



ISAAC

INTERNATIONAL

STUDY OF

ASTHMA AND

ALLERGIES IN

CHILDHOOD

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Warm greetings to all of you,

The tragic events of September 11th 2001 and the subsequent war in Afghanistan have affected us all deeply. At this time it is humbling to be part of a worldwide collaborative network working in a peaceful and constructive way, across boundaries of language, culture, religion and geography.

We have been told by our Regional Coordinators that ISAAC has made a significant contribution to collaborative work within and between countries. This has been achieved through communications about ISAAC at meetings held locally, nationally and at regional levels. In many places ISAAC is the first epidemiological study of asthma and allergies ever undertaken. In many cases ISAAC Phase One results and conclusions have been passed on to government.

I would like to pay tribute to our retiring Steering Committee member Dr Michael Burr (see page 2 & 3). Michael led one of the first worldwide comparisons of asthma in 1989. He has contributed his expertise and wisdom to ISAAC since its inception. We are glad he will continue to do collaborative work with ISAAC.

ISAAC Phase Two is been completed in 32 centres in 20 countries coordinated by Prof Stephan Weiland who is moving to the University of Ulm at the end of the year. The ISAAC Phase Two data centre will also move to Ulm, including the Phase Two data manager Dr Peter Rzehak. We are delighted that Prof William Cookson, University of Oxford has joined the Steering Committee with his special expertise in genetics.

ISAAC Phase Three has stunned us with registrations. We got the 157th centre registered today - one more than the total from Phase One! We will be very busy in the ISAAC International Data Centre. We are very keen for collaborating centres to adhere to ISAAC protocols and methodology, to keep the quality of studies high and enable inclusion in the Phase Three worldwide analyses.

At the Malta Steering Committee meeting held in September, we were pleased to decide to welcome Dr Sunia Foliaki to join as the Regional Coordinator for Oceania (see previous newsletter for information on his region).

The ISAAC Steering Committee would like to express admiration for the efforts of the ISAAC collaborators in contributing in such an excellent way to this very important programme. Thank you all.

On behalf of the ISAAC Steering Committee and the ISAAC International Data Centre, I wish you, and your families, and colleagues the very best for the festive season and New Year.



Best wishes

Innes Asher

On behalf of the ISAAC International Data Centre and Steering Committee
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A TRIBUTE TO DR MICHAEL BURR by Professor David Strachan

I first met Michael in 1986, when I visited the Medical Research Council Epidemiology Unit in South Wales, as part of my masters course in epidemiology. From the literature published at that time, it was clear that Michael was one of the pioneers of asthma epidemiology and I took this opportunity to ask him a question, which has plagued our speciality for many years. I asked, "How do you measure asthma?" He replied, "That's a very good question!" If you think you have a better answer than that, then please let me know!

Michael is, of course, much more than simply an asthma epidemiologist. He has a prestigious record of publications in cardiovascular, dietary and environmental epidemiology. But it was his early work using free-running exercise tests as an objective marker of asthma in population surveys that laid the groundwork for the first standardised assessment of time trends in asthma prevalence (between 1973 and 1988 among 12-year-old children in South Wales¹). It also led to the first international comparison, which included an objective marker of asthma prevalence (involving four centres: South Wales, Sweden, New Zealand and South Africa²). This was in many ways a precursor for ISAAC, and therefore it was most welcome when Michael attended the ISAAC meeting in London in 1992 and subsequently joined the Steering Committee.

In addition to his valued contributions as a committee member, Michael has been an active participant in ISAAC both locally and internationally. He co-ordinated the Welsh sector of ISAAC UK during phase 1 and will do so again during phase 3 next year. He has also been the key link with Alfred Priftanji and colleagues in Tirana, Albania, who with Michael's encouragement have completed Phases One, Two and Three of ISAAC in the most difficult of circumstances. A recent research letter in the *Lancet*³ was based on this international co-operation between countries at the extremes of the worldwide distribution of asthma prevalence. Appropriately, that short report includes a comparison based on the free running exercise test which Michael pioneered for population surveys almost 30 years ago: a fitting tribute to a truly exceptional career in asthma epidemiology.

