BRIEFING PAPER 1
NICK
(Nutritional Improvement for children in urban Chile and Kenya)
The first steps in the implementation process in Chile (The process -the achievements- the challenges)
Beatriz Salgado Diez
Public Health Department, University of Valparaiso

During the first year of the NICK project in Chile (September 2010 to September 2011) two stages of the research schedule were completed: the literature review and the establishment of the PAR group. Most of the baseline child anthropometric and household survey data were also collected. However, there have been many challenges:

External difficulties
This year we have experienced multiple changes to the people in positions of authority at a central, regional and local level, which has caused some delays in them meeting their commitments towards the project. The change of government in 2010 resulted in several strikes and demonstrations, particularly in education. Last year, there were strikes in universities, public schools and nurseries over a seven month period due to the most important educational (and social) movement taking place in Chile since its return to democracy in 1990. This year there have also been strikes in the health system.

Financial difficulties
During the first year of the project, there have been delays in receiving the project funds due to late signing of the contract with the Institute of Education and delays in internal processing of funds. These difficulties are being resolved. But have led to difficulties in paying salaries and completing baseline data collection (for which there is a limited budget).

Unexpected difficulties
Due to problems with the United Kingdom Border Agency the author had to reschedule her visit to the Institute of Education to follow some doctoral studies courses. This lead to changes to the programmed activities (for the NICK project) for the rest of the year.

Despite these difficulties and challenges the NICK-Chile team has been able to complete most of the scheduled items, described below.

To inform the first four research questions data has been collected through the following:

Secondary data extracted from the structured literature reviews including policy and strategy documents, international reports, academic articles and gray literature. A large section of the literature review has explored the approaches that have been used to tackle the problem of child obesity in Chile and in Valparaiso and identifying the social determinants of this problem. The review has also tried to assess how effective the existing policies, initiatives and networks are in influencing these determinants.

Primary data have been collected from

Semi-structured interviews with key informants, (policy makers, members of the local council, health and educational sector (national, regional and local representatives), members of the local food industry, etc.) Fourteen interviews were carried out, transcribed and are being analyzed with NVivo.
Focus groups with mothers and carers of preschool children in the intervention area. Three focus groups were carried out, transcribed and are being analyzed with NVivo. All the participants have signed an informed consent form, which was reviewed and approved by the Bioethical Committee of the Faculty of Medicine.

Focus groups and in-depth interviews were finalized in June and some results from the qualitative analysis were presented to the Open Space group.

Anthropometric measurements baseline

Over 297 children ranging in age from 24 to 47 months old, attending JUNJI nurseries (The Regional Office of the National Board of Nurseries) in the intervention area (five nurseries) and 226 in the control area (four nurseries). The author personally supervised the process with the assistance of two medical students. The results showed at least 12% obesity in the intervention area and 9% in the control area; 28% and 26% overweight, respectively.

We decided to work with public nurseries because findings from the literature showed that school-based interventions can be a good starting point for reaching out to the wider community in poor urban areas. Furthermore, children attending these nurseries belong to 40% of the poorest families, representing a large proportion of the sample size (800). Out of a total population of 6800 children in the city of Valparaiso, 2700 of them are aged 24 to 47 months old and are considered who are socially vulnerable (2700). All anthropometric measurements were undertaken with parental authorization, which was reviewed and approved by the Bioethical Committee of the Faculty of Medicine.

Challenges we have faced

According to the institutional information provided by JUNJI, the first 4 nurseries selected had 416 children who were available to be measured. In Chile, children begin school in March and they are split into different classes according to their age (2 years – 2 years, 11 months; 3 to 3 years 11 months, etc). Therefore, many of the children included in the JUNJI data were above the age requirement for the study (3 years 11 months). We also found that there are fewer children enrolled in the younger classes. We also found that many of the nurseries were damaged in the recent earthquake and have not been repaired. This has also contributed to a reduction in numbers. Some children are being taught in community run classrooms, while others have been taken in by primary schools. Due to this situation we have included other nurseries in our sector. This decision meant expanding the intervention area. It is also important to consider that we would be intervening and setting up PAR groups representing 5 nurseries in more than 10 different neighbourhoods which would need to participate and commit to the intervention measures.

Other problems we encountered were related to the lack of coordination, between the regional officer at JUNJI and the nurseries, as in some areas, especially in the control area, information about our work was not sent to nursery directors and we have therefore had to delay taking measurements until we could reorganise the process.

Household surveys of families with children between 24 to 47 months old who had been included in the anthropometric survey in the intervention and control area. This survey includes questions relating to community related factors, such as, the availability of healthy and non healthy food, community services and security; cooking, feeding and attitudes to physical activity, etc. This questionnaire was based on different national and international questionnaires, piloted by the author and supervised by the senior researcher in Chile, Gabriela Charnes.

By April 2011 we had completed 200 household surveys from the database of 650 households held by two primary health centres in our intervention area and represent families living in the intervention area including low and middle income families. These 200 surveys were briefly
analyzed and presented to the participants of the Open Space group.

