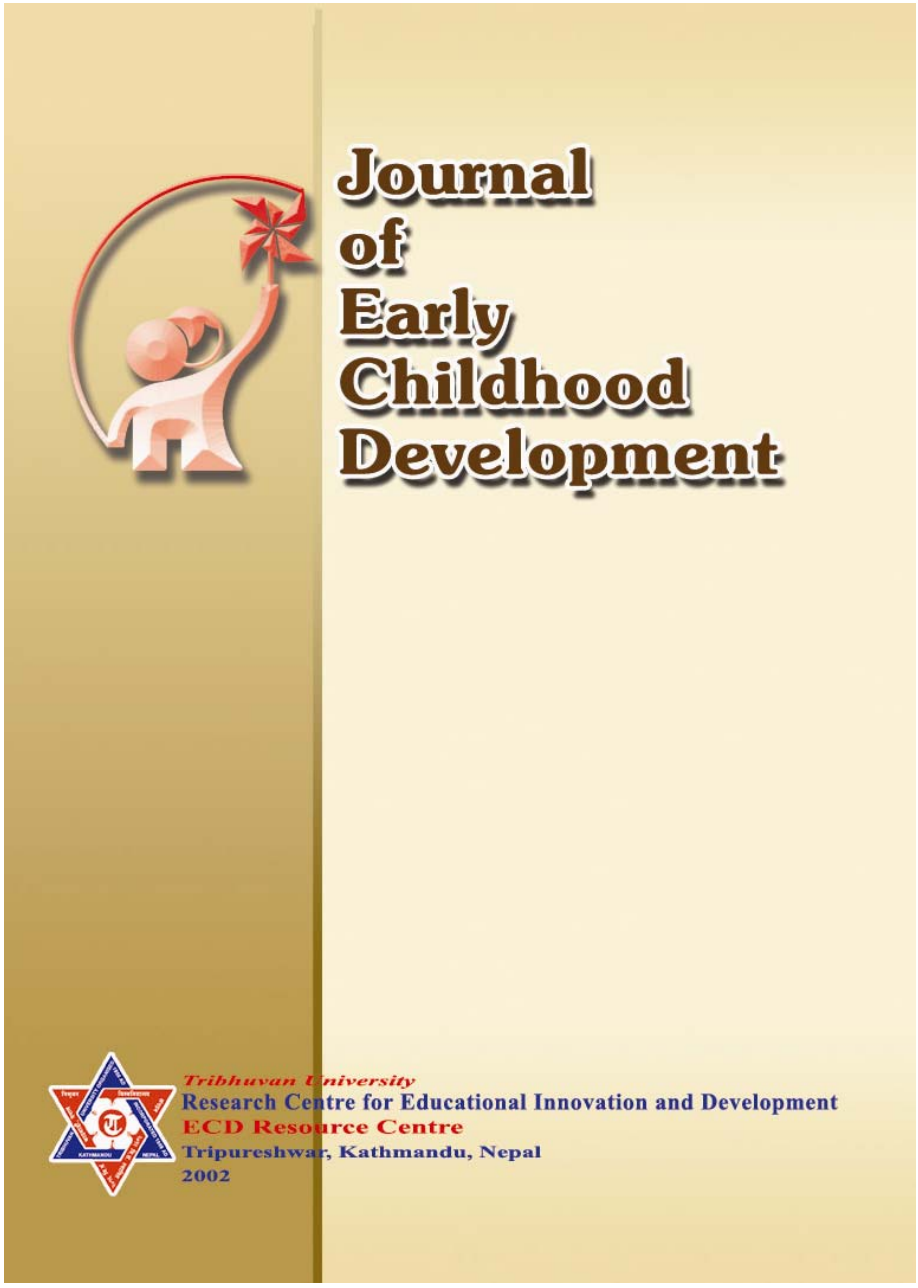
Journal
of
Early
Childhood
Development
Tribhuvan University
Research Centre for Educational Innovation and Development
ECD Resource Centre
Tripureshwar, Kathmandu, Nepal
2002

Journal of Early Childhood Development

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Preface

Early Childhood Development (ECD) has been one of the major activity areas of CERID. In order to facilitate information exchanges, sharing of experiences, and training/orientation of the people involved in ECD, CERID opened an ECD Resource Center in 1997. Since its inception the resource center has been generating ECD related resource materials, creating organizational linkages, developing a shared vision, organizing training programs and disseminating information on ECD through organization of dialogue sessions and conferences, publication of newsletters and now publication of this journal. This is the first journal devoted to ECD in Nepal.

This issue of the journal consists of eight articles written by academics, professionals and experts working in the field of ECD in Nepal and abroad. The articles open discourses on the meaning, trends and the challenges of the development of ECD in Nepal, the rights-based child development indicators, importance and initiatives of mother tongue in ECD, importance of health and nutrition focus, early childhood stage brain development and factors affecting the development, television violence and neurodevelopment of young children, importance of parental education, and analysis of national policies on ECD in Nepal. We hope that this journal will bring about better understanding and consequently better practices of ECD in Nepal.

As we are planning to make it an annual journal, we need to pool a supportive critical readership and contributors. We also need to make the publication match the expectations of the readers. For this we would very much appreciate comments and suggestions from the readers.

On behalf of CERID, I would like to express my sincere thanks to Dr. Cliff Meyers, and Mr. Abhiyan Jung Rana of UNICEF Nepal for the assistance received in publishing this journal as well as for the development of the ECD resource center as a whole. I would like to acknowledge the contributions made by all the writers whose articles appear in this volume. My special appreciation goes to Mr. Gaja Sundar Pradhan for his support in editing the language aspect. Appreciative thanks to Mr. Gautam Manandhar for layout and cover design, Mr. Bishnu Bikram Giri for computer typing and Mr. Bhakta Bahadur Shrestha for printing.

July, 2002

Hridaya Ratna Bajracharya
Executive Director
CERID

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Early Childhood Development: What is it? What are the Recent Trends and What are the Challenges Confronting its Development in Nepal?

- Kishor Shrestha, Ph.D.

This paper tries to define the meaning of Early Childhood Development (ECD), examine the current trends in the field of ECD globally and critically analyze the challenges connected with this aspect in Nepal.

What is it?

While attending seminars, workshops and formal and informal meetings at various places in Nepal it was observed that the participants tend to define ECD differently depending on their own experiences and field of work. The teachers working in pre-school programs define ECD as a pre-school program. The programmers and facilitators working in Child Care Center programs define ECD as a center where children are taken care of for 3 to 5 hours a day by a facilitator with or without the support of a helper. People working in Center-based Child Development Programs define it as a center where children are provided care and education services at the center for 3 to 5 hours a day. People working for Community-based Child Development Program define it as a service center established within the community but of course detached from the school.

One of the major limitations of the definitions these people have made is that most of them take ECD as synonymous to the education of children below 6 years of age. The definitions made by various individuals thus give only a partial meaning of ECD. The United Nations Children's Fund (UNICEF) provides a more comprehensive definition of ECD in *The State of the World's Children 2001* as follows:

> The acronym ECD refers to a comprehensive approach to policies and programs for children from birth to eight years of age, their parents and caregivers. Its purpose is to protect the child's rights to develop his or her full cognitive, emotional, social and physical potential. Community-based services that meet the needs of infants and young children are vital to ECD and they should include attention to health, nutrition, education and water and environmental sanitation in homes and communities. The approach promotes and

> protects the rights of the young child to survival, growth and development. (p. 17)

However, one of the limitations of the above definition is that it looks upon the ECD program to start only after the birth of a baby. It has been widely accepted that the growth and development of a child begins from conception. To have a complete meaning of ECD it is therefore important that the ECD program should also include services from conception and services for fetus in the mother's womb.

