ARE UNIVERSALLY AVAILABLE SUPPORTS FOR FAMILIES EFFECTIVE AND EFFICIENT?

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EXECUTIVE SUMMARY

The term family support services covers a multitude of diverse services and client groups. Murphy (1996) gives one of the most concise definitions:

> "Family support services is the collective title given to a broad range of provisions developed by a combination of statutory and voluntary agencies to promote the welfare of children in their own homes and communities."

At present family support services are mainly targeted at families and areas deemed 'at risk'. However, as McCroskey and Meezan point out,

> "Family support services are intended for families who are coping with the normal stresses of parenting, to provide reassurance, strengthen a family facing child rearing problems or prevent the occurrence of child maltreatment"

Therefore family support services are appropriate for all families who are facing the everyday stresses and challenges of bringing up children.

There is a large body of evidence to show the effectiveness of family support services for families deemed at risk. At this time insufficient research has been conducted to prove the effectiveness of universally available family support services. However an important theme emerges from the available literature: while universally available services support all families, some families will require more help and support then others. Therefore, universal services, while helping all families, could extend to be a reliable means of identifying families who need this extra help, but will in turn have to be flexible and responsive enough to be able provide this extra support.

Families do not fall neatly into "pigeon holes" of low risk or high risk. There is a continuum of risk just as there is a continuum of disease and no screening instrument is precise enough to identify all those who are at risk. Most problems will emerge from the general population, as opposed to those few "labelled" as at risk (Pugh *et al*, 1994; Elkan *et al*, 2001):

> "…the bulk of society's health and social problems occur in the large number of people who are not especially high risk rather than in the few who are at increased risk. Targeting services on a relatively small number of high risk individuals would thus have little impact on the total burden of ill-health and social problems in the population" (Rose, 1993 cited by Elkan *et al*, 2001).

A universal service which is offered to all is non-stigmatising and therefore more likely to be acceptable to a large proportion of the population. This will allow universal access to families with children, eliminating the need for screening:

> "…universal surveillance of the entire population is vital to the detection and prevention of problems as there exists no other effective means of predicting where and when difficulties will occur. No screening instrument can ever be sufficiently precise to identify risk groups" (Dingwall, 1989 cited by Elkan *et al*, 2001).

There is significant evidence for the impact of early development on the future outcome of children. Adequate and appropriate nurturing and care in these formative years will help prevent problems arising in the future and enhance future educational and economic functioning.

Parent education programmes may help parents better understand their child's development in this crucial period and thus enable them to help their children achieve their potential in adulthood.

A review of studies which examined the evidence for early intervention in preventing physical child abuse identified a number of components of successful studies, i.e.

- Early identification and/or screening of families referred through a universalistic services system – ideally during the perinatal period;
- Initiation of supportive services during pregnancy or shortly after birth;
- Voluntary participation;
- In-home service provision which is occasionally complemented by services from the primary health care setting, social services or support group;

- Case management support – formal supports for families;
- Provision of parenting education and guidance.

Early intervention services had favourable results for disadvantaged children in the short and long-term, including improving school achievement, decreasing teenage pregnancy rates, unemployment rates and criminal behaviour. Intervention mothers were found to have better education and employment levels.

Early developmental support in the form of good quality pre-school has been shown to have benefit in improving children's reading and mathematical skills but also has had an impact on improving social skills and reducing behavioural problems once in school.

It perhaps would be worthwhile examining the programme of comprehensive (state funded) universal care for pre-school children of some of our European neighbours. This may assist Ireland in developing a similar programme in this country. Such a programme would have many benefits, more mothers/parents would be able to return to work (if so desired) and it could go some way to negating the detrimental effects of poverty on children from poorer backgrounds in improving their future outcomes.

Worldwide, both Canada and the United States are moving towards the provision of universal services for young children. The Early Years Study (McCain and Mustard, 1999) from Ontario clearly advocates for the provision of universal services for *all* young children, focusing on early development to improve their outcomes in the future. The United States also support this view and have initiated the Healthy Steps programme, an all-inclusive universally available paediatric health service (Guyer *et al*, 2000; Lawrence *et al*, 2001). There is no evaluation as yet from the Healthy Steps programme but it would be of value to review this analysis when published.

It was not possible to evaluate the cost of providing universal support as few of the studies reviewed have included an economic analysis, but without doubt providing universal services will be more expensive in the short term. However, the consensus is that the long-term benefits to the child and society will eventually lead to savings in

the future, although these indirect savings are difficult to cost. It is estimated that any monies invested in good quality child development programmes "on a population basis" would at least return double that in savings in the long term.

There is a scarcity of studies on the effectiveness of universal services. There are numerous studies done on family support services conducted with families at risk, which overall show very favourable results for this group but these positive results cannot be generalised to the whole population without conducting further research.

Many of the studies reviewed suffered from methodological weakness (lacked statistical power) with little commonality in regard to design, programme interventions and processes. Most had been conducted in the United States, which further reduced the generalisability of the results.

Finally, family support services are not the panacea for all social problems, but are a vital component of a wider range of initiatives that are necessary to improve and promote the health and wellbeing of Irish children now and in the future.

> "…no service programme can provide all that is needed to support and strengthen every family. A system of well co-ordinated, assessable, family centred services must rest on a foundation of a healthy community that affords adequate basic services and opportunities for education, housing and employment. Efforts to strengthen family-centred services will be insufficient unless the basic needs of families are met" (McCroskey and Meezan, 1998).

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INTRODUCTION

> "Children are recognised as individuals within a family and in the wider community with rights to equal support, care and promotion of their wellbeing" *Commission on the Family (1998)*

There is a growing understanding among policy makers about the rights and needs of the nation's children and the necessity of providing more child-centred policies, which emanate in part from the UN Convention on the Rights of the Child, ratified by Ireland in 1992 (The Commission on the Family, 1998; The National Children's Strategy, 2000). With these policies comes the recognition that the family is essential to the health and wellbeing of children.

Family support services have been growing in popularity over the last decades, endorsed by the large body of conclusive evidence for the effectiveness of these programmes with disadvantaged families or families at risk[1] (Hertzman and Wiens, 1996; Barlow, 1999; McKeown, 2000; Barlow and Coren, 2001; Zoritch *et al*, 2001). Early intervention programmes with young children have been shown to improve their educational outcomes, reduce the numbers of teenage pregnancies and criminal activities, while home visiting has been beneficial in reducing childhood injuries (Hertzman and Wiens, 1996; Olds *et al*, 1997).

The term family support services covers a multitude of diverse services and client groups. Murphy (1996) gives one of the most concise definitions:

> "Family support services is the collective title given to a broad range of provisions developed by a combination of statutory and voluntary agencies to promote the welfare of children in their own homes and communities."

[1] See McKeown K. A Guide to What Works in Family Support Services for Vulnerable Families (2000), a comprehensive document that gives the Irish perspective.

This report was commissioned by the Supporting Parent's Subcommittee of "Best Health for Children", to investigate the effectiveness of universally available support programmes for helping all families, not solely those identified at risk, in their role of nurturing and caring for their children and promoting children's health.

A literature review was directed by the subcommittee to look for empirical evidence from studies that examined the effectiveness of universally available services. An extensive search was conducted of all available databases - Medline, Elsevier Science Direct, Blackwell Synergy and The Cochrane Library. Previous meta-analyses of related topics were also reviewed.

What is family support?

Most family support is provided, not by professionals, but by relatives and friends of the individual family. The majority of children thrive and grow into capable adults with just such a support system (Roberts and MacDonald, 1999; Gilligan, 2000). Where the professional services are involved, Thomas (1994) expands the goals of the family support services, proposing that they should encompass the improvement of child health and development and "prevention of family dysfunction, enhancement of parenting skills, and promotion of informal and formal community supports". Family support services also incorporate and reflect the aims of health promotion, which can be defined as "any planned and informed intervention" which seeks to prevent illness and to improve the physical and mental health of the individual (Hall, 1996).

