Podiatric School Health, which has continuously maintained over the last 20 years. This program has been carried out in the city of Seville, with the aim of preventing and promote child health. To achieve these goals two stages are marked. The first is to early detection of podiatric pathologies, describe the level of podiatric health, meet the most frequent alterations in the feet of schoolchildren 3-15 years and identify possible risk factors through a podiatric exploration which is done to each school. In the second stage, activities of Health Education develop. Throughout this work strategies and methods are identified, and what were some of the concepts and guidelines related to health promotion and work in the community, who have inspired us and given the scientific support. During the period 2004-2016 have been explored, in schools, a total of 4970 schoolchildren. For diagnostic confirmation and application of treatment have been treated in the Podiatric Clinical Area at the University of Seville, 766 schoolchildren. Activities of health education on foot care have attended a total of 7705 people. We believe that to meet the new and growing demands on health care by the society, they should be implemented more preventive activities and encourage adaptation to new care podiatry under Community status (Podiatry Community).

Keywords Health promotion; Prevention; Education for health; Chiroprody; Community; School

Promotion of Foot Health among School Children

Our experience in promoting podiatric health among schoolchildren started in the academic year 1996-1997 with the purpose of undertaking the practical activities of the degree of Podiatry, at the University of Seville. These activities subsequently lead to the establishment of the research lines "Program for Podiatric Healthcare at School" and "Podiatric Healthcare for All" within the research group Hermes (CTS-601). Since then, a great deal of work has been produced so far, including four thesis already submitted and three other thesis in phase of development, in addition to six MA dissertations and minor thesis.

We consider that podiatric healthcare should be permanently encouraged and protected by the Public Health interventions that society may afford in each moment, through the Health Promotion and Disease Prevention and not only with the treatment of problems. Podiatry as a scientific discipline is responsible for preserving, caring, enhance and restore the health of the feet, the community and the individual using the epidemiological method and planning to implement podiatric healthcare programs, according to the ranking of the problems detected, in order to reduce the incidences of specific podiatric diseases. Therefore, this area is intended to increase the podiatric healthcare of the population, as well as decrease the affections and deformities of the feet, through the implementation of programs for podiatric healthcare for the entire population. An important part of health programs is the prevention, which deals with the interruption of the natural evolution of any disease as early as possible. At present, there is a commitment to invest in programs of

prevention, since they can bring a double benefit in the future: the decline in diseases and economic savings [1-8].

Our activities are focused on the objective, according to the World Health Organization (WHO), which all Health Sciences must currently assume, of not only to healing illnesses, but also preventing and promoting healthcare, in order to reach the physiological limits of life that correspond to our species [9]. We are also inspired by the recommendations of the Alma Ata Conference [10] where Primary Health Care was defined as a set of guiding values for health development, a set of principles for the organization of health services and a variety of criteria to address priority health needs and the fundamental determinants of health. Thirty years after this event was held, Dr Margaret Chan, Director General of the WHO proposed the return to Alma-Ata [11]. We should take into account that Primary Health Care is the essential medical care, accessible, at a cost that the country and the community can afford, carried out with practical methods, scientifically found and socially acceptable.

We decided to deploy and maintain a Podiatric School Healthcare Program (PSHP) because most of the disorders that occur in the foot of children are susceptible of correction and the sooner the treatment is started, the easier and quicker this correction will be, because treatment is more effective when the percentage of cartilage is greater. In the preschooler, there is possibility of corrective treatment, since the percentage of cartilage is still important, therefore until the age of 6 the foot deformities maybe treated with a high probability of success. However, when puberty begins, 12 years on average, most of the short bones of the foot and tarsal bones, have nearly completed their ossification [12]. The ontogeny the contour and bone position is complete at the age of 8 years, however, the bone growth in general continues to around 21 years [5]. The podiatry health test schoolchildren to contribute to prevent and promote child health, not

only by the early detection of pathologies that may go unnoticed in the silence of their painful manifestations in childhood, but to design more specific care programs after knowing the real prevalence, difficult to detect only for children who require assistance. The podiatric health test constitutes a part of the PSHP that performed podiatric examinations to each school. Taking into account that the whole younger Spanish population is out of school; this means that the school is the ideal place for the podiatric prevention programs. The work of the podiatrist at the school should have an impact on protecting and promoting the podiatry healthcare of school children [8,12-15].

In our strategy to achieve these objectives, two stages are marked. In a first stage, we look for the early detection of foot pathologies, describe the level of podiatry healthcare, get to know the most frequent alterations in the feet of school children from 3 to 15 years, as well as identify its possible risk factors. The browsing protocol established is applied including: exploring the way with shoes and barefoot, standing exploration, study of the footprint, joint exploration and study of the footwear. In this exploration is considered a normal one foot that has a proper function during walking, no history of significant or surgery trauma, and pain or significant deformity that can carry out the activities of daily life, without causing problems or diseases to throughout life, adapting to the known principles of mechanics [3, 5,15-18]. A podiatric school with some alteration were derived to Podiatric Clinical Area (PCA), of the University of Seville, for diagnostic confirmation of the detected anomaly. Each family can request information on the outcome of the study undertaken to his son. The students who were has detected an abnormality in the feet may be treated, if they so wish, in the PCA. We should note that the most medicalized part of school healthcare programs, recognition, has an important repetition in the familiar environment of students.