1. Burr ML, Butland BK, King S, Vaughan-Williams E. Changes in asthma prevalence: two surveys 15 years apart. *Arch Dis Child* 1989; **64**:1118-1125.
2. Burr ML, Limb ES, Andrae S, Barry DMJ, Nagel F. Childhood asthma in four countries: a comparative survey. *Int J Epidemiol* 1994; **23**:341-347.
3. Priftanji A, Strachan D, Burr M, *et al.* Asthma and allergy in Albania and the UK. *Lancet* 2001; **358**:1426-1427.



ISAAC PROFILE

ISAAC profile: Dr Michael Burr, ISAAC Phase Three Principal Investigator



Although originally a Londoner, Mike Burr has lived for over 30 years in Cardiff, South Wales, UK. He attended East Barnet Grammar School, and qualified in medicine at University College Hospital, London.

After working in general practice and public health, he joined the MRC Epidemiology Unit (South Wales) in 1970, under the directorship of Professor Archie Cochrane (whose name is commemorated by the Cochrane Collaboration of Systematic Reviews). Here he undertook a number of epidemiological surveys, mostly in relation to respiratory disease (particularly asthma) and nutrition in the elderly. He also conducted randomized controlled trials on various topics, including mite eradication in the homes of mite-sensitive asthmatics. Another area of interest has been the effect of diet on risk of coronary heart disease: he conducted various studies of dietary interventions, including a controlled trial among 2000 post-infarct men that showed a

29% reduction in 2-year mortality attributable to a modest intake of oily fish. Since then, his wife has ensured that he eats oily fish regularly.

He is now Reader in the Department of Epidemiology, Statistics and Public Health in the University of Wales College of Medicine, with a heavy teaching commitment, and is Honorary Consultant in Public Health to Bro Taf Health Authority. He has acquired the postgraduate degrees of MD and DSc (Med) from the University of London. He is currently involved in a study of asthma in relation to housing; other projects include cohort studies of asthma and controlled trials of dietary interventions.

He attended the 1990 meeting in Bochum that led to the setting up of ISAAC, and was a member of the Steering Committee until this year. He is Principal Investigator for ISAAC in Wales, and is about to conduct Phase Three there.

Outside of work, Mike leads a busy family life with his wife Sheila, four married daughters, and 11 grandchildren. His other interests and activities include reading (particularly biography, history, and theology), lay preaching, and walking.

Dr Michael Burr

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ISAAC PROFILE

ISAAC profile: Mr Tadd Clayton, ISAAC Data Manager



While I have lived in Auckland, New Zealand's largest city, for most of my life, I was born in the city of Lower Hutt in 1965. Lower Hutt is located near the southern tip of the North Island of New Zealand and is adjacent to Wellington, New Zealand's capital. While I was still young my family moved north to live, initially in a small rural town called Wellsford, and then to Auckland. Auckland occupies a large area (comparable to London, England I believe) but only has a population of 1 to 1.5 million people (depending on how you define Auckland).

My tertiary education was at the University of Auckland where I studied Geography and Environmental Science, completing a BSc in 1988 and an MSc 1991. For my Masters thesis I studied environmental degradation caused by use of walking tracks in Tongariro National Park. Tongariro National Park is New Zealand's oldest national park and is located in the central part of the North Island. I have also recently completed a Diploma in Public Health at the University of Auckland, which provided a valuable insight into a range of public health topics such as aspects of environmental health, health information and health policy.

In between study and my current position at the ISAAC International Data centre I have worked at quite a range of jobs. These have included work as a car valet, a brief stint as a farmhand on a dairy farm and work as a house painter. I also worked for a year for an organisation called Island Care, on a research project examining sources of the marine debris (litter) which washes up on the shores of the islands near Auckland city. The research project involved designing, building and installing wire mesh traps which were placed over several stormwater outfalls to collect litter washed into the stormwater system. We were able to show that the

majority of the marine debris is likely to originate from Auckland stormwater discharges rather than from other sources such as littering by recreational boat users or losses of equipment from commercial fishing boats.