Gilligan (2000) divided family support services into three broad categories, which help to illustrate the range and breath of services: developmental family support, compensatory family support and protective family support. Box 1 outlines the variety of family support services and the types of family who may benefit from such support.

Box 1 Types of family support and who it benefits.

	Family type*	Examples of services*
Developmental support "strengthen social supports and coping capacities of child and parent in the context of their families and neighbourhood" (Gilligan, 2000)	All families/healthy families	Advocacy Income supports Housing Health care Child care Family centred work policies Parent education Development enhancing education Recreation Family planning services School-linked health and social services Information and referral services
Compensatory support "compensate family members for the disabling effects of disadvantage or adversity in their present or earlier life" (Gilligan, 2000)	Families needing additional support / facing minor challenges	Family support centres Family resource programmes Home visiting programmes Family counselling Parent aide services Support groups Services for single parents
Protective support "strengthen the coping and resilience of children and adults in relation to identified risks or threats experienced within individual families" (Gilligan, 2000)	At-risk families needing specialised assistance/facing serious challenges	Alcohol and drug treatment Respite child care Special health services Special education services Adolescent pregnancy/parenting services Mental health services Services for developmentally disabled and emotionally disturbed children and their Families
	Families in crisis or at risk of dissolution/ placing children at serious risk	Child protective services Intensive family preservation services Services for chronically neglectful families Services for runaway children and their families Domestic violence shelters Domestic violence counselling
	Families in which children cannot be protected within the home/ needing restorative services	Diagnostic centres Foster family homes Therapeutic foster homes Group homes Therapeutic group homes Residential treatment centres Reunification services
	Families who cannot be reunified	Adoption services Independent living services
		*** Source McCroskey and Meezan (1998)**

The difference between the types of family support services is also delineated by how families access the services. In developmental family support, families sign up

voluntarily for the service. Conversely, compensatory or protective support services may have been imposed or ordered by social services for families, who, themselves may not acknowledge the problems within the family and thus may resent or reject the services (McCroskey and Meezan, 1998).

Universally available services

The word universal is defined as "belonging to all persons, applicable to all cases" (Pearsall and Trimble, 1996). Most literature documents that family support services are intended (in theory) for all families with children (Thomas, 1994; McCroskey and Meezan, 1998; Gilligan, 2000). This is based on the awareness of the responsibilities and challenges faced by all parents bringing up children.

> "Family support services are intended for families who are coping with the normal stresses of parenting, to provide reassurance, strengthen a family facing child rearing problems, or prevent the occurrence of child maltreatment" (McCroskey and Meezan, 1998).

In practice the services are most often targeted at and associated with vulnerable families and children. This is illustrated by the fact that the Eastern Health Board spent 80% of its total child care budget solely on child protection in 1996 (Commission on the Family, 1998).

There are very few truly universally available services in Ireland. Within the health care provision sector there is a variety of legislation to make certain that all children, regardless of financial income or social class, have access to at least one health service.

Medical care for new-born infants

Health boards are legally obliged to make available free medical care for infants up to the age of six weeks. Most infants in Ireland receive a six-week check up, either through the Maternity and Infant Care scheme, private GP or maternity hospital. The Maternity and Infant Care Scheme is part of this scheme and provides free health care during pregnancy and for the first six weeks of the infant's life. The uptake rates vary

throughout the country (not all GPs subscribe to the scheme) but nationally 54% of infants are seen (Denyer *et al*, 1998).

Public health Nurse

The public health nurse (PNH) is an integral part of the Irish public health service, involved especially in children's services. These duties include a mandatory visit to new mothers in the early post-natal period and general developmental monitoring of the child including participating in baby clinics. It is estimated that there is one nurse to for every 3,000 individuals in the country (Commission on the Family, 1998).

Immunisation

Immunisation is available for all children. The target of 95% immunisation coverage has not been achieved for any vaccine regime in the Republic, with the levels of coverage varying between health board and between age group. In September 2000, for children aged 24 months, the national immunisation rates varied between 81% and 87% depending on the vaccine (NDSC, 2001).

Day care

One in three of children under five in Ireland attend some form of child day-care (publicly funded or private) service. Public funding is provided through Health boards, voluntary organisations, community groups, and the Department of Social, Community and Family Affairs. In 1993, only a small fraction of children (9,000, who were all from disadvantaged families) had a wholly or partially subsidised place at a pre-school facility (Commission on the Family, 1998).

It is interesting to compare the provision of day care services in Ireland with that which is provided in other European countries. Several Scandinavian countries provide an almost universal day-care service for children under seven. In Sweden, there is virtually universal provision by the local authorities of child care for children aged between one and six (Myers, 2000), while Denmark provides places for around 60% of its under three population. France and Italy have almost *all* of their three to five year olds enrolled in public day-care programmes. The French and Italian agencies advocate strongly for universal day-care for young children as they "…believe that, given the small family size and the paucity of children in

neighbourhoods, the social isolation of many of these mothers and children can be devastating". Supplemental and supportive group experiences are essential and will lead to better adaptation in pre-school" (Kamerman and Kahn, 1995).

Factors affecting child health and well-being

Ireland today

The world where children are raised today bears little or no resemblance to the one in which their parents grew up. Economic, cultural and social changes have altered the nature of Irish families. A more mobile population has lead to the loss of traditional family supports. Family sizes are becoming smaller, with the net fertility rate dropping to 1.9 in 2000 from 4.1 in 1971. The numbers of children born out of marriage have increased dramatically since the 50's, to 32% this year, a figure above the European average. The economic boom has meant that the numbers of women at work are at an all time high, with a 46% participation rate and an average working week of 33 hours (CSO, 2001).

The threat of illness and death to the nations children from infectious disease has been replaced by the more intangible and less obvious dangers caused by lifestyle and behaviour (Kolbe, 1997; Denyer *et al*, 1998). The cause of physical and mental morbidity in adulthood can be linked to life-style behaviours some of which begin in childhood; these include dietary habits, amount of physical exercise, or more obvious risk behaviours such as abuse of stimulants (including tobacco and alcohol) and unsafe sexual practices (Kolbe, 1997). Poverty continues to be one of the greatest threats to health and as the social divide between rich and poor widens so does the divide between their health (Keating and Hertzman, 1999).

Keating and Hertzman (1999) reflect on this apparent paradox of our lives in the 21st Century:

> "…on the one hand, material abundance and the ability to generate wealth unimaginable even by our recent ancestors; on the other hand, grave concern about the deterioration of the quality of the human environment …[and] the consequences of this deterioration as seen in increasing developmental problems among children and youth."

Early development

The child's experiences in their first years of life are instrumental in the development of the brain and their subsequent capacity to learn, their behaviour and health (Hertzman and Wiens, 1996; McCain and Mustard, 1999). The evidence for this has been concisely summarised and evaluated by the Canadian project, "The Early Years Study" (McCain and Mustard, 1999). The study states that the nurture, care, nutrition and stimulation received by a child from their parents (or primary carer) is a key factor in the development of a child *regardless* of socio-economic group.

The case for universal services

As previously mentioned family support services are most frequently targeted towards at risk individuals. However there are strong advocates and coherent arguments for the case for universal family support services for all families. Pugh *et al* (1994) state:

> "Families do not necessarily fall into one of the two pigeonholes often created for them – either they are coping adequately and are felt to need no assistance at all, or that they fall below an accepted level of providing "good enough parenting" and become the focus of intervention. …the skills of parenthood do not necessarily come naturally and most parents, even those who manage well on their own for most of the time, would welcome some support part of the time, without feeling that they run the risk of becoming stigmatised or being labelled failures by asking for or using support."