In the second stage, activities are carried out for health education, whose contents are determined by the information obtained in the previous stage on the state of podiatry healthcare, the most frequent alterations and their risk factors. These activities are aimed at pupils, teachers, parents and guardians. The content of the talks on the care of the feet is divided into three sections: Information on the feet and the activities of the podiatrist, foot disease more frequent and tips on care of the feet and footwear healthy (Figure 1).

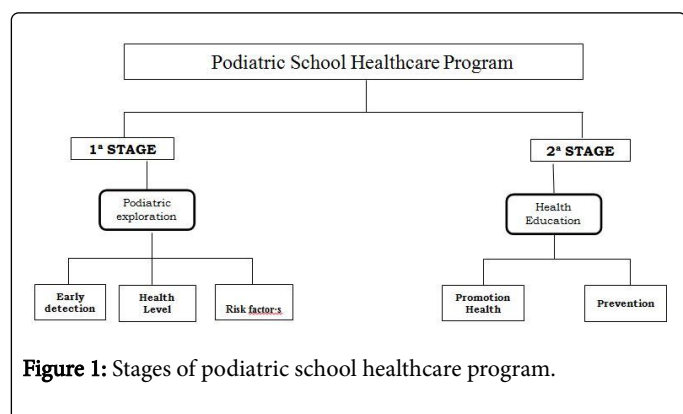


Figure 1: Stages of podiatric school healthcare program.

Among the results obtained we emphasize that, during the period 2004 to 2016, of the 4,970 studied students in the educational centers have been proposed, for diagnosis confirmation, the referral to the PCA countries of the University of Seville to 2,286 (46%), who fled 766, which represents 33.5% of the bypass proposals and 15.4 per cent of the totality of school children. We call attention to the latter because it indicates that one out of every six school children has been

diagnosed and treated of pathologies in the feet, which were not known by those affected or by relatives or guardians. The most frequent pathologies that were diagnosed and treated were: foot valgus (24.5%), gear in internal rotation (13.2%) and flat foot valgus (12.3%) (Figure 2) [5-7].

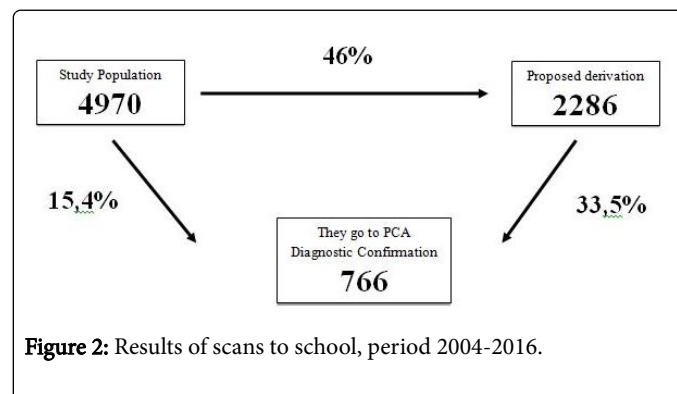


Figure 2: Results of scans to school, period 2004-2016.

The activities of EpS on foot care have come, during the period 2004-2016, a total of 7.705 people among school students, parents and teachers. To assess the effectiveness of these educational activities, a questionnaire pre-chat and other post-chat have been designed and validated. This investigation culminated in a doctoral thesis presented in April 2016 [8]. Among the results we emphasize that families are those that primarily inform the school on how to care for your feet (27.9%), followed by the podiatrist (20.9%) and the doctor (7%). As well as that the 56 per cent of school children has not gone never to a podiatrist and that, among schoolchildren in the Primary Education, one out of every three primary school students need help to care for your feet. The results obtained in the improvement in the knowledge and attitudes observed in school children justify the educational intervention.

In conclusion, we emphasize that these activities have had a great impact on the population involved, particularly among schoolchildren, but have also benefited teachers, parents and guardians. These actions are also having a significant impact among the students and teachers of the titling of Podiatry, to encourage collaboration among different sectors such as education (levels of infant, primary, secondary and higher), Health and Society. We believe that to respond to the new and growing demands of preventive activities on the part of society, the adaptation of the chiropody the new healthcare framework of Community character (Podiatry Community) should facilitate, giving a further step for the inclusion of our profession in the public sphere and becoming part of a multidisciplinary team, reorienting and expanding the current podiatry services.

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