Generally, early childhood development programs in Nepal are known by various names. Early child care programs such as day care centers and child care centers; and early childhood education programs like nursery, kindergarten, pre-school and pre-primary schools all fall under early childhood development program. There has been a shift in emphasis from Early Childhood Education (ECE) to Early Childhood Care and Education (ECCE), and from ECCE to that of Early Childhood Development (ECD). ECE connotes educating the children at early childhood age; ECCE refers to taking care of children and educating them during the absence of parents and guardians. ECD encompasses a broader meaning in that it refers to the overall development of children. It, therefore, explains why the term ECD is becoming more appealing and is being widely used.

What are the Recent Trends?

Internationally, ECD has been a concern of not only industrialized countries but also of many developing nations, including Nepal. From a global perspective, some of the recent ECD trends are described below:

Focus on 0 –3 age group

What happens during the earliest years of a child's life, from birth to age 3, influences how childhood and adolescence unfolds.

It has been realized that this critical time span is often neglected in countries' policies, programs and budgets.

There are periods in life when the brain becomes particularly open to new experiences and is especially able to take advantage of them.

Human interactions are as important to the development of brain connections as having food to eat, sounds to hear and light by which to see.

There is a consensus that during early childhood, the brain's growth potential is unparalleled in later life.

According to the State of the World's Children 2001, UNICEF has chosen to focus on the early years, 0-3, because they are critical to how the rest of early childhood unfolds; and because these important early years are often neglected in countries' policies, programs and budgets.

Integrated Approach

The multidimensional nature of child development calls for an integrated program that includes health, nutrition, early stimulation, water and sanitation services. It is important to recognize that the needs of the young child are interdependent and therefore child development initiatives must be based on a holistic approach and implemented within the framework of an integrated structure. The integrated approach can be useful in many ways. It can give equal emphasis to the psychosocial as well as the physical needs of children. It can minimize the cost of the program by preventing the duplication of work and by increasing the efficiency of the functionaries. To provide integrated services, an institutional integration of various organizations responsible for delivering services related to the health, nutrition and education of the child should be initiated.

Holistic Development

The cognitive, social, cultural, physical and emotional dimensions of a child are interwoven. The child's physical surroundings, emotional ambience, relationships with others, and the immediate needs at any given moment affect his/her development. It is universally recognized that young children cannot learn adequately without an all-inclusive concern for health, safety, and physical care. A child development program should therefore emphasize fulfilling both the physical and psychosocial needs of children. One of the basic principles of child development is that the child's development cannot be compartmentalized into health, nutrition, and educational, social and emotional variables. All these functions are interwoven in a child's life and develop simultaneously. Progress in one area has a bearing on progress in others. Similarly, when something goes wrong in any one of those areas, it has an impact on all the other areas.

Involvement of Families and Communities

The involvement of parents, guardians and community members in the ECD program is considered essential for two reasons. Administratively, it is important that parents and the community feel the importance of the program as well as develop the knowledge and skills necessary to manage ECD programs. The involvement of parents and community people can reduce the costs of the program. The interest, enthusiasm and involvement of

parents and the community can increase the efficiency of the program. The involvement of parents and the community in planning, monitoring and implementing initiatives is necessary in order to sustain the program.

A child attending an ECD program would be looked after by a facilitator for only about 3 to 5 hours a day. The rest of the time the child should be with the family members and live in his/her community. In order to help the child develop to his/her full potential, the environment and services made available at the ECD center will remain inadequate if the child is deprived of the appropriate environment at home. Moreover, every community has its own values, beliefs and norms that it wants to transmit to its citizens. It is important that the program pay attention to those important values, beliefs and norms. If the program contradicts the social norms of the community, the people in the community will not accept it. Thus, community norms and values need to be incorporated in the program. This can be achieved by involving the parents and community in the program.

Not Liability but Base for Human Resource Development

Many industrialized countries, as well as developing nations, have considered ECD as a base for human resource development. However, the governments of many developing countries view it as a liability. Thus, no investment for ECD is included in the national budget of these countries. Looking at the need and at the role ECD can play in the development of human resources, a kind of realization of its importance among the policy makers is growing. International initiatives such as the World Declaration of Education for All (1990) and the UN Convention on the Rights of the Child (1989) have been successful in drawing the attention of governments towards formulating plans and policies and in changing the concept of viewing ECD from one of a liability to a means for human resources development. Nepal as well, although the investment in the national budget for ECD has not yet met the plans and policies developed after 1990s, considers ECD as a base for human resources development.

A Medium for Ensuring Child Rights

The program should be appropriate to a child's stage of development. It is essential to recognize that there are age-appropriate foods and age-appropriate care. The program should consider the individual needs and interest of the children and extend services accordingly. The caregivers should therefore be warm and attentive to the child's needs. In connection with indoor and outdoor activities, there should not be any discrimination made between girls and boys.

Article 6 of the UN Convention on the Rights of the Child (1989) states that the "States parties recognize that every child has the inherent right to life. . . .[and] States parties shall ensure to the maximum extent possible the survival and development of the child."

Article 18 of the same document states "For the purpose of guaranteeing and promoting the rights set forth in the present Convention, States parties shall render appropriate assistance to parents and legal guardians in the performance of their child-rearing responsibilities and shall ensure the development of institutions, facilities and services for the care of children."

These two articles emphasize the importance of proper care and education for the survival, growth and development of children. In this regard, ECD programs could be a viable medium for ensuring child rights.

Greater Positive Effect on Children in Disadvantaged Situations

Early interventions can improve the preparedness of children for school in terms of their physical growth, mental capacities, and social adjustment. The gains obtained during the early childhood can lead to increased enrollment in school, and to improved progress and performance in school. Many studies reveal that the effects of ECD programs have been greater on children in disadvantaged situations than on the children living in affluent and urban communities.

In regard to the importance of making ECE services available to all people Myers (1991) observes, "One argument used against early education programs is that they are discriminatory—favoring the upper class. That is certainly true if no special effort is made to assist the poor and if programs of early education are left to those who can pay for them"(p. 43). By providing ECE services it is possible to modify distressing socio-economic and gender-related inequalities (Myers, 1990, p. 37). Investment in early childhood development can help to modify inequalities rooted in poverty and discrimination (social, religious, and gender) by giving children from so-called "disadvantaged backgrounds a "fair start". Lal and Wati (1986) state that the evaluation of Integrated Child Development Service of India has clearly demonstrated that benefits of the program are greatest for lower castes and for girls (cited in Myers, 1991). Similarly, several Latin American studies have shown results favoring children from lower socio-economic status and children from rural areas (Filpm, et.al, 1983, cited in Myers, 1991).

What are the Challenges Confronting its Development in Nepal?

There are a number of challenges confronting the development of ECD in Nepal. Some of the major challenges are discussed below:

National Commitment

It is necessary to set goals and targets for making ECD services available to children living in remote, rural, and disadvantaged situations as well as to children living in urban areas. It is important that the government should have a strong political will and commitment to develop ECD in Nepal.

Expansion

In Nepal, there is virtually no ECD program for children under three years of age. Most of the programs available are targeted to children aged three to five. Some ECD facilities are available for only 8.01 percentage of children aged three to five (EFA Assessment, 2000). These facilities are mostly for children living in urban areas. Provisions have to be made for programs for the poor children living in rural and remote areas of the Kingdom. The Government should have a clear policy on this matter. It should encourage service agencies (INGOs and NGOs) to go to the rural and remote areas and provide early childhood development services.

Quality Improvement

Caregivers have minimum knowledge about ECD and child development. Most caregivers have low levels of academic backgrounds. The educated people are not motivated to work as caregivers due to the low level of financial incentives. Aptitude and motivation to work with young children, academic background and knowledge about ECD and child development are crucial factors for the delivery of quality services.