Offord *et al* (1998, 1999) outlined the arguments for targeted and universal services in relation to child psychiatric care, but they can equally be applied to many other services (Box 2). The authors highlight several aspects of universal programmes. They suggest that having middle class families attend the services will ensure a higher quality, better run programme, as they are more likely to complain than lower class families. They note that universal programmes may not have a large effect on every individual, but have a small effect on most members of the population, which ultimately will lead a large effect in the overall population.

Box 2 Advantages and disadvantages of targeted and universal services.

Advantages	**Disadvantages**
Targeted services	
Human face - Subject motivation - Health provider motivation - Intervention tailored to the individual Potentially efficient Can address problems early	Labelling and stigmatisation Difficulties with screening - cost - uptake least among those at greatest risk - boundary problem - risk status unstable - Inability to target accurately Limited potential for individuals and populations - power to detect future disorder usually very weak - a large number of people at small risk may give rise to more cases of the disease than a small number at high risk Tends to ignore the social context as a focus of intervention
Universal	
Easier than targeted to obtain support from the general public No labelling or stigmatisation Middle class demand that the programme be well run Can focus on community wide contextual factors Large potential for the population	Hard to sell to the public and politicians Impersonal: poor motivation of subject and health provider Small benefit to the individual Hard to detect an overall effect May have the greatest effect on those at lowest risk, thus increasing inequality Unnecessarily expensive Denies the non-high-risk population the opportunity of doing good If broader than community level, can undermine community initiatives

Adapted from Offord *et al* (1998, 1999).

The authors concluded that the most effective method was a combined approach; the implementation of a universal programme, complemented by a targeted programme for those identified as needing more support (Offord *et al*, 1998; Offord *et al*, 1999).

Elkan *et al* (2001) put forward a similar reasoning for the case for universal home visiting again which can be applied to other services. They concentrated on the population perspective of universal services, based in part on the work of the epidemiologist, Geoffrey Rose. Their key points are:

- The most vulnerable are the least able to access services and therefore targeted rather than universal services might lead to a failure to identify those who do not seek help
- No screening instrument can be sensitive or precise enough to identify all at risk groups.
- Assumption that the world can be divided neatly into two, with those who are "at risk" and those who are not "at risk", ignores the fact the that just as there is a continuum of severity of disease so too is there a continuum of risk.

Rose (1993) cited by Elkan *et al* (2001) states:

> "…the bulk of society's health and social problems occur in the large number of people who are not especially high risk rather than in the few who are at increased risk. Targeting services on a relatively small number of high risk individuals would thus have little impact on the total burden of ill-health and social problems in the population."

The authors quote Dingwall (1989) in support of a universal home visiting programme:

> "…universal surveillance of the entire population is vital to the detection and prevention of problems as there exists no other effective means of predicting where and when difficulties will occur. No screening instrument can ever be sufficiently precise to identify risk groups."

The authors concluded that a universal service (for home visiting) is necessary and required, with the recognition that within such universal service some people will need more intensive input than others (Elkan, 2001).

Stigma is cited as one of the most frequent reasons for families not taking up services (Pugh *et al*, 1994; Offord *et al*, 1998). Goffman (1963) stated that stigma referred to "an attribute that is deeply discrediting" marking a person out as different or tainted to his peers or social group. Targeting families, selecting them out from others, for special family support services can be stigmatising, causing them to feel embarrassed or ashamed, making them feel labelled as bad or inadequate parents. This means that some families are unwilling to take up services or subsequently drop out of programmes. In England, a recent report by The Child Poverty Action Group illustrated the effect of stigmatisation (Storey and Chamberlin, 2001). The report found free school meals were not claimed by at least 20% of eligible children, mostly because they felt stigmatised by receiving them. Children were worried about what their classmates would think of them e.g. that they came from a poor family or their parents "couldn't be bothered to get a job".

Evaluating the evidence for universal family support services

The vast majority of studies into family support have been done with subjects drawn only from those families deemed to be "at risk". The reasons for the perceived risk vary from study to study and there is no common definition for the term or indeed the degree of risk. In general, most "at risk" families have socio-demographic factors such as teenage pregnancy, membership of a specific ethnic group, unemployment, poverty or an identified risk factor e.g. history of domestic violence, drug or alcohol abuse, that increase the possibility of poor family and childhood outcomes. This, therefore makes the generalisability of favourable results to the general population difficult to evaluate and thus is the biggest impediment to evaluating the evidence for universal family support.

Of the studies not performed specifically on populations at risk, much are descriptive in design, or if empirical studies such as randomised control trials (RCTs), they have suffered from methodological design faults.

There exists an inherent bias in many of the studies as programmes required participants to volunteer. It is well recognised that volunteers may be different to those who do not, so may not be truly a representative sample of the general population (Hennekens and Buring, 1987).

Lack of compliance and high drop out rates are also a feature of many studies, with a noticeable failure of many to examine the characteristics of dropouts and how this may have affected their final results (Barlow, 1999). Non-compliance results in a decease in the ability of the study to detect true differences between the groups under study (Hennekens and Buring, 1987). Hill (1999) identified "twin dangers" in programmes where there is failure to take up the service (volunteer) or substantial drop out rates.

> "First, a service may only reach and help those who are most easily helped, because they are highly motivated to change/or their problems are less serious. Second the service may exclude or be much less accessible to certain groups on the grounds of poverty, language or cognitive ability".

The study populations have included a myriad of different age groups, cultures and nations but have predominantly been carried out in the United States which makes their generalisability to other countries and populations difficult. Many interventions/studies have not been repeated on other populations or re-evaluated to examine long term effects.

Comparison between studies is further hampered because of the amalgam of interventions and type of services that may be looking to achieve similar outcomes. For example, early intervention programmes may include day-care and/or parental education programmes. Equally parental education programmes may be used in trials for different outcomes e.g. behaviour, obesity, prevention of child abuse.

Other problems inherent in this type of research were outlined by Hall (1996) and Hill (1999).

- Difficulty in measuring specific research outcome which may only occur years after the intervention.
- Changes in health behaviours in populations occur slowly and thus are difficult to measure.

- Rarity of adverse outcomes e.g. Sudden Infant Death Syndrome, which necessitate very large samples or measurement of proxy outcomes.
- Variations in health professionals' skills or the intervention programme.
- Views and influence of fathers is often absent from studies.

Empirical evidence

Randomised controlled trials are often referred to as the "gold standard", providing the best available evidence for the effectiveness of a intervention. If the sample size is adequate and study protocols correctly adhered to, they can offer a degree of certainty and confidence about the validity of the result that no other type of study can (Hennekens and Buring, 1987).

Outline of report

The remainder of the report is presented in five sections. First there will be a brief explanatory overview of some of the services. The second section will examine the empirical evidence for specific outcomes. Thirdly, relevant items from the North American experience will be discussed. Economic analysis will be covered in the fourth part before the conclusions and recommendations.

TYPES OF SERVICES

Parent education programmes

Parent training programmes have been in existence since the 1960's and have gained popularity over the decades. Lamb and Lamb (1978, cited by Dembo *et al*, 1985) defined these programmes as "the formal attempt to increase parents' awareness and facility with the skills of parenting". Briefly, the programmes can incorporate different methods that can be educational, behavioural or have elements of psychotherapy. The programme can be undertaken individually or in a group, usually over a set period of time (Dembo *et al*, 1985; Pugh *et al*, 1994; Barlow, 1999). Pugh *et al* (1994) outlined the desired goals of parent education programmes:

- Develop greater self-awareness
- Use effective discipline methods
- Improve parent-child communication
- Make family life more enjoyable
- Provide useful information on child development

Studies have shown that such programmes can have a positive impact not only on parents' attitudes and behaviours to childrearing, but also their own personal mental wellbeing and the behaviour and wellbeing of the child. The use of parent education has now become an integral part of many different family support services. A note of caution is sounded by the some reviewers, who stress that parent education is not a panacea for all problems as in many programmes there is a high drop-out rate of participants (Barlow and Coren, 2001).