In 1993 I applied for the new position of Data Manager for the ISAAC study at the Department of Paediatrics in the University of Auckland School of Medicine. I was happy to be appointed and have since carried out data management tasks for Phase One in Auckland and New Zealand, and for the worldwide Phase One ISAAC study. All Phase One data has come across my desk (and through my computer) and I am now starting to receive Phase Three data. Among the tasks I completed for Phase One was preparation of the tables, plots and world maps illustrating the worldwide data for the major papers presenting the data. I have also been responsible for development and maintenance of the ISAAC web site (<http://isaac.auckland.ac.nz>). Working for ISAAC has allowed me to develop a broad range of skills in data management and acquire experience of use of many software packages and programming languages.

A bonus of being data manager for ISAAC is that I have been asked to make several trips to Europe to attend meetings and the European Respiratory Society Annual Congress. New Zealand is a long way from just about anywhere else in the world and while New Zealanders are great travellers, travel from New Zealand is usually very expensive. I'm very grateful that by taking holidays adjacent to the ISAAC trips, I was able to visit such interesting places as London, Paris, Nice, Florence, Rome, Barcelona, Ireland, Sweden, Berlin and Prague.

My interests include classic cars, reading science fiction and fantasy and computers. As a New Zealander I'm proud that a New Zealand director, Peter Jackson, has been responsible for creating a major adaptation of JRR Tolkien's wonderful story of the Lord of the Rings. New Zealand offers so many varied landscapes that it was a natural choice for filming of this epic story. My interest in classic cars stems from my father's long experience as a classic car dealer. My interest in computers and web site development has allowed me to help my father develop a web site for his business.

Since February of 2001 I have been happily married to Miriam. We had known each other for nearly six years prior to our marriage and felt the time was right to make a formal commitment to each other. We have built a house together and are looking forward to many happy years to come.

Tadd Clayton
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ISAAC PHASE THREE REGISTRATION

The following guidelines have been written to assist collaborators.

Prospective ISAAC Phase Three centres should in the first instance contact the appropriate Regional Coordinator. The Regional Coordinators will notify the ISAAC International Data Centre (IIDC) and/or Richard Beasley, Phase Three Coordinator, of centres to be included in ISAAC Phase Three. The IIDC cannot accept Expressions of Interest or Registration Documents from centres without prior approval from the Regional Coordinator.

The name of the Principal Investigator, centre name and contact details should be supplied to the IIDC at this stage. The IIDC will establish communication with the centre and send the appropriate documentation for the study. All Registration Documents should come to the IIDC from the Regional Coordinator. Where a centre independently sends a Registration Document to the IIDC, the Regional Coordinator will be contacted for advice.

This process must be followed for all Phase Three centres, whether they are repeating Phase One centres (3A) or new Phase Three centres (3B). Phase One centres are not automatically included in Phase Three. The centre must be approved by the Regional Coordinator prior to accepting them as a Phase Three centre. When a centre has registered, a Centre Report for each age group will be posted or emailed for completion. This can be returned with the data when it is ready to send to the IIDC.

If the IIDC receives data from a centre that is not registered, the IIDC will contact the Regional Coordinator for approval prior to accepting the data. When the IIDC receives the data, notification is given to the centre (with a copy to the Regional Coordinator) that it has been received and is in process. The checking process is then undertaken with the centre involved.

The data checking process is not complete until the centre report has also been checked and verified. When the Centre Report is complete, a final copy is returned to the centre for checking and to keep for their records.

ISAAC PHASE THREE FIELDWORK

It has been suggested that taking some photographs during fieldwork may provide a useful pictorial account of some of the experiences encountered. We encourage Principal Investigators to obtain permission from the school principal prior to taking photographs and to obtain any other approvals required. An archive of photographs could be kept at the IIDC for collation at a later date if centres wish this.

