

British Association of Dermatologists Project Grant Report 2015

“An investigation into the current knowledge of parents with children who have been diagnosed with eczema in New Zealand” – Milin Seth

I carried out my elective in New Zealand over the summer of 2015. Whilst there, I was presented with the opportunity to initiate a research project with the Hutt Hospital Paediatrics Department, supervised by Dr. Leadbitter.

Atopic eczema is a common dermatological condition, which may present at any age, but most commonly presents during childhood^[1]. It occurs as a result of a hypersensitive inflammatory response, and may also be associated with allergic rhinitis and asthma. Atopy refers to the three conditions: allergic rhinitis, asthma and eczema.

The aim of this project was to investigate the current level of eczema knowledge amongst parents and carers of children with eczema. An additional aim was to evaluate the effectiveness of nurse-led eczema clinics, with a view to improve the provision of knowledge to parents and carers so that they may better manage their child's condition at home.

The project used a questionnaire designed by Milin Seth prior to departing from the UK and arriving into Lower Hutt, New Zealand. The questionnaires were provided to the paediatrics department at Hutt Hospital, where the eczema clinics were held. The target participants were parents and carers who attended clinics with children that had existing diagnoses of eczema. The children were identified using clinic information provided by the clinic administrative staff. Questionnaires were then set aside to give to targeted parents and carers of these children. The questionnaires consisted of four parts. The first part of the questionnaire established the demographics of the participants providing the data. The second part determined current clinical knowledge of eczema with regards to triggers, treatment, age of onset. The third part targeted the children's current eczema treatment and quality of life (using a questionnaire from the University of Nottingham). A final part of the questionnaire was to be completed once parents and carers had attended their eczema clinic, in-order to evaluate the usefulness of eczema clinics objectively (by testing post-clinic knowledge), as well as to evaluate the usefulness of the clinics subjectively.

Ethical approval was granted by a local Ethics Committee only a week prior to returning to the UK, giving an extremely short time span to kick-start the project and establish potential participants for the questionnaires.

The data was collected during and post-New Zealand. The questionnaires were scanned across from the paediatric department in Hutt Hospital to the UK, none of which contained any confidential patient information. The questionnaires were then analysed using Microsoft Excel in order to determine any trends in the data. From these data, appropriate charts and graphs were drawn. No statistical analysis was required as the project aimed to explore current eczema knowledge and treatment and was not investigating the effectiveness of any interventions or comparing variables.

Participants consisted of 17 parents aged between 25 - 54 years old, 13 of which were married or in a partnership and therefore not the sole carers for their children. The age range of children varied from the ages of 0 - 14 years of age. 65% of parents were European and 11 parents had achieved a college degree or higher during their education.

In terms of parental knowledge before eczema clinic, results revealed that 59% of parents did not know the definition of eczema, 82% were not aware of serum immunoglobulin IgE, and 94% did not know what the term atopy meant. Although the majority of parents were aware of many signs and symptoms of eczema as well as the interventions for treatment of eczema, there was a lack of knowledge with regards to potential triggers of eczema and beneficial interventions for the prevention of eczema. For example, 59% of parents were aware that changes in temperature and stress were potential triggers for eczema.

Parents were asked to complete a quality of life questionnaire on behalf of their children, to determine the effectiveness of their child's current treatment. Results showed that the majority of children experienced itchy, dry and cracked skin. There were no children who did not experience any signs or symptoms of eczema, reflecting potentially un-optimised management (either by parents or healthcare staff).

It was interesting to see that in 100% of those who changed their diet (9 out of 17 children), a change of diet appeared to benefit the child's eczema condition. All children had been prescribed corticosteroids and an emollient/moisturiser at some point in the management of their eczema. Two parents rated the severity of their child's eczema as severe, however; post-eczema clinic, no parents rated the severity of their child's eczema as severe.

In terms of evaluation of eczema clinics attended, responses were positive (on average 77%), however, there could be an improvement in the confidence of parents for managing their child's eczema with the information they have been given.

This research project demonstrates that there is room for improvement with regards to the information parents with eczema are provided with in order to help them manage their child's eczema at home and prevent potential triggers from affecting their eczema, as well as improvement in parents knowledge and use of interventions to optimise the management of child's health condition.

References:

[1] BRITISH ASSOCIATION OF DERMATOLOGISTS. Atopic Eczema: Patient Information Leaflet [Online]. April 2013.

Available: <http://www.bad.org.uk/shared/get-file.ashx?id=69&itemtype=document> [Accessed December 2015]