In order to improve the quality of ECD, it is important that programs be child-centered and gender-sensitive. The program should focus on interactive activities and encourage the child to be active learners and practice appropriate behaviors. Learning involves the child's acquisition of knowledge through exploration, interaction with materials, and imitation of role models. The program should be appropriate to a child's stage of development. It is essential to recognize that there are age-appropriate foods and age-appropriate care. The program should consider the individual needs and interest of the children. Indoor and outdoor activities should not discriminate

between girls and boys. Similarly, the program should focus on the holistic development of children.

Integration of Child Development Program Components and Development of Institutional Linkages

Although the need for an integrated approach for child development has been stressed in a couple of child-related plans and policies, no concerted effort has been made to integrate the early child development programs being run by various GOs, NGOs and INGOs. Thus, one of the major challenges for those working in the field of child care in Nepal is to develop plans, policies and programs that integrate the various child-related components as well as develop institutional linkages among the ministries, departments and national and international non-government organizations.

Investment on Early Childhood Development

An essential aspect of a sustainable ECE program would be the generation of adequate resources to support the program. The focus must therefore be on creating a realistic policy to generate such resources. Expenditure on ECD should be regarded as an investment in human resource development rather than as a liability. It is important to recognize that human resource development is a key to national development. The foundation for this development is laid before the child enters the primary school. The current policy of shifting financial responsibilities for ECD to the local community and the parents cannot improve the quality of ECD and lead to its expansion in Nepal. Two important things need to be considered when managing the financial resources of ECE. First, proper management could help minimize wastage. Secondly, investment in early education can bring high returns in the future.

Control Detrimental Practices

Many of Nepal's ECD programs include detrimental practices. Introduction of the three R's (reading, 'riting and 'rithmetic), paper and pencil tests, formal methods of teaching and coercive means of disciplining children are detrimental practices found in most of the ECD programs in Nepal. Hence, one of the major challenges for the government and all other responsible organizations and individuals is to control these detrimental practices. Enactment of a code of conduct for the caregivers seems to be inevitable in this regard. To ensure that the ECD programs do not have any negative effects on young children, the development of a national code of conduct for ECD workers is advisable. The training programs for caregivers should

include basic principles of child development and focus on the negative consequences of detrimental practices in ECD centers.

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Assessing the Supportiveness of the Environment for Young Children

- Caroline Arnold

The commitment to early childhood development programs as a key element of both basic education and overall child rights strategies is growing worldwide. This paper defines early childhood development programs and children's rights and presents a child rights-based framework for early childhood development indicators. It also deals with the tools and methods of collecting information for measuring the status of early childhood development.

A Child Rights Framework for Indicators

1. What is Our Understanding of Early Childhood Development Programs? ECD Programs and Children's Rights

Early Child Development (ECD) Programs

- Influence the contexts in which children are growing up (family, community, schools, health centers, policy) so that they are supportive of children's' overall development.
- Attempt to ensure that children grow up healthy, well-nourished, protected from harm, with a sense of self-worth and identity, and enthusiasm and opportunities for learning, able to communicate effectively and get on well with others.
- Address the issues, which slow and damage children's development.

> *In other words, they are about children's rights and the obligations of the state and of all adults to protect the individual child and create the conditions in which all children can develop their potential.*

Worldwide the commitment to early childhood development programs as a key element of both basic education and overall child rights strategies is growing. Early childhood programs were earlier viewed as merely a "piece" of basic education. It is relatively recently that the critical connection to ensuring children's rights has been made. This holistic view of children's well-being, while by no means new, has been validated and encouraged by the Convention. The basic needs for food, healthcare and protection have always been central to child-focused agencies, work and have been long instituted in government policies. It is more recently that these have been understood not just as needs but also as rights (implying duties and obligations) and that in addition the rights to affection, interaction, security, stimulation and opportunities for learning are being accepted as being just as fundamental.

However, there are still serious gaps in understanding. The Special Session preparations and documents provide ample evidence of this. Attention to young children's overall development as healthy, capable, confident and caring people is minimal. The only piece that receives appropriate attention is survival.

It is important for ECD programs to be firmly rooted in education because it is psychosocial aspects of children's development, which have the most significance for long-term social change and sustained realization of children's rights. The great strength of quality ECD programs is their emphasis on:

- developing children's understanding of their world,
- supporting the confidence, communication skills and flexibility they need to interact effectively with the world.

These are the capacities that have the greatest significance in enabling children, as they grow up, to deal with life's challenges and be active, contributing members of society. This is essential if we are looking to effect major change in society. Indeed the statements above apply to the best of what we do to support children's development, whatever age they are. The emphasis here is on ensuring that young children enjoy this sort of supportive environment because it is during the earliest years that our basic sense of ourselves and our relationship to the world is established. Patterns are established at this time that have far-reaching implications.

We know that **children's rights will be met when the environment around the child respects children's rights and supports their overall development**. As such some recent child development program design - for example in Nepal, Bangladesh, Vietnam and Laos - has framed the objectives (and the indicators) in terms of increasing the supportiveness of

the environment for children's overall development at all different levels (from family through to national policy).

2. What are We Concerned About?

Children's well-being (impact)

Program effectiveness--are programs working? (coverage, quality, etc.) what needs improving?

Accountability--are adults fulfilling their obligations to young children?

3. What do We Need to be Measuring?

What we need to look at is **how adults are meeting their obligations to children's** family members, parent educators, child development center facilitators/teachers, district staff, NGOs, government policy makers, etc. To do that we need to look at **children's status** and **adult efforts**.

The rights framework has ensured attention to **government policy** as a key to sustained change. However, all levels are critical if we are to achieve the sort of fundamental value changes and shift in social mores, which we are seeking. While the Convention is legally binding for state parties and, as such, is an immensely powerful tool, the **moral obligations to children extend throughout society** and long precede any treaty.

Child development programs seek to have a positive impact on the child's physical and psycho-social development. Therefore we need to be able to observe changes in the child. However, we also need to be looking at all the **different levels (family, community, local institutions, national policy)** to confirm (or otherwise) that adults are meeting their obligations to children. Using a multi-level framework allows us to home in on problematic areas - because we won't see the desired achievements at the child level on a significant scale unless things are working at the different levels.

We have to look at effort in terms of political will, financing, coverage, etc. We also have to be concerned with the quality of what is happening and the overall context. These will be key in determining the outcome for children.

The rights-based framework described here is being used in a number of countries and was used as the framework for the Consultative Group's Indicators Project in Nepal, a contribution to the EFA 2000 Assessment. This effort was co-coordinated by CERID and was very much a joint effort with the Ministries of Education and Health, Seto Gurans National Child Development services (a national NGO), the Save the Children Alliance and UNICEF/Nepal.

The **rights-based framework** attempts to summarize the overall concept visually - **with the child at the center surrounded by concentric circles representing the family, community, district and national levels**. It starts with identifying for each level the key question that we need to answer in order to make an assessment of how we are doing in supporting young children's development.

Note that within a rights-based framework we are concerned with the **whole child** and so **indicators are necessarily multi-sectoral and cross-sectoral**. Within each of these levels there are selected examples of indicators. These are only examples particularly for the "interaction" segment there is a vast range of possible indicators. The indicators are divided into 3 core areas:

Political Will

This covers areas such as policy, levels of support indicated by budget allocations and expenditure, program coverage, inclusion of young children's issues in agendas, etc. This is not seen as being exclusively concerned with national level decision making rather it takes account of all levels (district, village committee, etc.) and can go right down to household expenditure.

Socio-economic Conditions

This provides vital information about the overall context, which has a powerful influence on the realizing of children's rights. For the most part these context indicators have been established and are available in a wide range of existing reports. The concern is with basic indicators relating to people's well-being, income levels, health, education and gender information. It is important to have access to community and district level figures not only national figures, which may mask wide disparities.

Interactions

This is seen as a critical set of indicators. For children it is the interactions with the people around them, which have the most powerful effect on their well-being. And yet this is the area that is often most neglected. Often because the indicators are more subtle and may require different approaches to gather information. The range of possible indicators is vast and must be locally defined.