ISAAC PHASE THREE REGISTERED CENTRES

As of 14th November 2001, the IIDC has received 157 centre Registrations (from 60 countries) for ISAAC Phase Three. Centre Reports have been processed and either mailed or emailed to the Principal Investigators. I would like to thank all the collaborators for responding to me so quickly when I have an enquiry. This makes the processes work much more smoothly and efficiently. A very happy Christmas and best wishes for 2002 to you all.

Kind regards



Philippa Ellwood
ISAAC Research Manager

PHASE THREE DATA DEADLINE

Submission Date: No later than 30 November 2002
Recipient Centre: ISAAC International Data Centre (IIDC)

Registered centres that wish to be included in ISAAC Phase Three worldwide publications must provide a complete data set and Centre Report to the IIDC by **30 November 2002**. The data and the Centre Report will then undergo a checking process by the IIDC in conjunction with each centre. A satisfactory data set is one which is prepared according to the Coding and Data Transfer Section of the Phase Three Manual and which has completed the data checking process above.

Reference: ISAAC Phase Three Manual; Page 24

ISAAC PHASE THREE REGIONAL COORDINATORS

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FRANCOPHONE AFRICA REPORT

Regional Coordinator: Professor Nadia Aït-Khaled

The following 11 African French-speaking countries will participate in the ISAAC Phase Three: Algeria; Cameroon; Côte d'Ivoire; Congo; Democratic Republic of Congo; Guinea; Mali; Morocco (3 centres), Senegal; Togo; Tunisia (2 centres) and one Africa arabic-speaking country (Soudan).



A regional meeting of all the researchers was held in Paris in November 2001 (photograph of participants above). Translations in French of the ISAAC manual and of the environmental questionnaire were given to all the participants and the methodology of the study discussed. The meeting was very useful for all participants.

It was reported that one centre in Morocco, one in Tunisia, and Mali centres have already completed the ISAAC Phase Three study. The others will conduct the study in 2002.

This meeting was in part, funded by the Professor Bousquet (chair of the Allergy Rhinitis Initiative). As the level of rhinitis was very high in the ISAAC Phase One study, we proposed to the centres, which had not yet begun the study, to add four questions, after the core questionnaire (these questions are on rhinitis).

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PHASE THREE REGIONAL COORDINATION FOR OCEANIA: REPORT FOR 2001 STEERING COMMITTEE MEETING

In Phase One Oceania consisted of Australia (4 centres) and New Zealand (6 centres only). Most of these centres will continue on to carry out Phase Three, as well. There was little difference in Phase One between the 10 Australasian centres, and their prevalence was similar to that in other English-speaking countries.

AUSTRALASIA

The New Zealand and Australian Centres are well organised and will have no problems in conducting Phase Three. At this stage, three of the four Australian centres and 5 of the six New Zealand centres will be repeating the survey. Wellington has already started, and Bay of Plenty, Nelson, and Christchurch will be starting soon. Auckland has received ethical approval and has begun contacting the schools. The Auckland study will run from October 2001 to August 2002. The printing of the questionnaires have been completed and distributed to the participating centres.

THE PACIFIC

We are therefore focussing on the rest of Oceania for Phase Three, with the aim of recruiting as many new centres as possible throughout the Pacific. Although Neil Pearce was appointed as the Regional Coordinator for the region, Dr Sunia Foliaki (Tonga) is conducting this work. Sunia has now been granted a Wellcome Trust Fellowship and will be based with Neil in Wellington for the next two years. He has therefore now officially replaced Neil as Regional Coordinator for Oceania and joined the ISAAC Steering Committee (this was confirmed at the recent Steering Committee meeting in Malta).

We held an initial meeting in Fiji in April 2001, and the various Pacific centres are now getting started. Tonga is expected to start data collection in October/November 2001. Fiji will commence in November/December 2001. Samoa and the Cook Island will probably commence data collection either late this year or early in 2002. We are also currently waiting to hear the outcome of Sunia's application to the Wellcome Trust which will enable him to take leave from the Ministry of Health (Tonga) and have the time and the funds to visit the other Pacific countries specifically for ISAAC purposes. A site visit to assist with the first study will facilitate other studies in other centres within the same Pacific countries.