Limitations of parent education programmes

Research has identified factors why parents do not participate in education programmes or drop out of programmes (Dawson *et al*, 1989; Frankel and Simmons, 1992; Cunningham *et al* , 2000; Barlow and Coren, 2001):

- Logistical factors e.g. time or location of meeting, availability of childcare
- Single parents
- Low education levels
- Family dysfunction

- Low socio-economic class
- Low levels of education
- Ethnic group
- Children with greater number of and/or more severe behavioural problems
- Inexperienced therapist

Dawson *et al* (1989) found that mothers from lower socio-economic classes lacked the social skills to feel comfortable in large groups and discussions. Parental feelings of negativity and helpless also feature as reasons for initial non-participation or discontinuing with the programmes (Frankel and Simmons, 1992; Cunningham *et al*, 2000).

Health visitor/home visiting

Health visitors are a key element of the British childcare system, with these trained professionals caring primarily for all families with young children in their own homes. The remit of the health visitor includes health promotion/prevention and developmental assessments of children but also health promotion/education for all the family (Elkan *et al*, 2001). This intervention has been proven to be effective in improving a broad range of parent and child behaviours (Robinson, 2000; Elkan *et al,* 2000; Elkan *et al*, 2001):

- family nutrition
- immunisation rates
- maternal psychological well-being

Health visiting has been effective in reducing:

- incidence of language delay
- injuries and early hospitalisation
- child behavioural problems

The process of home visiting, not only by trained professional health visitors, but by trained volunteers has proved to be successful. An example of such non-professional volunteer visiting is the Community Mothers Scheme among disadvantaged families in Dublin (Johnson *et al*, 1993). Children of the intervention group were more likely to have been immunised, with both mother and child having improved nutritional

intake. Mothers who received visits felt less tired and miserable than those who did not receive a visit. However it should be noted that much of the research into the effectiveness of health visiting has been conducted in the United States with populations identified as at risk (Robinson, 2000).

Early intervention programmes

Early intervention programmes began in the United States in the 60's in an effort to combat the effects of poverty and disadvantage in certain high-risk groups. These programmes, such as The Perry Pre-school programme, High Scope programme and Head Start programme, combine a variety of methods – high quality day care incorporating aspects of pre-school education, parent education, home visiting and other methods to improve outcomes. Children who attended these programmes overall had significantly better outcomes than controls e.g. better academic achievement, less teenage pregnancy rates, higher earnings in later life (Yoshikawa, 1994; Hertzman and Wiens, 1996; Zoritch *et al*, 2001).

EVALUATING OUTCOMES

The quantitative evidence

Despite the quantity of evidence on this subject, there is a dearth of studies examining the effectiveness of universally available services. Much of the published research uncovered by the authors relates to targeted services and is not generalisable to the general population. The initial search strategy was to look for studies of universally available services, ideally randomised controlled trials (RCTs) with a representative study population. In view of the above mentioned difficulties with the available evidence, the strategy was broadened to include any studies which had in the study population a mixture of both high risk and low risk families (regardless of proportion) or study populations that excluded "at risk" families.

Ability of early intervention programmes to improve childhood outcomes

A comprehensive review of randomised control trials of day care for pre-school children was undertaken in 2001 by the Cochrane Review (Zoritch *et al*, 2001). Only eight trials were forwarded for the final review, all which contained limitations:

- The day-care was usually provided as part of a wider programme of early intervention which included home-visiting and/or parent training and support
- All studies have been carried out in the USA
- Studies were conducted exclusively among disadvantaged populations

So although the review was entitled day care for pre-school children, it appeared more appropriate for it to go under the general title of "early intervention". Overall the review showed that these combined day-care programmes had favourable results for the disadvantaged children in the short and long-term, including improving school achievement, decreasing teenage pregnancy rates, unemployment rates and criminal behaviour. In regard to parental achievements, mothers were found to have better education and employment levels, while the effects on fathers had not been examined/determined. The extent to which these positive results are generalisable to other socio-economic groups or other countries could not be determined.

Hertzman and Wiens (1996) made an interesting observation in regard to pre-school education, based on the results the Perry Pre-school Study, one of the biggest pre-school early intervention programmes conducted in the United States. They commented that although the intervention children had better outcomes (see page 15) when compared to controls, their social and educational achievements did not match those of more well off children (higher social class) who had received no special pre-school education.

The Brookline Early Education Project (BEEP) is one the few RCTs that examined the effects of a kindergarten programme on families of all socio-economic levels (Pierson *et al,* 1984; Hertzman and Wiens, 1996). Young children of parents with a wide degree of educational levels were randomly assigned to three different levels of kindergarten education or a control group. All children benefited from the programme, however children of parents with low education levels needed the more intensive programme to show any effect. The researchers noted that once the intervention children went into primary school that the programme did not raise their academic grades above others, but that they had improved social skills and had fewer problems.

The UK Child Health and Education Study, was a longitudinal study which examined the effects of pre-school programmes (pre-school, day care and play groups) on children's academic achievement and cognitive development. Children who participated in any pre-school care had better vocabulary and mathematical skills at age ten than those who had not attended. These positive effects were increased especially if a parent (usually mothers) had participated somehow in their child's day care programme. The study showed that children in all socio-economic groups benefited from participation in pre-school programmes (McCain and Mustard, 1999).

Improving maternal psychological health

In 2001, the Cochrane Review examined the evidence from randomised controlled trials in regard to parent training programmes for improving the psychological health of mothers. The review arose from the increasing prevalence of mental health problems noted among women, estimated to occur in every 1 out of 3 women, while post-natal depression is thought to affect 10 – 15% of mothers (Barlow and Coren,

2001). Further to this, research suggests that the psychological health of the mother affects not only the mother-infant relationship but also the subsequent mental health of the child.

After a rigorous selection, 22 out of a possible 56 RCTs were included in the review. Most studies failed to meet the standard for methodological reasons. Only two out of the 22 studies had subjects taken from the general population, the rest had subjects identified as high risk or with children with reported behavioural problems already. There was a marked degree of heterogeneity among the trials; most trials had not been designed to specifically look at the outcome of maternal psychosocial health. One of the overriding criticisms of the studies was their failure to measure the severity of the problems of the family (parent or child) at the beginning of the study.

Despite these reservations and the identified weaknesses of the 22 studies, the review concluded that that there was sufficient evidence to show that parent training programmes did improve the psychosocial health of mothers. This suggests that this would also have a positive long-term effect on their relationship with their children and on their health and development. However, generalisability to all mothers whether they have manifested psychological problems or not, has yet to be proven.
One Australian home visiting initiative targeted new mothers, of any parity, at low risk. The Sutherland Family Network was a volunteer home visiting scheme, which focused on the mother, rather than the child. A phenomenological investigation (experiential analysis) was undertaken, which showed the programme had positive outcomes, linking isolated new mothers, especially those with more than one child, to social networks and health professionals (Taggart *et al*, 2000).

Interventions for preventing obesity among school children

The prevalence of obesity is increasing world-wide, and is related to changes in lifestyle i.e. diet and exercise (Müller *et al*, 2001; Campbell *et al*, 2001). Obesity in childhood is directly related to obesity in adulthood, which in turn leads to increased morbidity and mortality (Müller *et al*, 2001; Campbell *et al*, 2001). There are no figures for the prevalence of obesity in school children in Ireland, however the prevalence of obesity in British school children has risen since 1984 and now (depending on region and gender) lies between 9% and 16% (Chinn and Rona, 2001).