These indicators are concerned with the whole range of interactions which affect children's well-being - from opportunities to talk with others, play, etc. to feeding practices, healthcare within the home, health-seeking behavior, etc. Examples are given in the chart and one of the interesting points to note

is that some of the family and ECCD center ones are identical; for example, opportunities for play, frequent interactions with adults and children, exploration of a variety of materials and secure atmosphere in which children's efforts are appreciated and encouraged.

At the district and national levels the key interaction indicators are seen as being appropriate training and on-going back-up support and supervision for ECCD personnel. The constant recommendation from almost every ECCD evaluation worldwide should perhaps be included as a core indicator. The definitions of "appropriate" and "ongoing" have to be made locally.

This presentation of ECCD indicators is designed to i) illustrate the connections within an overall child rights conceptual framework ii) help ensure we don't lose sight of the key questions which concern us.

4. How do We Get the Information?

Quantitative and qualitative approaches

The framework of necessity is concerned with a wide range of indicators -- some easily obtained using standard quantitative methods and others requiring more qualitative research approaches.

- **Quantitative** indicators, which are collected on a large scale and routinely (enrolments, retention in primary comparisons of children who have participated in ECD programs with controls, nutritional status, numbers of personnel at village/district level, budget allocations, etc.)
- **Qualitative** assessments (small scale) using participatory research methodologies. The qualitative piece is important because it is the quality of children's interactions with others which is critical and while there are measurable indicators which help capture "quality" (responsiveness to questions, use of open-ended questions, etc.) more qualitative observations which take account of a whole host of factors relating to the way adults relate to children often end up providing more meaningful information and observe effects which may be hard to capture relying on only statistical methods.

5. A Note on Child Level Indicators

When gathering information it is important to come back to the basic questions -- for example at the level of the child what do we want to find out? We want information which confirms (or otherwise) their well-being - their happiness, health, sense of self-worth, ability to get on well with others,

communicate effectively, use their bodies skillfully and understand their world at an appropriate level.

What are the Best Ways to Get that Information?

We are basically trying to use our eyes, ears and minds well and there are many methods to choose from, e.g.:

Observation

Observation is the key and should be given emphasis in programs; both informal and structured observations are important:

a. informal (advantage - open to all sorts of information - may observe things which could not be anticipated but which are important indicators; disadvantage - more untidy)

b. structured (using checklist or other observation tool)

Listening to people

Conversations, Focus Group Discussions (FGDs) and semi-structured interviews with the children themselves, parents, caregivers and teachers.

Questionnaire

- For baseline (information regarding sex, age, family) information.

Monitoring forms

Developmental checklists

A few comments on developmental checklists

These are preferable to comprehensive developmental assessments, which are far more complex than are needed for most purposes. Most developmental assessments have been developed in the US, Europe or Russia. There have been many adaptations (e.g. the Denver has been adapted for Vietnam, Bayley has been adapted widely) but the extent to which assessments can be applied cross-culturally is highly questionable. As Engle emphasizes assessment tools are not intrinsically transportable being based on social conventions which vary tremendously from one culture to another. **It is not necessary to have normative data to assess whether an intervention has changed a child's developmental course**. A comparison between an intervention and control group does that.

A simple developmental checklist is most valuable as a practical tool to enable caregivers to better support all aspects of children's development. It

assesses the young child's skills in different developmental areas and highlights specific strengths and weaknesses at different ages/stages. This gives the caregiver/teacher the opportunity to plan activities which are developmentally appropriate for the child, e.g. if an ECD facilitator notices a child of 4 never joins in with other children she can make special efforts to organize group games and help the child to join in or to organize activities in pairs.

Defining indicators of well-being has to be developed together with representatives from the area in order to incorporate local perceptions. This does not mean that we will not make use of existing scales and checklist (such as the Philippines checklist which was cross-referenced with 11 other tools). It just means that we will be careful to ensure that local ideas about children's development and what is important are incorporated.

The childrearing study (Nepal) began this process - assisting communities articulate their own knowledge and values about how children develop and what it is important for children to know and be able to do. The researchers looked into parent's expectations of what children should know before they go to school. In *Dekhetbully* they listed skills that might be stressed in any country with universal primary education - "speaking properly", "able to read some letter", "able to dress", "self-care skills" and so on. But these parents also listed "taking care of siblings", "cattle herding", "starting the fire in the kitchen", "co-operating with others" - demonstrating a much greater emphasis on practical work-skills and social responsibility than would be expected in most affluent countries. This links closely with some of the categories such as personal life-skills and social connectedness being defined in new attempts to look at child level indicators.

Work on child well-being indicators in Nepal should be developed very much in dialogue with local communities and then discussed and debated with communities around Nepal to come up with something that would be widely agreed upon in terms of desirable "capabilities". Indeed an invaluable next step in the indicators area in Nepal would be to take forward just such an initiative and to link with some of the work being undertaken globally and would be important in strengthening child rights work.

6. Moving Beyond Legal Approaches to Children's Rights

During the 1st phase of child rights work much has been done on "awareness raising" and legal frameworks. This remains a centrally important piece. The CRC is legally binding for state parties and has ensured attention to government policies and initiatives. However, we are increasingly aware of the necessity within a rights perspective, to concern ourselves with what is happening at all levels. Children's rights are about the obligations of all

adults to protect the best interests of children, and to create the conditions under which they can develop and thrive. For most children it is the family that is most closely involved in the day-to-day management and defense of children's rights - and the younger the child the more this is the case. Sometimes inadequate attention has been given to families' goals and concerns for their children. But the CRC is not a rigid set of universal solutions. During this next phase it will be vital to give far more attention to the sort of dialogue interpretation and negotiation necessary for internalization of the Convention's core principles. This applies to all levels of society. Much of the work integral to ECD programming is concerned with developing effective participatory methods for initiating discussion and dialogue on key children's issues.

7. Conclusion

While an overall framework is needed to assess how we are doing in meeting our obligations to young children the reality is that we will, quite appropriately, be very **selective in choosing the indicators** we use. It will at times (e.g. when developing 5 year plans, conducting situation analyses, country strategies, evaluations, etc.) be necessary to take a broad view to relate the different pieces together (context. outcomes, etc.) rather than focusing too much on only program inputs. At other times it is absolutely appropriate to just be checking whether the inputs committed to were indeed provided in terms of budget allocations, posts filled, centers established, etc. At other times we may be concerned specifically with child level indicators.

Different agencies (both governmental and non-governmental) may fruitfully take a variety of approaches and focus on different aspects. Governments are responsible for the major quantitative indicators while NGOs may for example offer particular expertise in participatory research. It is linking the different pieces and connecting them within an overall child rights framework which may be helpful in i) encouraging a more holistic approach to programming for young children and ii) enabling us to better assess how we are doing in meeting our obligations to young children.

Education in Mother Tongue in Nepal

- Stella Tamang

Introduction

Nepal is a multi-ethnic, multi-religious and multi-lingual country. The development of the Nepali people depends on the interrelationships of all its peoples. In confronting the many challenges for the development of Nepal, education becomes an indispensable asset to attain the ideals of peace, freedom and social justice. There is no lack of awareness for education. The rich or the poor, the city dwellers or the villagers, educated elites or the illiterate persons, their only wish is that their children should get the best education. The challenge therefore for the government, the policy makers and educational experts lies in providing:

- Education for all
- Education where everyone can have access
- Education which is appropriate
- Education which is affordable in terms of language, culture and monetary cost
- Education which does not exclude anyone
- Education which embodies the rich diverse language, culture and religion.

There are many other important factors that need to be considered if we are really committed to "Education for All". But this paper will explore education in mother tongue in Nepal because this is one of the major factors which exclude many children from the education system. The education system that does not include all the children and exclude them from education is part of an intricate web of human rights violations. It reflects a complex, progressive and sustained process of "being excluded".