Thus, at this stage we have six Pacific countries that are definitely going to take part in Phase Three (New Caledonia, French Polynesia, Tonga, Samoa, Fiji, Cook Islands) and a number of other countries who are likely to participate (including the Solomon Islands, Vanuatu, Guam, Yap, Palau, and other countries from Micronesia). Eventually we should have 10-12 new countries. This is a fascinating part of the world with rapid economic and social change (i.e. westernisation) and large-scale immigration to countries (particularly New Zealand) that are already taking part in ISAAC and can provide comparative data for Pacific people. We are already working on plans to not only do Phase Three in the Pacific but to also produce publications comparing the findings in the Pacific with those in Pacific people in New Zealand, as well as with those in Maori (New Zealand) and Aborigines and Torres Strait Islanders (Australia).

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ANALYSIS OF ISAAC PHASE THREE STUDY SURVEY DATA FROM ONE CENTRE

Contributed by: Alistair Stewart

To perform analyses at the Centre level requires certain information to be known. With this information it is reasonably straightforward to do the necessary analyses.

- ◆ Know how the sampling frame (the population from which the sample was taken) was defined
- ◆ Know the total number in the population (this is not the number in the sample). This is the total number of children that could have been in the study if every child had been selected.
- ◆ Know the school from which each child interviewed was recruited.

The two main analyses at this level are:

- ◆ Estimation of prevalence
- ◆ Association between prevalence and environmental questions

Below is a discussion on the estimation of prevalence while the assessment of the association will be discussed in a subsequent newsletter.

Estimation of Prevalence

Prevalence:

This is the proportion of children responding "YES" to the question of interest. This is calculated by dividing the number of children who answered "YES" by the total number of children in your sample. (We have made a decision in ISAAC that children who do not answer or who give 'any other response' are part of the denominator - equivalent to them having answered "NO".)

95% Confidence Interval about the Prevalence:

The prevalence as estimated above is a simple proportion and if simple random sampling (SRS) was used to get the information then the variance and hence the 95% confidence interval (95%CI) is easily calculated.

Prevalence is $p = x / n$ where x is the number responding "YES" and n is the total number of children interviewed.

The variance of p is $V_{\text{srs}} = p*(1-p) / n$ and the 95%CI is $(p - 1.96*\text{sqrt}(V_{\text{srs}}), p + 1.96*\text{sqrt}(V_{\text{srs}}))$ where $\text{sqrt}(V_{\text{srs}})$ means the square root of V_{srs} .

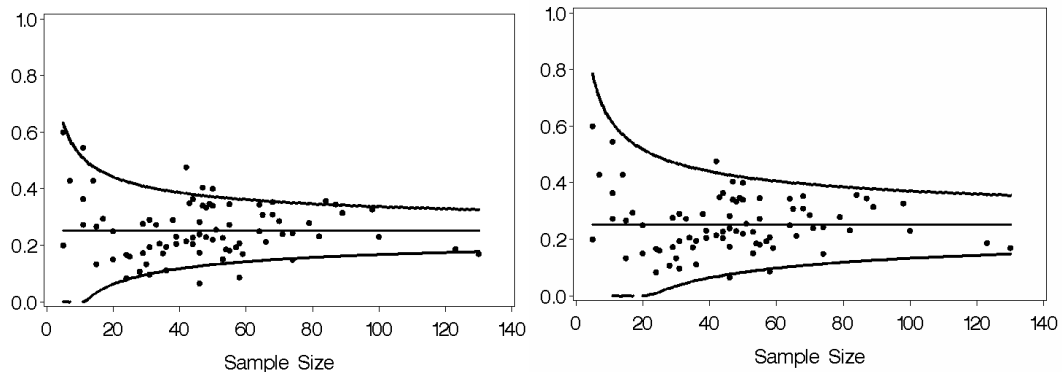
However if cluster sampling was used then this must be accounted for in the calculation of the CI. (NOTE: This form of sampling does not bias the estimate of the prevalence though provided it was done correctly.) A method for calculating the variance when cluster sampling

has been used is given by Rao and Scott as $V_c = \frac{m}{m-1} \frac{\sum_{j=1}^m (x_j - n_j \hat{p})^2}{n^2}$ where m is the number of clusters, n is the number in the j^{th} cluster and x_j is the number with a positive response in the j^{th} cluster. The n is the sum of the n_j , x is the sum of x_j , and $\hat{p} = x/n$. Hence the 95%CI is $(p - 1.96*\text{sqrt}(V_c), p + 1.96*\text{sqrt}(V_c))$.