In July we investigated two more Primary Health Centres, obtaining information from 1000 households in order to collect the required information. Data collection was postponed in August due to lack of funds to carry out the necessary activities (hire interviewers, operational expenses, etc.).

**Difficulties:** Many of the addresses and telephone numbers provided were incorrect, false or difficult to obtain.

We also found ourselves in very hostile and dangerous neighbourhoods putting the interviewers in unnecessary danger. It is important to note that the children being measured are living in some of the most unsafe and socio-economically vulnerable areas in Valparaiso.

We resumed the household surveys in November 2011, whilst also completing the child anthropometric measurements. The households surveyed belonged to the families of the nursery measured.

During this stage we decided to start calling families by phone to agree an appointment between the interviewers and interviewees, in order to avoid potential risky situations and to improve our chances of success. This strategy worked for a few weeks, until we came across phone numbers that were wrong, unavailable or didn’t exist. Consequently, interviewers were asked to search for the children’s houses on their own. In some instances this worked, until we came across incorrect, false or difficult to get hold of addresses. We also encountered dangerous situations, such as, robberies, assaults, dog bites, etc. All these situations were documented by the interviewers affected and the field work assistant. This is a very sensitive situation as besides the great responsibility we would have had to face if any interviewer had been seriously harmed, according to Chilean legislation these types of events are categorized as working accidents and we would have been expected to have insurance to cover such injuries.

Despite these obstacles, we completed the surveys on 6th January 2012 of 230 children/household surveys in the control area and 200 children/household surveys in the intervention area. These are being inputted in to SPSS.

**Establishing the Participatory Action Research Group**

**The Open Space meeting**

Our Open space activity was carried out on the 29 July. In this meeting we invited different actors from the education and health sector, at a local, regional and national level, members of the civil society and NGOs, the regional and national leader of the ‘street markets’. We also invited members of the ‘small fishery industry’ that represents the fishermen that sell their products directly to the community. All of these representatives held a very important role and their interaction with the other actors during the session contributed to their interest in collaborating with the project.

The purpose of Open Space was to convene the different sectors, organizations and actors involved with the problem of child obesity and present the NICK project currently underway in Valparaiso. The purpose was also to analyze the context in which the problem occurs in Chile, facilitate cross-sectoral dialogue and identify the keys to understanding the new challenges and practices at a local level.

**Some comments on the workshop:**

- It was widely attended.
- Participants were highly motivated to discuss factors relevant to achieving the objectives, it reaffirms that childhood obesity is a major issue and a priority for these actors.
- There was great interest in learning about new proposals for tackling the problem, as in the NICK project.
- Child obesity was viewed as an expression of inequality and poor urban governance and its effect on the food system health being the responsibility of
all sectors. These points emerged as the starting point of the group work.

It was proposed that the concept of an obesogenic environment, be defined as "a set of environmental circumstances that encourage people to eat and drink more calories than they expend."

We also emphasized that there are networks between individuals, organizations and sectors that are currently emerging that are working on this problem.

The PAR group

According to our updated schedule, we should have had our first meeting in August, but because of the administrative difficulties we faced and lack of required funding, all activities were postponed.

The PAR meeting was rescheduled to the end of November. The Open space activity did allow us to identify the participants and anticipate the needs and visions of those working in our sector with children between 2 and 3 years and 11 months.

We have contacted the Open Space participants who expressed interest in participating in this experience. Almost all of the 20 participants showed enthusiasm and motivation. We needed to assure the group that represents the different levels of governance (local and regional) and has the capacity and time for efficient action. We’ve divided the work into three workshops in November (two days), December (one day) and January (one day) and here are some of the results from the meetings.

The aim of the first PAR workshop was:
To reflect on how things could and should be done locally, facilitating the development of new governance practices at the local level and adapt these to be flexible, transparent and deal with the complex issue of child obesity

Some conclusions
- To form an Intersectoral Learning Community (ILC)
- To develop a common purpose for the ILC
- Establishing working arrangements
- Shared rules, methods of organization, in-depth discussion about action research processes, analysis of stakeholders, DSS and inequity in health, urban governance and its effects on the food system and health as a responsibility of all sectors.
- Beginning the DSS analysis of overnutrition in children attending nurseries in Playa Ancha and Cordillera from the work issues discussed in the Open Space group.

The aim of the second PAR workshop was to discuss in more depth the concepts previously worked on to refine the definition of problems that cause or perpetuate an obesogenic environment affecting children attending JUNJI nurseries of Playa Ancha and Cordillera.

Some comments on the PAR group learning process
- Deepening the analysis process of the social determinants of child overnutrition attending nurseries of Playa Ancha and Cordillera.
- Agreeing what aspects of the problem need to be addressed.
- Creating closer links with stakeholders and its inclusion to the project.

The next PAR group meeting is planned for 9 January 2012, where we plan to complete a process of prioritization and to select problems to work on and find possible solutions and forms of intervention. We also plan to continue the PAR work after the summer holidays in March 2012.