Currently in the United States it is estimated that 22% to 39% of children are obese (Campbell *et al*, 2001).

A review was undertaken by the Cochrane Library to assess the evidence for the effectiveness of interventions designed to prevent obesity in childhood (Campbell *et al*, 2001). The was a limited amount of quality data found for the subject, only seven studies were included in the review, three followed up subjects after one year and four followed up subjects after three months. The lack of good quality research meant that the reviewers were unable to make any conclusive or generalisable inferences about the effectiveness of obesity prevention in childhood. However, the evidence did indicate that promoting better diets and exercise in children aged 7 to 12 years in the United States may be useful and warrants more study.

Müller *et al*, (2001) concurred with the results of the Cochrane review, again stressing the lack of quality empirical research into the subject, but felt that the studies which had been undertaken showed promising results in favour of prevention (both targeted at high risk children i.e. those with obese parents or offered universally). Better school education and social support were advocated as strategies for the future.

Emotional health of children

Poor behaviour originates in the family and there is evidence to show that poor behaviour in childhood can persist into adolescence and turn into chronic delinquency (Yoshikawa, 1994). It is reported that rates of mental illness are increasing among young people and it is estimated that 20% of Irish children suffer from some sort of psychiatric or behavioural problems (Denyer *et al*, 1998).

Improving behavioural problems

Barlow (1999) undertook a systematic review of the effectiveness of parent education on improving behavioural problems. Barlow reports the lack of high quality research on the effectiveness of parent-training programmes (defined in this review as "a group process with a defined curriculum aimed at enhancing the parenting skills of the participants"). Overall the review was constrained by weakness of the methodological designs of various studies and lack of quantitative data. The

principles of evidence based medicine formed the inclusion criteria and only 16 out of 255 RCTs examined were eventually included in the review.

Dropouts from the trials were recorded in ten studies, but there was failure to analyse the effect of this on the eventual outcome. Box 3 outlines the main findings of the review.

Box 3 Main findings from "Systematic review of the effectiveness of parent-training programmes in improving behaviour problems in children aged 3 – 10 years (Barlow, 1999).

Group based programmes have a positive impact on the behaviour of children aged 3 to 10 years

Group based programmes are more successful in the long-term in improving the behaviour of children compared to working with parents on an individual basis

One study showed that community-based group parent training produced more changes than individual clinic based programmes

There is insufficient research to demonstrate which aspects of group parent programmes are the decisive factors in bringing about change

While all group-based programmes produced changes in children's behaviour, the more "behavioural" type of programme, in which the parent was trained to use reinforcement techniques effectively, appeared to produce the best results

Behavioural programmes are now sufficiently well researched and their effectiveness has been demonstrated. However, there is still insufficient research, demonstrating "which" parents do and do not benefit from the different types of training programmes available

There is a need for further controlled studies utilising both process and outcome indicators, alongside a study of the cost-effectiveness and public health potential of parent-training programmes

Again the results of this review show a positive effect of parent education programmes, but are unable to generalise the results to the general population.

Another community based programme was found to produce more changes than the individual clinic based programme. A Canadian study also found positive effects when it examined the outcomes of a universally available community based parent teacher programme (although it was not a RCT) (Cunningham *et al*, 2000). The programme was community based, in local schools and offered randomly to all

families with children aged five to eight. The rationale behind the study was that community based programmes, rather than clinic based, may affect participation levels in parent education programmes. The advantages offered are that the locations are closer to home and participants are more likely to be demographically similar and more comfortable in the programme. The study looked at the characteristics of participants. Enrolled parents were more likely to have:

- Lack of parenting experience i.e. firstborn child
- Behavioural problems
- At least an education to high school level

Parents with an immigrant background, single parents or limited extracurricular child activities were associated with lower enrolment. The majority, 80%, of children of enrolled parents had no evidence of behavioural problems. The authors felt that the programme was worth pursuing because "…most children with psychiatric disorders emerge from the low risk population, this [programme of school-based, with large-group] provides better preventative opportunities" (Cunningham *et al*, 2000).

Preventing behavioural problems

There have been several experimental early intervention programmes aimed at preventing behavioural problems of children of specifically targeted high-risk families. There is not a consensus of agreement about the effects of the studies. Aronen and Kurkela (1996) felt the results of these types of programmes have proved to be patchy, some failing to show any benefits and others having only short-term effects due to a combination of methodological problems and other reasons. Conversely, Kolbe (1997) felt that a major reduction in mental health problems were found in the intervention groups.

Two trials were identified that appear to have been successful in preventing the appearance of mental health symptoms in the long term among teenagers using universally available programmes.

In Finland, the long-term effects of a home-based early intervention programme of counselling for parents were analysed after 15 years. Parents in the intervention group received 10 counselling sessions per year for five years from a psychiatric

nurse, starting when their infant was six months old. The study population were a mixed group of intervention and control families with young children of different social and economic backgrounds, with only 17% of these considered "at risk" (Aronen and Kurkela, 1996). Even after 15 years there were still positive effects on the mental health of the children of the intervention group (now teenagers) whose parents had received counselling. There was no difference found between the "low risk" and "high risk" families.

A randomised control trial of brief family intervention therapy specifically designed for the general population was conducted on American adolescents (Spoth *et al*, 2000). The brief intervention therapy consisted of a weekly session for seven weeks teaching both parent and child skills to identify, cope with and reduce behavioural problems. The results of this trial showed beneficial effects in reducing aggressive and hostile behaviours in the intervention group of teenagers after four years. Most of the participants were white, from two-parent families (although from different socio-economic groups), but studies to test the generalisability of the method to other mixed populations have begun.

Preventing alcohol abuse

Alcohol use is widespread among Irish teenagers with rates among the highest in Europe (Hibell *et al*, 2001). A recent study uncovering that 34% of 15 to 16 year olds having drunk alcohol forty times or more in the past three months with 23% binge drinking (drunk heavily at least three times in the previous month) (Hibell *et al*, 2001).

In Minnesota, Project Northland, a trial to prevent adolescent alcohol use, was undertaken using a multilevel community-wide approach. The programme was a multi-component project aimed at several different teenage age groups, in the community. Programmes were run over three years which taught leadership, communication and behaviour modification skills to the teenagers, while at the same time parent education was also provided. The study is of interest as it used a large sample of mainly white students from a rural area comprising of lower to middle class communities. It was able to maintain participation in the programme over three years

at the end of which intervention students reported less use of alcohol than the control students (Perry *et al*, 1996).

Preventing child abuse

Guterman (1997) examined the evidence for early intervention in preventing physical child abuse. In preventing child abuse, "early" also covers the necessity of starting the intervention while the child is very young and in the initial stages of parenthood when the risks are highest. Eighteen randomised control trials were reviewed from which emerged a "promising yet complex picture". The review was limited by the fact that most studies used different measurement tools and had small sample sizes. The common components of successful studies are shown in box 4.

Box 4 Core set of early intervention principals for preventing child abuse (Guterman, 1997).

Early identification and/or screening of families referred through a universalistic services system – ideally during the perinatal period

Initiation of supportive services during pregnancy or shortly after birth

Voluntary participation

In-home service provision which is occasionally complemented by services from the primary health care setting, social services or support group

Case management support – formal supports for families

Provision of parenting education and guidance

All of the study populations had a demographic risk e.g. low socio-economic status, single parent, teenage mother. Guterman (1997) found that studies which recruited directly from the universal maternity services (e.g. maternity hospital, clinic, etc) and that did not psychologically screen and then target families at high risk for their study population had better outcomes, than those studies which did screen. He hypothesised that targeting services to only high risk families "screened out" families who may be more responsive/receptive to the intervention. Gutterman suggests that:

> " …programs may yield their greatest clinical impact and make the best use of scarce resources when they offer services to demographically based groups, particularly to minority teens, who are universally offered services, rather than screened for high psychological risk. At this time, the existing empirical base does

not appear to support the use of extensive psychological screening, particularly in the light of both the increased risk of stigma often accompanied by such screening and the questionable predictive capacity of current maltreatment risk assessment instrumentation for this population".