ANALYSIS OF ISAAC PHASE THREE STUDY SURVEY DATA FROM ONE CENTRE CONTINUED

Design effect (DEFF) is a concept related to these variances. It is a figure showing how much the variance from the cluster sampling differs from that of simple random sampling. DEFF is measured as V_c / V_{srs} . Another conceptual way of thinking of the effect of cluster sampling is all the children within a cluster do not contribute a 'full child' to the count of children in the study because, within their cluster, they have some similarity to the other children within that cluster. We therefore have an effective sample size as well as the observed sample size and the effective sample size is the observed sample size divided by the DEFF. This means, for example, if the DEFF is 2 that the cluster sampling of 100 children is the equivalent of simple random sampling of 50 children.

The effect of cluster sampling and the use of the adjustment can be seen in the figures below. The figure on the left shows the proportion of children responding "YES" to a question in each of 83 schools (shown as the 83 dots) and the curved lines show the 95% confidence limits on the assumption of simple random sampling. However, the sampling used schools as the primary sampling units and then all eligible children were interviewed. This cluster sampling needs to be accounted for in the calculation of the variance and the second figure shows the 95% confidence limits when accounting for this sampling scheme. It can be seen that the limits move out a bit. In this example the DEFF was nearly 2.



The method referred to above comes from the paper by Rao JNK and Scott AJ, which is in *Biometrics* 1992; Vol 48 pages 577 to 585.

Alistair Stewart

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THE NHS HEALTH TECHNOLOGY ASSESSMENT SYSTEMATIC REVIEW OF TREATMENTS FOR ATOPIC ECZEMA

Contributed by: Professor Hywel Williams, ISAAC Steering Committee

Hello ISAAC friends. I know that most of you are interested in epidemiology, but I guess that many of you are practising clinicians who come into contact with children who have atopic eczema. Have you ever wondered if anybody out there has systematically reviewed the evidence base for what we do? Then look no further, for this is exactly what we did over the last two years. The main purpose of our review was to identify gaps for future research, but some of the findings may be useful to inform current practice as well. The review was commissioned by the NHS R&D Health Technology Assessment Board and can be viewed in its entirety free of charge at the following link: <http://www.ncchta.org/>. Look under publications then pharmaceuticals and use the “find in page” command on your toolbar to look for the word “eczema”. Let me tell you a bit more about it:

Why did we do it?

- ◆ Atopic eczema is important because it now affects around 15% of UK schoolchildren.
- ◆ It can cause misery for both child and family due to the constant itching, sleep disturbance, and the social stigma associated with a visible skin disease.

The **purpose** of the review was twofold:

- ◆ To produce a “map” of all randomised controlled trials (RCTs) for atopic eczema in order to identify what has been done and what needs to be done in terms of research
- ◆ To try and summarise the available RCT evidence using quantitative and qualitative methods in order to guide clinical practice

How was it done?

- ◆ Complex searches of MEDLINE, EMBASE, the Cochrane Controlled Clinical Trials Register and the Cochrane Skin Group’s specialised register of trials to identify all possible RCTs of atopic eczema.

- ◆ We hand searched atopic dermatitis conference proceedings, and wrote to 29 pharmaceutical companies and 38 leading atopic eczema researchers from over the world in order to identify any unpublished or ongoing studies.
- ◆ Only studies where a physician diagnosed atopic eczema were included. Two people extracted the data. Trial quality included an assessment of randomisation (generation and allocation concealment), blinding and intention-to-treat analysis.

So what did it show?