This paper is written with the wish that all the children of Nepal have equal access to education. It is written with the objective to draw attention and initiate discussion on education in the mother tongue in Nepal. The objective of this paper will be achieved if it is discussed, though at the end of the presentation, it will be clear that I am committed both to the recognition of the

languages of Nepal and for the education in our mother tongue. This in turn is a result of my long experience in education as well as my active involvement in the issue of the language of Nepal and working for the promotion of education in our mother tongue.

Language, Self-perception and the Overall Development of a Child

The experiences from childhood and adolescence are of particular importance for our self-perception, identity and the overall development of a child. The all-round development of a child depends on the environment, information and the opportunity offered to the children about their culture, literature, history and the development of society. Therefore, the education system must respect the rights of others, as well as promote tolerance and community solidarity - give children and young people the opportunity to develop a positive sense of self-esteem, a creative self-perception and a national identity.

Language is a key factor in education. People wish to speak their own mother tongue because it is central to their identity. After all, "language is the soul of the people". It is linked to their cultural environment where the world of meanings is stored. Language doesn't exist in isolation rather it is interwoven with culture, social structure, social values and religion. It is through one's mother tongue that history, traditions and myths about people come alive. Language is in itself a living symbol of the community. It links social and age barriers. When we were children and we hurt our knees, we were comforted in our mother tongue. These memories make up a major part of our very identity. They are in our hearts and are based on our mother tongue.

Why Education in Mother Tongue?

Mother tongue education is a curriculum that teaches students in their mother tongue, first language, rather than using the mainstream language, which may be unknown to the students. Education research shows very clearly the need for mother tongue education at least in the first seven years of education, otherwise it is detrimental to the education of learners. Many education programs have failed because of language problems. There is a pressing demand from the various indigenous and ethnic communities all over the world for education in their mother tongue.

Linguists and education psychologists agree that the use of the mother tongue as the language of instruction in the early years of education has many advantages, especially where the development of cognitive faculties is

concerned. Conversely, it has been demonstrated that classroom use of a language, which is not the language spoken by the child, results in cognitive and pedagogical difficulties.

Major problems exist in diagnosing language-minority children who are in the process of learning a second language. These difficulties often show up in low levels of language proficiency. In fact, these are often normal/superior children in regard to learning processes. Schools have generally approached the education of indigenous and ethnic children from a deficit model, based upon the belief that they have "lacked the innate intelligence to succeed in school. Deficit thinking continues today but is couched in slightly different terms. Social workers and educators often identify these children as an "at-risk" or "vulnerable" school population because of high drop-out rates and low academic achievement. Solving personal problems on an individual level, using individual solutions, is important. However, structural approaches aimed at reducing institutional racism and oppression are equally important. Problems are encompassed in both individual and structural frameworks.

> *Sonam and Sita get admitted in pre-school at the age of four. Tamang is Sonam's mother tongue and Nepali is Sita's mother tongue. Both of them have the same stock of vocabulary in their mother tongue. But once they are admitted in Nepali-speaking school, the language developed vertically in the case of Sita since she has been speaking Nepali at home, which is also being continued in school. In the case of Sonam, her language developed not even horizontally but it regressed since she had to start the new language from zero or the lowest level. This not only damages her language but the whole development. The conscious or unconscious discomfort affects the intellectual development of the child. Learning in the early years of life is not only to accumulate information, knowledge and concepts but these are the years to explore, experience and acquire basic learning skills.*

The low level of education possessed by many children are also due to the fact that:

- Parents have much more difficulty in helping their children with the schoolwork than, the low motivation to acquire an education,
- Lack of familiarity with mainstream language as a teaching language
- Unfamiliar culture, tradition, social value and practices

These are all barriers to children receiving an education as well as getting a good job, and with it a better life.

Glimpse of the Research, Study and Projects on Education in the Mother Tongue in the World

There have been studies and education programs carried out around the world in regard to education in one's mother tongue. Among the most conclusive studies carried out in Africa to prove this is the case of Nigeria's national policy on mother-tongue literacy and the experimental project carried out in 1970 in the region. The project's purpose was to test the education in mother tongue during the first six years of primary school. Despite initial doubts, the evaluation of the pilot schools and comparisons between them and other Nigerian schools were very positive. The students in the project scored higher than their counterparts in the regular schools both academically and cognitively. According to the study, the advantages of teaching children in their mother tongue go beyond academic success to include cultural, emotional, cognitive and socio-psychological benefits.

In Mali, a similar evaluation of cognitive benefits for students in mother-tongue education projects was carried out in 1985. The study followed 154 students from experimental schools and 340 students from French-speaking schools starting at the same level (first grade) over 6 years. Forty-eight percent of the children in experimental schools finished their studies without repeating a single year, as compared to only 7% of the students in francophone schools. Although other factors may have contributed to the success of the pilot schools, the study proves that the use of the mother tongue in education is an important factor in academic success.

Both Great Britain and the United States have experienced a large influx of immigrants from all over the world. Initially, both Britain and the United States chose English as the medium of instruction. But the academic performance of immigrant children became a real concern. From 1978 to 1981, the University of Bradford in Great Britain observed the effects of a yearly bilingual program on five-year-old native Punjabi speakers. A control group using only English scored much lower than children who were taught partly in Punjabi and partly in English. Similar results were obtained with Italian speaking children. Linguists have demonstrated that language and thought are inextricably interwoven and that for their cognitive development all children need a language on which to pin and develop their thoughts.

In the United States, the Center for Minority Education and Research, University of California, carried out one of the most comprehensive longitudinal studies of bilingual education programs to date (1981-991). The objective of the study was to determine whether teaching Spanish-speaking

students (who have limited English proficiency) mostly in English or in combination with Spanish enabled them to "catch up" with their native English-speaking peers in basic skills (English, language arts and math). Students in 51 schools across five states were sampled. The study looked at three types of programs: English Immersion (almost all teaching is in English), Early-Exit Bilingual (less than forty minutes of instruction in the mother tongue per day, for no more than two to three years) and Late-Exit Bilingual (instruction in mother tongue represents 40 to 50% of the daily schedule up to grade four). The study came to the following conclusions:

- The students' mother tongue is the most effective language of instruction
- Rapid transition to classes taught only in the students' second language does not allow for satisfactory development of the student's' linguistic and cognitive abilities.

Indigenous Language, Education in Mother Tongue and Education Rights

THE RIGHT TO EDUCATION IN ONE'S first LANGUAGE affords educational opportunities to members of minorities and indigenous peoples. Indigenous peoples have a central concern in regard to their language as well as educational opportunities for their children. In this respect:

UN Convention on the Rights of the Child (1998)

Article - 30 states that in a country with peoples of ethnic, religious or lingual minorities or indigenous origin, their children shall not be deprived of the right to use and exercise their language and culture, and profess their religion.

UN Draft Declaration on the Rights of the Indigenous Peoples

Articles - 14 and 15 of the (1993) are most pertinent:

Article 14. Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons.

Article 15. All indigenous peoples…have…rights to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching learning. Indigenous children living outside their communities have the right to be provided access to education in their own language and culture.

The Constitution of Nepal

Article 18 on Cultural and Educational Rights ensures the "right of every citizen to development and promote the language, script and culture". The government has recognized 12 ethnic dialects as national languages, many of which are used in the national broadcast media. It also provides the right to acquire education up to the primary level in their own mother tongue to the children of the ethnic people.

National Conference on Linguistic Rights

National Conference on Linguistic Rights held on 16-17th of March 2000 in Kathmandu organized by Nepal Federation of Nationalities has adopted in its declaration regarding education in:

Article - 11

All language communities have the right to education in their mother-tongues and in the script they desire.

Article - 12

Every person has the right to education in his/her mother-tongue.

Article - 13

The community concerned of a territory shall use the education as a means to preserve, promote and develop their language and script, and achieve history, culture and traditional knowledge.