Preventing childhood injury

Roberts *et al* (1996) conducted a systematic review of 11 RCTs of home visiting programmes examining their effect on preventing accidental and non-accidental childhood injury. The trials employed a spectrum of home visiting interventions, from social support from non-professionals to educational programmes backed up by a variety of professional staff – health visitor, social worker, doctor. The key points of the review are summarised in box 5.

Box 5 Main findings from: "Does home visiting prevent childhood injury? A systematic review of randomised controlled trials" (Roberts *et al,* 1996).

This systematic review of randomised controlled trials shows that home visiting can substantially reduce rates of child injury (from any cause).

No consistent effect on child abuse (non-accidental injury) was found, but differential surveillance for child abuse between visited groups and control groups is an important weakness in many trials

The role of health visitors and non-professionals in the prevention of child injury deserves further attention

The authors highlighted that all but one of the trials targeted "at risk" groups, "which may restrict the extent to which the results are generalisable to programmes of universal health visiting".

THE NORTH AMERICAN EXPERIENCE

The United States

Healthy Steps for Young Children Program (HS)

In 1996 the United States began to trial a new universal programme for paediatric health care, Healthy Steps for Young Children Program (HS). It is designed for all families with young children (birth to three years), not just for those identified as at risk. This indicates that the United States is moving away from a targeted approach with what appears to be the strongest support of universal services to date. HS is put forward as a new model of paediatric health care, catering for not only the child's health but also psychological wellbeing as well. It aims to promote child health and outcomes by strengthening parents' knowledge, attitudes and behaviours (Taaffe Mclearn *et al*, 1998; Guyer *et al*, 2000; Lawrence *et al*, 2001).

Lawrence *et al* (2001) stated that the goals of the programme were to support the physical and emotional development of every child along with supporting the parents in their child rearing knowledge and skills. This is in conjunction with supporting the clinical paediatric primary health care practices to meet the needs of these families.

The impetus behind the Healthy Steps programme is based on many issues (Guyer *et al*, 2000; Lawrence *et al*, 2001) including:

- The changing dynamics of American families e.g. more mothers returning to work after birth
- Parents having less experience with dealing with children
- The growing demand for more advice and information among American parents
- The importance of the family environment in maximising development in early childhood
- 88% of children access paediatric health care therefore this is the ideal environment to place early intervention

The overall hypothesis is that by educating and supporting parents, families and children will benefit. The Healthy Steps programme is based where the child receives their health care and a Healthy Steps Specialist (HSS) expert in early child

development works along side the paediatricians and nurses in the practice. Box 6 outlines the programme contents of Healthy Steps.

Box 6 Components of Healthy Steps (Guyer *et al,* 2000*).

Healthy Steps Specialist (HSS) is located in the paediatric office and the program offers a package of services including:

1. Extended well-child office visits; designed to answer questions about child development; identify family health risks; take advantage of teachable moments
2. Home visits by HSS: timed to reach parents and their children at predictable junctures in their development; a minimum of 7 visits over the first 3 years
3. Child development telephone information line: HSS available to answer questions about day to day worries and developmental concerns
4. Parent groups: facilitated by HSS, offering social support as well as interactive learning sessions and practice in problem solving
5. Tool for gauging child development: used to detect early signs of developmental or behavioural problems and provide teachable moments
6. Written information materials for parents that emphasise focus on prevention: child health and developmental record
7. Links to community resources: community resources and parent-to-parent connections; internet home page

*Source: The Commonwealth Fund. *The Healthy Steps for Young Children Programme,* 1998.

A common criticism of previous early intervention programmes has been the lack of rigorous scientific evaluation. Thus the designers of Healthy Steps have incorporated a comprehensive evaluation process into the study design. Unfortunately there are no results as yet from this process.

Universally available school based care

"Schools of the 21st Century" is a pilot programme of a universally available intervention in the United States. The programme is a school-based system which aims to integrate family, school and health care systems for children from birth to 12 years. Its goals are to be more responsive to the needs of all parents by providing high quality but affordable and accessible care to aid the optimal development of children. There are currently 250,000 families in 16 different states enrolled in the programme.

Finn-Stevenson *et al* (1998) conducted a preliminary evaluation on 183 children from mainly middle class, white suburban families in the State of Missouri. The

researchers reported the "usual" problems faced by these programmes e.g. high drop out rate, variation of quality of the programmes offered between intervention schools. They also state that at this early stage the results are only "merely suggestive". These results pointed to reduced parental stress influenced by stable and reliable childcare, and less financial output on childcare. The pre-school programme played a part in early identification of special needs children and increasing their readiness for kindergarten. However further and more in-depth research is necessary, with sufficient sample size to give statistical power before any conclusive positive outcomes can be made.

Canada

Ontario's community services department carried out "The Early Years Study", looking at how the province could positively influence and improve the health of their children (McCain and Mustard, 1999). The study affirmed that the first years of life are crucial in a child's development, in regard to the type of nurturing and learning they experience. The study strongly advocated universal services, as the authors felt the evidence showed that focusing on the development of all children would improve their health and wellbeing in the future.

> "Ontario's approach to early child development should be universal in the sense that programs should be available and accessible to all families who choose to take part. There should be equal opportunity for participation and all children should have equal opportunity for optimal development. Targeted programs that reach only children at risk will miss a very large number of children and families in need of support in the middle and upper socio-economic sectors of society" (McCain and Mustard,1999).

They also concluded that responsibility for improving services lies not only with the Government but with families, communities and the voluntary and private sectors.

> "We are not using the term universal to mean government mandated and funded programs. We mean community initiatives to create the necessary child development centres and parenting supports taking into account cultural, linguistic,

religious and other characteristics that are important for families in the early period of child development" (McCain and Mustard,1999).

ECONOMIC REVIEW

The financial cost of a programme is an important part of any evaluation; whether the programme is cost effective is an integral and important part of its feasibility and long term survival. This is also true of family support services where there is a finite budget to stretch over all child related services (Knapp and Lowin, 1998; Commission on the Family, 1998). Indeed it is one of the arguments used against universal services because they cost more initially to implement (Offord *et al*, 1998; Offord *et al*, 1999). Hall (1996) advocated the use of targeted resources, declaring that "…to do some things well and in depth for some individuals is likely to be more cost effective than providing a token service for a large number of people".

Few of the studies reviewed above have included an economic analysis. Knapp and Lowin (1998) blame the lack of data for analysis as one of the main reasons for the scarcity of economic evaluations in the child care area. They claim that data for analysis is difficult to obtain because of:

- Difficulties in defining needs and outcomes
- Multiple agencies providing many different types of service types (often uncoordinated)
- The complexity of measuring outcomes
- Lack of recognition among service providers for the need for economic evaluation

Knapp and Lowin (1998) also state that another of the main reasons for the scarcity of studies in this area is due to the lack of economists working on social care policy or services research, and specifically in the child care field:

> "This is partly because invitations to economists to participate in evaluative studies have sometimes been narrowly focused on costs (economics almost seen as a form of glorified accountancy), when most economists usually want to investigate more exciting matters, moving out from cost to cost-effectiveness (that is, incorporating proper outcome measurement) and on to incentive structures which seek to ensure that the best treatment arrangements actually occur" (Knapp and Lowin, 1998).