- ◆ After scanning 3,800 abstracts a total of 1,165 possible RCTs were retrieved in hard copy form.
- ◆ Most of these 1165 reports had to be discarded due to lack of appropriate data or because people with atopic eczema had been mixed in with people with other inflammatory dermatoses in the analyses.
- ◆ The final 272 RCTs of atopic eczema covered at least 47 different interventions, which could be broadly categorised into ten groups.

This is my own selection of the **8 most important findings**:

- 3.1** The **quality** of trial reporting was generally **poor**, regardless of who sponsored it.
- 3.2** There was **reasonable RCT evidence to support** the use of oral cyclosporin, topical corticosteroids, psychological approaches and ultraviolet light therapy.
- 3.3** There was simply **not enough high-quality RCT** evidence to come down either way on maternal allergen avoidance for preventing disease, oral antihistamines, Chinese herbs, dietary manipulation for established eczema, homeopathy, house dust mite reduction, massage therapy, hypnotherapy, evening primrose oil, emollients, topical coal tar and topical doxepin.

3.4 The following categories had been subject to RCTs, **but their results did not suggest any clear clinical benefit:** avoidance of enzyme-containing washing powders, cotton clothing as opposed to soft-weave synthetics, biofeedback, twice-daily as opposed to once-daily topical steroids, topical antibiotic/steroid combinations versus steroid alone and antiseptic bath additives.

3.5 There was a **complete absence of RCT** evidence for wet-wrap bandages, water softeners, salt baths, impregnated bandages, allergy testing, dilution of topical steroids, and oral prednisolone or azathioprine.

3.6 Although 97% of atopic eczema patients are treated in primary care in the UK, **only one of the 272 RCTs was conducted in primary care**

3.7 **None of the eczema trials had been sponsored by the MRC**

3.8 With the exception of a notable few, **most drug companies completely ignored our request for unpublished studies** (for a list, see tables 39 and 40 in our report).

So has my practice changed after writing this report?

Yes – I now:

- ◆ no longer recommend antiseptic bath additives or prescribe topical steroid/antibiotic combinations.
- ◆ I use all topical steroids just once daily.
- ◆ I tell people that enzyme washing powders are fine, and that they do not have to buy expensive cotton clothes if they can find equally soft synthetic garments.
- ◆ I encourage my patients to read sections of the free report themselves – a wonderful antidote to the gifts of Internet sheets my patients sometimes bring me.

Areas of caution

I am more cautious about the interventions mentioned in points 3.3 and 3.5 above and will continue to use some of the when I get stuck with my patients. Absence of evidence does not mean that something does not work, and we should not become “paralysed” into inaction by lack of high quality data if no alternatives exist.

What does it mean for future research?

The evidence base for preventing and treating atopic **eczema is currently a bit of a mess**, characterised by:

- ◆ a profusion of short-term trials on “me too” products
- ◆ a lack of outcome measures that measure important things to patients
- ◆ poor standards of reporting and a lack of data on questions that physicians and people with eczema deem to be important.

Urgent primary research is needed to address these gaps and those outlined in section 3, mainly in the form of RCTs.

- ◆ RCTs should be of longer duration
- ◆ More RCTs should be conducted in primary care.
- ◆ More detailed and updated systematic reviews of specific treatments are needed
- ◆ Methodological work is needed to sort out the outcome measures.

How can you help to put this mess right?

- ◆ Already, several specific question-driven systematic reviews are being developed from this report through the Cochrane Skin Group (see Cochrane Skin Group website: www.nottingham.ac.uk/~muzd).
- ◆ Anybody wishing to contribute to these or new reviews, or to help me to set up a network to conduct independent clinical trials in atopic eczema (in primary or secondary care) should e-mail me on: hywel.williams@nottingham.ac.uk

Health Warning - *We were careful in the report to separate the factual data abstracted trial data from our own views on what the data meant. I would encourage the reader to read the relevant section of our report him/herself, or better still, to go back to the original published papers before making any final judgements.*

Reference

- 1 Hoare C, Li Wan Po A, Williams H. Systematic review of treatments for atopic eczema. *Health Technol Assess* 2000;4(37). <http://www.ncchta.org/>

Professor Hywel Williams
ISAAC Steering Committee

ISAAC ABSTRACTS

TIME TRENDS IN THE PREVALENCE OF ASTHMA AND ALLERGIES AMONG CHILDREN IN MÜNSTER, WEST GERMANY: 1994/95 - 1999/2000

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To assess time trends in the prevalence of asthma and allergies in the city of Münster two surveys were conducted in 1994/95 and 1999/2000 according to the Phase Three protocol of the International Study of Asthma and Allergies in Childhood (ISAAC).

