Busy Bee screenings—early childhood intervention in a rural setting

Jenny Williams, Eastern Eyre Health and Aged Care, Sharon Healy, Northern and Far West Health Service

When delay in children remains undetected until school years they are at an increased risk of academic failure, behavioural problems and socio-emotional disturbance (Glasgoe 1999). Assessment of children from an early age assists in identifying some of the difficulties, and gives time to address some of these issues before the child begins formal schooling.

In considering assessment methods, Gallagher et al (2004) advocates for universal screenings—that is to identify problems and offer treatment or early intervention as quickly as possible to maximise long term development. Additionally, these screenings need to occur periodically across early childhood and be offered in locations that are convenient and accessible to families.

However challenges of providing developmental assessments or screenings for children exist, especially in rural communities. A large number of Australians living in rural and remote areas have less access to health care compared with those living in metropolitan zones (SARRAH 2002) Often services are not as readily available to people in rural areas, or they are not promoted enough so that people have knowledge of the services available to them. Additionally services need to overcome geography, low population density, cultural diversity and the historical difficulties of recruiting staff in rural and remote areas (Battye and Taggart, 2003)

Eastern Eyre Health and Aged Care (EEHAC) is a cluster site that includes three district council areas of Cleve, Kimba and Franklin Harbour in rural South Australia. It covers 11 734 sq km, with a population of 4475 people and is geographically isolated (548 km from Adelaide or looking at a map Kimba is situated halfway across Australia between Sydney and Perth).

Traditionally allied health services to EEHAC have been contracted from Whyalla Hospital and Health Services Inc. (roughly 1 ½ hours away by car). Since the introduction of Regional Health Service Program funding in 2000, the visiting allied health services of Speech Pathology, Occupational Therapy, Podiatry and Dietetics have visited each site fortnightly, with local Physiotherapists and an Early Childhood Health Program co-ordinator being employed.

In 2004, an early childhood screening was held in Kimba at the Doctors Surgery by the visiting Speech pathologist, Occupational therapist and local Physiotherapist. Initially only a few families attended. It was felt that a screening was a good proposal, however the formality of the screening setting was a shortcoming. Discussion developed between the visiting allied health team, local physiotherapist and early childhood intervention co-ordinator about the need for local parents to become aware of and be able to access services available to families in the Eastern Eyre region more readily. The idea of co-ordinating the services already visiting, and those working within the region, to develop a model for screenings grew from these discussions and, Busy Bee screenings evolved.

A consultative approach was used in planning the screenings, using a primary health care approach. This included:

- development of the project aim—to provide multi-disciplinary screening to children under the age of 5 years, that identifies children at risk, or who have developmental delays so that intervention can be implemented in a timely manner and allow the children to develop their optimum potential.

- development of the project name—to be catchy and easily identifiable for the community

- using the locally based Early Childhood Health Program Co-ordinator (who works across the 3 sites) as a key contact person for the local communities and visiting Allied Health staff

- consultation with visiting allied health professionals and kindergartens regarding dates and format
- developing/researching a tool for the screening that allowed a holistic approach to the screenings and ease of reporting and evaluation.

**Where are the screenings held?**

The venues for the screenings are the kindergartens in the three towns of Cleve, Kimba and Cowell. Kindergartens were chosen as they provide a family friendly, non threatening environment of which most children are familiar with (via attendance at playgroup, occasional care/rural care or preschool).

**Who is involved in Busy Bee screenings?**

- Locally based Physiotherapist and Early Childhood Health Program Co-ordinator who work across the three Eastern Eyre Health and Aged Care Cluster sites.
- Visiting Allied Health to the three sites (Speech pathologists, Occupational Therapists and Podiatrists).
- In the second half of 2005 a Social Worker was employed by the Eastern Eyre cluster, and joined the Busy Bee team in the last round of screenings in 2005.
- The Preschool Directors of Cleve District Children’s Centre, Kimba Kindergarten, and Cowell Early Childhood Centre.
- In 2006 a Dietician became involved in the Busy Bee team for the first time and was available for parents who had any queries about their children’s diet and eating habits.

**What is the Australian Developmental Screening Test**

The ADST (Harcourt Brace 1993) was the tool chosen for the screenings. The ADST is a standardised, individually administered screening test for children 6 months to 5 years. The tool was designed for use by medical practitioners and specialists, nurses and support staff (eg special educators, speech pathologists).

The tool covers the areas: personal/social, language, cognitive, fine motor and gross motor, looking at the child’s behaviour and abilities according to their age in months. It is aimed as a method for determining if a more comprehensive developmental assessment is required. In addition Podiatry and Dietetics have developed their own component for the Busy Bee screenings.

**What is involved in a Busy Bee screening?**

- The screening is advertised via the kindergarten newsletters, and through visits to playgroups by the Early Childhood Health Co-ordinator.
- On the day of the screening the therapists set up in discrete areas around the kindergarten, (kindergarten is usually running at the same time!). Signs and balloons are put up to show where each therapist is situated.
- The parent is given the ADST record form and then accompanies their child to each appointment, with each appointment scheduled to rotate every 15 minutes.
- A traffic controller, usually the Early Childhood Health Co-ordinator, ensures each parent and child can find their way around the circuit. This ensures the smooth running of the screening, and also assists with entertaining the child if there is a delay in appointments. All staff involved wear a child friendly funny hat, which helps identify who is involved in the screening, and can help break the ice.
• At the beginning of the screen a basic case history is taken along with a discussion of parental concerns. Within each section, there are components of parental report, and assessment with the child. The child participates in a range of activities with the therapist.