The Early Years Study (McCain and Mustard, 1999) strongly supports investment in early child support to maximise their development in the future. Figure 1 clearly shows the discrepancy between current public expenditure and brain development.

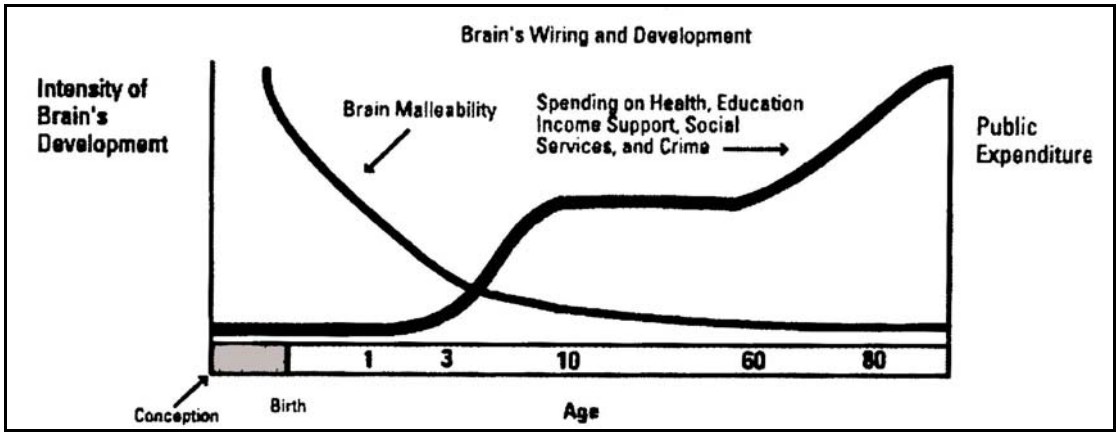

Figure 1 Brain development – opportunity and investment (Perry,1996 cited in McCain and Mustard, 1999).

The majority of spending occurs once the child has entered primary school, aged five or above when already it may be difficult to reverse the negative influences on early brain development and the child's subsequent life outcomes (McCain and Mustard, 1999). This theory is supported by Keating (1999), who adds that it appears that such expenditure is based, albeit unwittingly "…on the presumption that early development is the least important, not the most".

The general consensus from the studies reviewed agree that costing is difficult because of the indirect nature of the programmes e.g. savings in child care, ability of parents to return to work and therefore pay taxes, future earning of the child. Most studies however hypothesise about the future long term benefits to the child and society. Keating (1999) also agrees with these opinions:

> "When we examine the costs of failing to provide supportive contexts for developmental health - in terms of reduced school performance, increased anti-social behaviour, reduced subsequent work participation and so forth – we see that they are substantial. Conversely, the savings down the road from early interventions that prevent these problems are also quite substantial. Investment in

high-quality early child care on a population basis is likely to have a return in terms of such savings that is at least double the original investment".

Some studies did manage to put broad figures on the future savings that could be made in the future. An economic evaluation of the High Scope pre-school programme run in the 1980's for disadvantaged children in the United States showed that for every $1000 spent, $4130 would be saved in the future. This achievement was considered possible as the participants of the programme were shown to have continued their education and gained employment, therefore had less criminal convictions and use of social services (Sylva, 1989). The Perry Pre-school Programme (see page 14), a similar project, was estimated to return $7 for every $1 spent (to the age of 27) (Yoshikawa, 1994). When discussing the feasibility of the Brookline Early Education Programme, again the authors did not undertake a cost analysis, but considered that the investment per child would be substantial, approximately $2000 (1984 prices, not considering inflation). The authors agreed that such additional costs to the school would have to be found not only from parents but also from outside agencies. However, it was felt the investment would be returned sometime in the future as the intervention children would continue to finish their education (Pierson *et al*, 1984; Hetzman and Wiens, 1996).

Denmark provides the most universally available day-care service for children under six years of age. The brunt of the costs for this acknowledged expensive programme is borne by governmental agencies. In 1991, outlay for parents was around 5% of the yearly family income, with less well off parents paying less or nothing (Kamerman and Kahn, 1995; Myers, 2000). In Ireland, the report by The Commission on the Family (1998) acknowledged that there is "virtually no state investment in the care of children in the years before entry into primary school". The report estimated it would cost £85 million to provide good quality day care/pre-school for all three and four year olds children in the country.

Keating (1999) highlights another cost of poor investment in early child development that is difficult to estimate:

"…the cost to society in terms of its future potential to be economically innovative and thus to grow its economy. …failing to provide supportive contexts for human development, particularly for early child development, is likely to incur these "hidden costs" of lost opportunities for future economic growth. If the growing economies of the future rely heavily on human and intellectual capital, as many contemporary economic models suggest they will, then this under investment may represent a major, though largely hidden, cost to society – the cost of talent lost".

CONCLUSION AND RECOMMENDATIONS

The purpose of this report was to review the evidence for the effectiveness of universal family support services. After examination of the literature this review concludes that, although there is not enough *empirical* evidence at this time to prove the effectiveness of universal family support services, globally there is growing recognition of the need for such services.

One of the dominant themes to emerge from the literature is that although universal services are intended for all families, some families will require more help and support than others. Therefore universal services should not only care for all families, but also could extend to be a reliable means of identifying families who need this extra help. However, the service then needs to be flexible and responsive enough to be able provide this extra support (Guterman, 1997; Offord *et al*, 1998; Offord *et al*, 1999; Elkan *et al*, 2001).

One of the main tenets behind the provision of family support services is that all families, regardless of socio-economic class or designated "risk" status face difficulties and challenges in raising their children in the Ireland of the 21st Century:

> "…the skills of parenthood do not necessarily come naturally and most parents, even those who manage well on their own for most of the time, would welcome some support part of the time, without feeling that they run the risk of becoming stigmatised or being labelled failures by asking for or using support" (Pugh *et al*, 1994).

Targeting support services, based on pre-defined criteria can lead to stigmatisation resulting in those who require it most not availing of the service (Guterman, 1997; Offord *et al*, 1998; Elkan *et al*, 2000). Moreover, families do not fall neatly into "pigeon holes" of low risk or high risk. There is a continuum of risk just as there is a continuum of disease and no screening instrument is precise enough to identify all those who are at risk. Most problems will emerge from the general population, as opposed to those few "labelled" as at risk (Pugh *et al*, 1994; Elkan *et al*, 2001):

> "…the bulk of society's health and social problems occur in the large number of people who are not especially high risk rather than in the few who are at increased risk. Targeting services on a relatively small number of high risk individuals would thus have little impact on the total burden of ill-health and social problems in the population" (Rose, 1993 cited by Elkan *et al*, 2001).

Guterman (1997) supported this view, stating that targeting services to only at high-risk families of child abuse "screened out" families whom may be more responsive/receptive to the intervention.

> "At this time, the existing empirical base does not appear to support the use of extensive psychological screening, particularly in the light of both the increased risk of stigma often accompanied by such screening…"(Guterman, 1997).

This highlights the importance of the role universal services in identifying families who may require more assistance. A universal service which is offered to all is non-stigmatising and therefore more likely to be acceptable to a large proportion of the population. This will allow universal access to families with children, eliminating the need for any (imprecise) screening instrument:

> "…universal surveillance of the entire population is vital to the detection and prevention of problems as there exists no other effective means of predicting where and when difficulties will occur. No screening instrument can ever be sufficiently precise to identify risk groups" (Dingwall, 1989 cited by Elkan *et al*, 2001).

One service that could fulfil this function is the PHN. They are a familiar service already in place, however the numbers of PHNs and the service provided would need to be expanded to provide a comprehensive truly universal service. One recommendation would be to visit mothers in the ante-natal period, to build up a relationship with the family before the child is born. Another solution could be to enlarge the successful community mothers scheme, not only to identified "at risk"

mothers but also to all new mothers, regardless of demographics or socio-economic class (Johnson *et al*, 1993).