Article - 14

The right to study and research, teaching in the university and publication of all languages and scripts is guaranteed.

Article - 15

The students of the relatively backward language communities at present shall have the right to reservation in scholarship and higher education.

Article - 16

All languages and the lifestyle, culture, cultural heritage and history of their speakers are the assets of the country and the whole world, and absolute and impartial information on them shall be compulsorily included in the educational text-books.

UNESCO Report on (1953) Mother-tongues

States that the best means to teach children is in their mother-tongue.

ILO Convention 169

ILO convention 169 concerning indigenous and tribal peoples in independent countries (1989), which stipulates that, the children of indigenous peoples/nationalities shall have the right to education in their mother-tongues.

Declaration on Linguistic Rights

"Declaration on Linguistic Rights" adopted by "World Conference on Linguistic Rights" held in Barcelona in 1996 also has the same spirit.

United Nation Permanent Forum on Indigenous Issues

It is noteworthy that UN has recently established United Nation Permanent Forum on Indigenous Issues representing eight member states and eight indigenous peoples representatives.

Community-based Education Program

Community based education programs are based on the wisdom, knowledge, culture, spirituality and skill of the community in the language spoken by the community. It also means ownership because without ownership participation and sustainability cannot be expected. As John Ogbu (1995) pointed out, instructional methodology and curriculum are not the only variables in minority student success. Another key factor for academic success is how students, parents, and communities view schools. Are teachers viewed as the "enemy" seeking to suppress indigenous and other minority languages and cultures as was so often the case in the past? Or are they "friends" seeking to build students' identities, acquainting students with the wider national world they will be dealing within their life, and introducing them to the wider international world our country has to deal with as well?

The indigenous peoples worldwide are working to take control of their schools in their communities so that indigenous learners can become active participants in shaping their own education. There have been various initiatives taken by indigenous communities to run community-based education programs. Maori "language nests" in New Zealand is a model for indigenous community-based education. This grassroots effort has expanded over the last two decades from its pre-school base through elementary and secondary education into Maori language university-level teacher-education programs.

While community-based efforts led by dedicated and committed local language activists are found at the heart of any successful language revitalization effort, that is not to say that university and school efforts are of no use. In fact, once community-based efforts start to show results, children need to be accommodated in the schools and universities or else the previous pattern of school failure and forced assimilation will be repeated.

Mother Tongue Education in Nepal: Initiative and Progress

Initiatives by the Government

Realizing the reality of the country, the present constitution of Nepal therefore has made a provision for education in the mother tongue up to the primary level for the various languages speaking communities. The government has recognized 12 ethnic dialects as national languages, many of which are used in the national broadcasting media. Following the adoption of a liberal language policy by His Majesty's Government of Nepal, more publications are being written in the ethnic languages of Nepal. The Ministry of Education and Sports, Basic and Primary Education Program has published primary level textbooks in indigenous languages. One of the major steps taken by the Government is the establishment of National Committee for the development of nationalities, under the Ministry of Local Development.

> *Sonia Eagle's chapter on Nepal provides a detailed historical and social account of the very complex language situation in the multilingual nation. She notes that "most language matters in Nepal have not been planned; they have evolved in response to historical circumstances." In a sense, this notion of a reactive language policy to some extent contributes to a detailed, but largely non-analytical, account of the language situation in Nepal. It almost negates any focus on the ideological, and on any sense of debate embedded in the policies and planning practices. And so, glaring contradictions and questions are left unexamined. For example, she notes that the need to make education available to a larger number of people has resulted in the adoption of one language as the official language. In the goal to achieve one basic human right (basic education), another is denied (mother tongue). This is a struggle common to many nations around the*

world, a struggle, begging a deeper analysis of the language-education-development trajectory.

Extract: Review of Baldauf & Kaplan, Lg, Language Planning in Nepal, Taiwan, Sweden

Initiatives by INGOs NGOs

There are few but significant initiatives taken by some INGOs and NGOs in Nepal. These initiatives have been mostly for informal education in areas such as health, human rights, Aids and HIV, Adult and women literacy programs, etc.

Initiatives of Various Indigenous and Ethnic Peoples' Organization

According to the Government data, there are 61 indigenous and ethnic communities in Nepal. Many indigenous and ethnic communities are organized and united under the Nepal Federation of Nationalities (NEFEN). At present, NEFEN has 41 indigenous and ethnic organizations. Seven Indigenous women organizations are organized under the umbrella called, "National Indigenous Women Federation". One of the struggles of all these organizations is language. Nepal's Tamang Ghedung has recently drafted a language bill; and it has been forwarded to the Parliament for discussion and adoption.

As discussed above, indigenous communities are particularly fragile within the spectrum of excluded communities. Not only are they excluded by the fact of their history, religion and culture, they are also susceptible to further risk by the very interventions intended to support and include them. The indigenous communities are therefore seriously concerned about the educational interventions directed at them. They are seeking education programs, which are:

- Indigenous community-based
- Interactive and genuinely participatory
- Be based on local culture, development priorities and social context
- Be in the mother tongue.

Most of the indigenous organizations are running Literacy Programs in their own mother tongue. Some organizations have been successful in using textbooks, for primary schools, in their own languages.

Bikalpa Gyan Kendra, Nepal

Bikalpa Gyan Kendra is an alternative traditional learning center in Baudha, Kathmandu. This center runs non-formal primary education in the Tamang language. This is the center only for Tamang girls who have lost the opportunity to go to school because:

- They cannot speak the Nepali language
- They are poor and the parents cannot afford to send them to school
- They are earning members of the family

It is an eighteen-month program, which includes:

- Non-Formal primary education in the Tamang language
- Learn traditional Tamang skills which are disappearing at an alarming speed
- Small scale business management skill
- Spirituality
- Community development and leadership

The program is run in the Tamang language. After eighteen months training, they become the trainers to train other Tamang girls. The center is run and managed by the girls. The center has turned out three groups of eighteen months' training. The girls of the first group are now taking the SLC Test Examination.

Observation:

- The girls feel very comfortable since they are not challenged by the Nepali language
- They quickly learn to read and write in the Tamang language
- They are very confident
- Their speed of learning is very fast
- They become very responsible
- Far from hampering their progress in Tamang, the confidence gained from learning in the mother tongue facilitated learning Nepali and English.

Jagat Sundar Bwane Kuthi

This school was started in 2047 with 36 Newari students. This school is situated in Chagal, Kathmandu. This school is run in the Newari language. This school runs from Pre-primary to Grade 7. The school uses the textbooks of the Ministry of Education and Sports, Newari language. The school has its own publishing board. This publishing board publishes additional reading materials as well as textbooks in Newari for the students.

The school is operated and managed by a Committee who are all Newars. The students pay a nominal amount of fees.

Observation:

- The students are confident
- The students' performance in other areas of learning is good
- The students are very responsible
- They have developed positive self-esteem
- The parents are very happy and are cooperative.

General Recommendations

Many suggestions and recommendations are made for the improvement in education in Nepal. One of the most important suggestions that needs serious attention is that mother tongue (MT) education will bring improvement in education in Nepal since there is a link between mother tongue education in the early years of children's primary school education and improved education achievements in the higher grades. There has been some progress in this regard. By taking a few steps, Governments have shown some concern but lacks commitments and concrete actions. For the effective implementation of indigenous languages and education in the mother tongue, the following recommendations are proposed:

Governments

- Establish a Council or Commission for the protection, preservation and promotion of indigenous and ethnic languages comprising indigenous and ethnic representatives.
- Protect, promote, and develop scripts and languages that are in danger of extinction or are being extinct.