Random samples of pupils (n=4,259 in 1994/95 and n=4400 in 1999/2000) attending school grades 6-7 (mostly 13-14 years of age) and of parents of children (n=4607 and n=4647, respectively) attending grades 1-2 (mostly 6-7 years of age) were invited to participate. The same study methods were used in both surveys and these included the standardized ISAAC written (WQ) and video questionnaires (VQ; only in older age group) on the occurrence and severity of symptoms of asthma, allergic rhinitis and atopic eczema. The questionnaires asked also for information on potential risk factors such as age, sex, family history of atopy, smoking, and housing conditions. Participation was similar in both surveys (94% and 94% in the old age group, 81% and 82% in the young age group).

In both age groups, there was a statistically significant ($p < 0.05$) increase in the reported prevalence of wheeze during the last year (14.4%-17.4% and 98%-13.3%, respectively). Point estimates of the 12 months period prevalence of symptoms of asthma assessed by VQ, of symptoms of rhinitis, and of symptoms of eczema did also increase, some of these differences reached statistical significance. Adjustment for sociodemographic and recorded putative risk factors could explain only a small part of the observed time trends.

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IMMUNIZATION AND SYMPTOMS OF ATOPIC DISEASE IN CHILDREN: RESULTS FROM THE INTERNATIONAL STUDY OF ASTHMA AND ALLERGIES IN CHILDHOOD.

H Ross Anderson, MD, MSc, Jan D Poloniecki, DPhil, David P Strachan, MD, MSc, Richard Beasley, MD, Bengt Björkstén, MD, PhD and M Innes Asher, MD, BSc, ChB for the ISAAC Phase 1 Study Group.

Objectives:

This study tested the hypothesis that immunization is related to the prevalence of atopic disease in childhood.

Methods:

We used data from the International Study of Asthma and Allergies in Childhood to perform an ecologic analysis of national and local immunization rates for tuberculosis, diphtheria and tetanus toxoids and pertussis (DTP), and measles and prevalence of atopic disease symptoms (asthma, allergic rhinoconjunctivitis, and atopic eczema).

Results:

In 13- to -14-year-old children, there were significant negative associations with local birth-year immunization rates for DTP and measles but none with rates for tuberculosis. No associations were found in 6- to 7-year-old children. No associations with national immunization rates were found.

Conclusions:

International variations in childhood atopic diseases are unlikely to be explained by variations in immunization.

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ISAAC ANNOUNCEMENTS

PHASE THREE DATA DEADLINE

Submission Date: No later than 30 November 2002
Recipient Centre: ISAAC International Data Centre (IIDC)

Registered centres that wish to be included in ISAAC Phase Three worldwide publications must provide a complete data set and Centre Report to the IIDC by **30 November 2002**. The data and the Centre Report will then undergo a checking process by the IIDC in conjunction with each centre. A satisfactory data set is one which is prepared according to the Coding and Data Transfer Section of the Phase Three Manual and which has completed the data checking process above.

Reference: ISAAC Phase Three Manual; Section 6.14: Page 24

INVITATION

ISAAC International Data Centre (IIDC)

cordially invites

ISAAC Phase Three Centre Collaborators

to submit items for future ISAAC Newsletters

ISAAC NEWSLETTER

Please be advised that the IIDC would like to circulate future issues of the newsletter electronically. Future issues will be electronically sent as an Adobe pdf file or Acrobat pdf file and copies may be viewed on the ISAAC website: <http://isac.auckland.ac.nz>

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