There is significant evidence for the impact of early development on future outcome of children (Hertzman and Wiens, 1996; McCain and Mustard, 1999). Adequate and appropriate nurturing and care in these formative years could help prevent problems arising in the future. Parent education programmes may help parents better understand their child's development in this crucial period and thus enable them to help their children achieve their potential in adulthood.

Early developmental support in the form of good quality pre-school has been shown to have some benefit in improving children's reading and mathematical skills (McCain and Mustard, 1999) but also has had an impact on improving social skills and reducing behavioural problems once in school (Pierson *et al*, 1984; Hertzman and Wiens, 1996). It perhaps would be worthwhile examining the programme of comprehensive (state funded) universal care for pre-school children of some of our European neighbours. This may assist Ireland in developing a similar programme in this country. Such a programme would have many benefits, more mothers/parents would be able to return to work (if so desired) and it could go some way to negating the detrimental effects of poverty on children from poorer backgrounds in improving their future outcomes.

Worldwide, both Canada and the United States are moving towards the provision of universal services for young children. The Early Years Study (McCain and Mustard, 1999) from Ontario clearly advocates for the provision of universal services for *all* young children, focusing on early development to improve their outcomes in the future. The United States also support this view and have initiated the Healthy Steps programme, an all-inclusive universally available paediatric health service (Guyer *et al*, 2000; Lawrence *et al*, 2001). There is no evaluation as yet from the Healthy Steps programme but it would be of value to review this analysis when published.

Although there is a paucity of empirical evidence about the effectiveness of universal services, those that were found do indicate positive results. Two interesting examples presented in this report illustrate the benefit of universal intervention. Both

interventions were based in schools in the community and involved interventions with both child and parent. Obesity and behavioural problems in children cause significant morbidity and mortality in adulthood but both are preventable. It is estimated that around 20% of Irish children have some type of behavioural or psychiatric problem (Denyer *et al*, 1998) while obesity is now considered to be reaching epidemic proportions in the developed world (Chinn and Rona, 2001; Müller *et al*, 2001). Irish children could benefit from such early intervention prevention strategies at school level, which seem to have some positive effect in changing damaging lifestyles and reducing the prevalence of these problems in the general population, regardless of risk level, before children develop these problems (Aronen and Kurkela, 1996; Spoth *et al*, 2000; Müller *et al*, 2001).

Community based programmes seem to be more effective and this may also suit the Irish situation better, with few urban centres, but widespread small rural communities (Barlow, 1999; Cunningham *et al*, 2000). Better use of resources could also be made by utilising existing programmes or in partnership with existing religious/voluntary organisations (Pugh *et al*, 1994; McCain and Mustard, 1999). This would also lead to a stronger sense of ownership of the service and reduce the risk of undermining community initiatives (Offord *et al*, 1998; Offord *et al*, 1999).

It was not possible to evaluate the cost of providing universal support as few of the studies reviewed have included an economic analysis, but without doubt providing universal services will be more expensive in the short term. However, the consensus among authors is that the long-term benefits to the child and society eventually will lead to recuperation and savings in the future. These indirect savings are difficult to cost e.g. savings in child care, ability of parents to return to work and therefore pay taxes, future earning of the child, improved parental well-being (Yoskikawa, 1994; Pugh *et al*, 1994; Hill, 1999; Barlow, 1999). Keating (1999) estimated that any monies invested in good quality child development programmes "on a population basis" would at least return double that in savings in the long term. The discrepancy between current expenditure on the child and their optimal brain development is shown in figure 1 (pg 29).

Universal provision of family support services is not without limitations, as providing a service to all reduces the benefit to the individual, in the hope that there will eventually be a long-term change in the overall population. It can also cause more inequality in service provision by helping most, those who are in least need (Offord *et al*, 1998). The economic perspective cannot be ignored understanding that resources are finite, as Hall (1996) puts succinctly: "…to provide some things well and in depth for some individuals is likely to be more cost effective than providing a token service for a large number of people". For instance in 1996 the Eastern Health Board spent 80% of its total child care budget on child protection (Commission on the Family, 1998), raising the question of how can finance universal services be financed without compromising child safety.

This review was hampered by the scarcity of studies on the effectiveness of universal services. There are numerous studies done on family support services conducted with families at risk, which overall show very favourable results for this group (Hertzman and Wiens, 1996; Barlow, 1999; McKeown, 2000; Barlow and Coren, 2001; Zoritch *et al*, 2001) but these positive results cannot be generalised to the whole population without conducting further research. There is a clear need for further studies in to the effectiveness of universally available family support services, including randomised controlled trials, with sound methodology, incorporating cost analysis and public health implications of universally available services.

One of the limitations of the review is that many of the studies suffered from methodological weakness and faults in the design. These were common problems frequently noted by a number of authors of meta-analyses reviewed for the report (Roberts *et al*, 1996; Hall, 1996; Barlow, 1999; Zoritch *et al*, 2001; Barlow and Coren, 2001). There was little commonality among them in regard to design, programme interventions and processes. Few had been repeated on different subject populations, many lacked statistical power and failed to analysis non-compliance. Most studies had been conducted in the United States only, which further reduced the generalisability of the results. A recommendation to be made is that any new programme starting up, regardless of whether it is a research trial or not, should have as a prerequisite, built-in evaluation both of programme effectiveness and economic analysis.

In relation to policy change in Ireland, the report of The Commission on The Family (1998), "Strengthening Families for Life" does address some of the issues raised by this review. It seems that the Government is committed at least to begin to make some changes in the provision of family support services, but it is not clear to what extent they will be universal services.

Finally, a note of caution was sounded by many authors. Family support services are not the panacea for all problems, but are a vital component of a wider range of initiatives that are necessary to improve and promote the health and wellbeing of Irish children now and in the future.

> "…no service programme can provide all that is needed to support and strengthen every family. A system of well co-ordinated, assessable, family centred services must rest on a foundation of a healthy community that affords adequate basic services and opportunities for education, housing and employment. Efforts to strengthen family-centred services will be insufficient unless the basic needs of families are met" (McCroskey and Meezan, 1998).

RECOMMENDATIONS

⊕ PHNs visiting mothers in the ante-natal period will help to build up a relationship with the family before the child is born. Another solution could be to enlarge the successful community mothers scheme, not only to identified "at risk" mothers but to all new mothers, regardless of demographics or socio-economic class.

⊕ Parent education programmes may help parents better understand their child's development in this crucial period and thus enable them help their children achieve their potential in adulthood.

⊕ Community based programmes seem to be more effective and may also suit the Irish situation better, which has relatively few urban centres, but widespread small rural communities.

⊕ Examining the programme of comprehensive universal care for pre-school children of some of our European neighbours would be worthwhile in assisting Ireland in developing a similar programme in this country. Such a programme would have many benefits and go some way to negating the detrimental effects of poverty on children from poorer backgrounds by improving their future outcomes.

⊕ Better use of resources can be made by utilising existing programmes or creating partnerships with existing religious/voluntary organisations. This would also lead to a stronger sense of ownership of the service by communities and reduce the risk of undermining their own initiatives.

⊕ Investigate the feasibility of commencing preventative based lifestyle programmes in primary and secondary level schools.

⊕ There is a clear need for further studies into the effectiveness of universally available family support services, including randomised controlled trials, with sound methodology, incorporating cost analysis and public health implications of universally available services.

⊕ Any new family support programme, regardless of whether it is a research trial or not, should have a built-in evaluation both of programme effectiveness and economic analysis.

⊕ Lobby the Government to act on the recommendations outlined in "Strengthening Families for Life" the document of the Commission of the Family.

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