- Adopt bi-lingual policy when the majority-speaking language of the related area is made the medium of education.
- Support the development of such minority languages and their eventual use for mother tongue education in schools in such communities and provide financial support to run mother-tongue schools.
- Produce curriculum, textbooks and other reading materials in mother tongues with the active participation of the community concerned.
- Train teachers for mother tongue education.
- Strengthen the role and position of Indigenous Peoples' Organization and NGOs in solving problems of multicultural and multilingual education.
- Search for policies that focus on improving the quality of education which promote social cohesion and respect for diverse culture and language.
- Search for policies, which overcome the obstacles posed by inequalities of access and risks of exclusion in the fields of education.
- Develop strategies.
- Support such local initiatives including research studies.

Professional Educators

a. Carry on research and study for the implementation of education in the mother tongue.

b. Make effective use of local expertise as teachers whenever local language and cultural knowledge is being addressed in the curriculum.

c. Make every effort to utilize locally relevant curriculum materials with which students can readily identify, including materials prepared by their own community.

d. Implement culturally appropriate approaches to first and second-language teaching in accordance with the language history and aspirations of the local community.

e. Involve government authorities into open dialogue with the non-governmental institutions in the field of multicultural and multilingual education.

f. Recognize and validate all aspects of the knowledge students bring with them, and assist them in their on-going quest for personal and cultural affirmation.

g. Provide sufficient flexibility in scheduling participation by indigenous and ethnic representatives so they are able to fully share what they know.

h. Produce reading materials, visual and audio aids for mother tongue education.

Schools

Schools can help strengthen the mother tongue education through the following actions:

a. Make sure the language policies and practices in the school are consistent with the language aspirations of the parents and community.

b. Provide follow-through support for local language recommendations, as well as incentives for students to participate in the mother tongue education programs that are offered.

c. Establish easily accessible language resource materials and knowledgeable expertise from the community.

d. Set aside special times and places where students can come and practice their language skills in an immersion environment.

e. Incorporate appropriate traditional cultural values and beliefs in all teaching, particularly when the language is involved.

f. Provide an in-depth cultural and language orientation program for all new teachers and administrators, with local language experts.

g. Collaborate with elders and teachers from the local community to acquire a comprehensive understanding of all aspects of the local, regional and statewide context in which the students live, particularly as it relates to the well-being and survival of the local culture.

h. Make use of locally produced resource materials in all subject areas and work in close collaboration with indigenous and ethnic representatives to enrich the curriculum beyond the scope of commercially produced texts.

i. Acquire expertise in first- and second- language teaching/learning and the benefits that accrue to children who grow up to be multi-lingual.

j. Implement annual awards in each school and school district in recognition of exemplary mother tongue education efforts.

Education Agencies and Experts

Education agencies and schools can help strengthen the mother tongue through the following actions:

a. Provide ample opportunities for personnel associated with mother tongue education to participate in regional and statewide conferences, workshops and other events in which educators share their insights and practices around language learning issues.

b. Provide administrative and funding support for local education aimed at immersing students in their mother tongue as the language of instruction in school.

c. Provide support for curriculum materials development in any area where mother tongue education programs are being implemented.

d. Implement appropriate long-term assessment processes for immersion and other mother tongue programs.

e. Provide support for training teachers for all schools, as well as appropriate orientation to language issues for existing teachers, administrators and others associated with the schools.

f. Provide current resources and relevant research data to assist schools and districts in developing effective language programs that also contribute to the overall educational achievement of the students.

g. Utilize the expertise associated with various indigenous and ethnic organizations for guidance in language education policies and programs.

Linguists

Linguists can help strengthen indigenous and ethnic languages and education in the mother tongue through the following actions:

a. Identify and utilize the expertise in participating communities to enhance the quality of linguistic data gathering and use caution in applying external frames of reference in its analysis and interpretation.

b. Contribute appropriate linguistic expertise on language teaching, learning, policies and planning in ways that are compatible with the language aspirations of indigenous and ethnic communities.

c. Provide encouragement and support for indigenous and ethnic students interested in teaching their language and/or becoming linguists.

d. Provide support, training, resources and technical assistance to language initiatives on-site in local communities so that maximum language revitalization can be achieved.

e. Help prepare linguistic materials and templates of basic planning documents that are of direct benefit to indigenous people in their language efforts.

f. Assist in the conservation and preservation of indigenous and ethnic language materials, including appropriate media and storage facilities.

Media Producers

Media producers can help through the following actions:

a. Utilize a panel of local experts rather than a single source to corroborate translation and interpretation of language materials.

b. Encourage the use of the local languages in multimedia materials in ways that provide appropriate context for conveying accurate meaning and interpretation.

c. Include an appreciation for the subtleties of story construction, use of metaphor and oratorical skills.

d. Provide opportunities for elders to share what they know in the local language and to have that knowledge represented in multimedia materials in a manner that retains its original meaning.

e. Involve in preparing curriculum resource materials that utilize the indigenous and ethnic language, so as to make it as easy as possible for teachers to draw upon the indigenous and ethnic language in their teaching.

Conclusion

It has been said that "Language is power, language is a problem, language is a right and language is a resource." Language is an essential component in people's development. It would be an unforgivable violation of their rights, if children are forced to learn through other languages. Then there would be no tolerance, intellectual and spiritual freedom or respect for the rights of others. What we would have then would be narrow-minded and inhuman regimentation.

The acquisition of education in one's mother tongue is a significant step towards empowering people to participate more fully in the economic, social and political life of their community. Governments' language policies can affect poor communities by promoting educational achievements that have a narrow focus on a minority language, as well as reinforce social and economic marginalisation. Education in one's mother tongue must be complimented with access to opportunities to other national languages or international languages. If governments are committed to alleviating poverty and promoting equal access to educational and socio-economic opportunities, then there should be no hesitance in adopting education programs in one's mother tongue.

The commitment of the government, various political parties, policy makers, education experts and professionals can advance the practice of indigenous education in one's mother tongue. The extent to which they can help remains to be seen. However, to effect change, educators interested in advancing indigenous education must develop strong collaborative relationships with the indigenous and ethnic community. Educators and policy makers with progressive, courageous, and collaborative attitudes and an interest in overturning oppressive aspects of indigenous education can make a powerful contribution. Education experts who accept the challenge of rising above their own profession's past involvement can help indigenous peoples change their children's future. Then only, it will really mean "Education for all and education for everyone."

Importance of Nutrition and Health in ECD Programs

- Harinder Thapliya, Ph.D.

Context

Early Childhood Development (ECD) has traditionally been viewed as a preparation for primary schooling equated with “preprimary” and “preschool" education. This is now broadly understood as an integrated and holistic approach to ensure a child’s all-round development as well as laying the foundation for later sub-sequential growth and development. The potential of ECD programming as a vehicle for the integrated promotion of young Children’s Rights programs in Child’s Rights framework is now realized by all Child-focused organizations worldwide. In other words an Early Childhood program is an entry point for human resource development thus ensuring fulfillment of developmental needs of young children, such as child care, safety, protection, health care, nutritional and psychosocial needs, in a stimulating environment. This program strongly emphasizes a community and parent partnership as an important step toward supporting and building capacities of parents in their child care roles and improving their quality of life.

Most of the ECD or ECCD programs in Nepal are targeted at children in the age group of 3 to 5 years. But it is equally important to link the day-care center and other child-care centers (which provide service for infants and children below 3 years) with the ECD programs. Services for the development of children from conception to three years of age are to some extent looked after by the Ministry of Health but these services lack the early stimulation components required for psychosocial development of children (CERID, 2000).