• On completion of each section, the parent is given a verbal indication of results and recommendations. Opportunities for parents to ask questions are encouraged.

• As each child completes their circuit they are given a notepad with a thank you for being part of our Busy Bee sticker.

The reports for each child are then sent by individual clinicians via email to the Early Childhood Health Program Co-ordinator and collated. Included in the report are any recommendations, parent information and requirements for further appointments. The report is then posted out to the family, along with an evaluation form and reply paid envelope.

By using a primary health care approach we were able to provide a program which looked not just at the individual child, but also involved their family and emphasised the importance of their role in enhancing their child’s development.

Primary health care principles included

• partnerships—allied health, kindy’s and community
• health promotion—enabling parents to access information on child development and hence empowering them in their parenting role
• community involvement
• early intervention
• sustainability.

In addition to referral numbers to allied health professionals and other agencies, the following outcomes have resulted:

• All allied health areas involved have reported an increase in the community awareness of services available in their areas. It has allowed parents access to information on many topics, from home made play, to buying the correct shoes for their children’s feet, to simple word games to play at home to improve their child’s speech development.

• Parents are now aware that even though they live in an isolated area they do have the services of therapists that they can access locally in respect to their child’s development. By meeting their local visiting therapists they are now more confident in approaching them for assistance.

• Some children that were screened were on the allied health waiting list prior to the screen, and by participating in the screen, the parents concerns were met, information provided and the child’s name then taken off the waiting list as no intervention required.

A case study in point

During the screening an 18 month old child was noted by the Speech pathologist to be predominantly mouth breathing, and that his tongue was quite forward in his mouth at rest. It was reported by the carer that he was prone to allergies and snored through his mouth. It was recommended this child be referred to an ENT specialist for review of his mouth breathing as this could impact on later speech sound development and dentition. This child was reviewed by the specialist and he required his tonsils and adenoids to be removed, resolving the mouth breathing, snoring and preventing future speech abnormalities.
Results

From small beginnings in 2004, the screenings are now being held across the cluster at three sites twice yearly. One hundred and thirty six (136) children have been screened over the region. The numbers of referrals to each specialty post screening were:

- speech therapy — 30
- occupational therapy — 18
- physiotherapy — 16
- podiatry — 18
- doctor — 2
- CYH — 3.

Note: In regards to Speech Therapy, children less than 4 years of age are usually seen by the visiting Department of Health speech pathologist, children 4 years and over are referred to the Department of Education and Children Services (DECS) speech pathology services (education). For the Busy Bee screening, the Health Speech pathologist screened all the children and made referrals to the DECS service as appropriate.

Parent evaluation forms have been helpful in pinpointing areas for improvement in the running of the screening day. Generally they have been positive and parents have found the information offered helpful.

Some comments from evaluations received:

Yes the venue was suitable as -- is familiar with the kindy as we have playgroup there.

Thought it was an incredibly great thing to do, and helped me pick up on a couple of issues.

The therapists were very professional, yet appropriate in relating to children.

It was good to have a report in writing—good that there were recommendations to correct problem areas.

Expectations were met. My child was 41/2 and I thought all was ok. I went more to support the service, but actually found he had rolling feet!!

Keep it up. I think these screenings are a fantastic way of finding out where our children are at.

Discussion and where to from here

The Busy Bee screenings have been an outstanding success in the Eastern Eyre Health and Aged Care Region. The success has mainly been attributable to:

- having a locally based co-ordinator in which the community identifies with, and can bring together local and visiting services
- the venue being familiar to the children and is known as a friendly and fun place
- a co-ordinator on site for the screening days to meet/greet parents, direct people between professionals and help with the logistical aspects of the day
- using a standardised screening tool
- that each site across the region had a common venue so that extensive travel was not required from families, and the screenings are easily promoted across the region.
Other sites on the Eyre Peninsula who have successfully held Busy Bee screenings, using this model are Ceduna, Wudinna and Elliston.

**Recommendations for the future**

- Link with Child and Youth Health for health and development screenings.
- Develop the screenings so they are appropriate to a wide range of cultures.
- Develop a package of materials, so the project is easy to “pick up and go” eg promotional materials, logical information, common handouts.

**References**

5. Services for Australian Rural and Remote Allied Health Inc. A study of allied health professionals in rural and remote Australia. 2002 &lt;http://www.sarrrah.org.au/&gt;

**Presenter**

Jenny Williams completed her registered nurse training in 1981, a midwifery certificate in 1984 and advanced paediatric training at the Adelaide Children’s Hospital in 1987. She has since worked predominantly in rural hospitals on the west coast of South Australia, including positions of Clinical Nurse Consultant and Director of Nursing. In April 2005, Jenny joined Community Services in the role of Early Childhood Health Program Co-ordinator for Eastern Eyre Health and Aged Care.