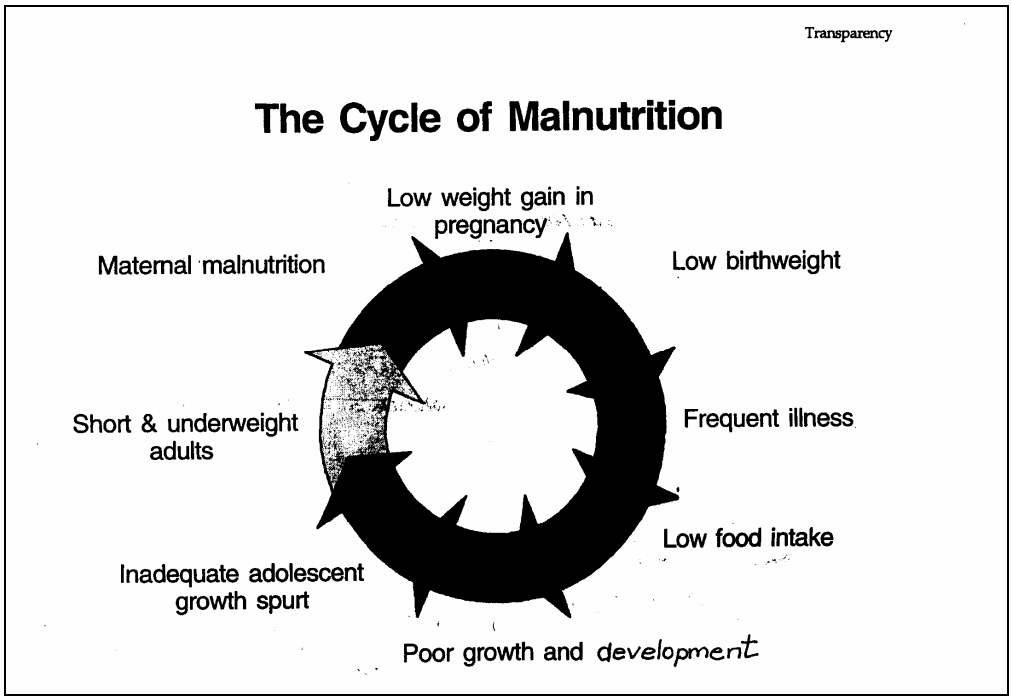
In Nepal the vital contribution that ECD can make in a child’s development is not understood properly. There is an urgent need to spread the message at family and community levels through parental education and community education programs. Recently HMG has made the commitment to make ECD a component of Basic Education. The preceding commitment is quite an appreciable effort toward the promotion of children’s rights. The modality as well as the approach and packaging of ECD programs may differ from country to country and one community to another community. Depending on the needs and priorities of the people, the importance of early childhood care, in regard to the basic needs of nutrition and health care during the first

five years, cannot be overlooked whether the child is raised in a home or with the support of ECD programs at the community level.

The CRC recognizes children's rights to survival and to the highest attainable standard of health (Article 6, 24), which implies a healthy environment, nourishing food, quality health services and parental awareness. Good nutrition and health care are the fundamental rights of human beings as it is critical for survival and optimum growth and development and improving human capital of a country. Nutrition, which has a direct impact on children's survival, protection, development and participation must be a key component in all child-focused programs with an integrated approach to family capacity buildings. When children are malnourished, their bodies' defenses are weakened, they get sick more often and their illnesses are more severe. Adequate nutrition is essential not only to children's health and growth but to ensuring their normal development, both physical and mental. Children who are frequently malnourished are less responsive to stimulation, cannot learn well and are likely to have stunted minds and stunted bodies (UNICEF, 1998).

Nutritional and Health Situation in Nepal

In an undeveloped country like Nepal, which is facing many developmental challenges, malnutrition is a big challenge for the Government. There are some studies conducted on assessment of nutritional status of children under 5; as well the available data on children's nutritional status is not encouraging. There is a high prevalence of malnutrition, which contributes to high rates of disease and death of Nepali children. Over half of all children under the age of three suffer from moderate or severe malnutrition and stunting. The situation remained unchanged over the last several years. The existing situation of child malnutrition is an outcome of a sequence of interrelated causes such as poverty, maternal malnutrition, low food intake, lack of child care and frequent illness, unhygienic sanitary practices, lack of access and utilization of health services and lack of nutrition education at community levels. Figure: (Cycle of Malnutrition).



Source: Participatory Nutrition Improvement, Training Module II, Colombo – March 1997

The most significant nutritional disorders among the Nepalese population are protein energy malnutrition (PEM.): vitamin A deficiency (VAD), Iodine deficiency disorders (IDD) and Iron deficiency Anemia. The 1975 National Nutritional Survey provided a comprehensive overview of malnutrition in the country. Later, a number of sub-national surveys were carried out but it was not until 1995 that estimates of PEM at the national level again became available from the multiple Indicator Surveillance survey (NMIS). Additional information on malnutrition became available as anthropometrics data was collected as part of the Nepal Family Survey, 1996. A follow-up on NMIS was conducted in 1997 and again the prevalence was measured. While variations in survey design did exist between the various surveys recorded over the past 23 years, all indicate that there is the persisting problem with PEM and that many of the factors associated with PEM have not improved.

Trends in Under-Nutrition Indicators

6-36 months Olds

Source	Year	Underweight	Stunting	Wasting
NNSS	1975	72	65	18
NFHS	1996	54.2	54.8	12.7
NMIS	1996	56.9	53.3	16.5
MNS	1998	54.2	50.5	8.5

NNSS=National Nutrition Status Survey, 1975.
NFHS=Nepal Family Health Survey, 1996.
NMIS=Nepal Multiple indicator Surveillance cycle4, 1996.
NMSS=Nepal Micronutrient Status Survey1998.

Source: NMSS, 1998.

In all parts of Nepal, as indicated by both *stunting* **(short for age),** *wasting* **(under weight for height)** and *underweight* prevalence, wasting was high in certain subgroups of the population. The prevalence of wasting by age group shows that there are still very high levels of chronic under-nutrition in the first year of life. This under-nutrition peaks in the 12-23 months age group. Chronic malnutrition or '*stunting*' affects the height of 63.5 % of the children, with peaking at 18 months of life. It is probably not just a question of food availability in the household, inadequate feeding practices have a major role, especially with acute infections and diarrhoea. This combination is especially detrimental to a child's growth and nutrition; it is further compounded by inadequate water, sanitation and other conditions of poverty. Nonetheless, in the 23 years from the National Nutrition Status Survey (1975) to the Nepal Micronutrient Status Survey (1998) there has been only marginal improvement in the nutritional situation of children as measured by stunting. The nutritional status of children also depends on maternal nutritional intake during prenatal and postnatal stages. Body Mass Index (BMI) is an indicator of overall maternal nutritional status, with low BMI level (BMI<18.5) indicating thinness and chronic energy deficiency. Nationally the prevalence of thinness was 24.7%, one out of every four women in Nepal is malnourished (NMSS, 1998). Figure: Malnutrition cycle.

A recent collaborative research study on "Bringing up children in a changing world" was conducted in four villages of Nepal. The study explored the realities of children's lives in relation to existing nutritional and health status and practices in some of the communities in Nepal. Regarding the health status of children in the villages, the study talks about the changes over

recent decades, which has contributed to an overall improvement in health and survival. Lack of records make it impossible to monitor health trends of immunization rates, weight and height and the prevalence of disease to verify the health status of children in these villages. It can be assumed that this change is more or less consistent with larger trends in Nepal where infant mortality has dropped from 199 per thousand live births in 1960 to 75 in 1997. However lack of sanitation, low standards of hygiene, poor indoor quality and unreliable, inadequate, poor quality food supplies continue to contribute to problems in all areas. There are signs of undernourishment and worm infestations in all villages, even in *Koldanda* in *Biskundada* and *Dekhetbhully* there was at least one case each of severe malnutrition. Children in all villages suffer from cold, racking coughs and fever and pneumonia and diarrhoea are common (Save the Children/UNICEF, 2000).

Poverty and lack of food availability in family is often considered to be the cause of malnutrition in Nepal but according to present research "Even where children may be adequately fed, worm infestation and frequent bouts of diarrhoea can rob them of valuable calories and undermine their nutritional status" (Save the Children/UNICEF, 2000).

Another very important cause of malnutrition among children as mentioned in the study is the **growing consumption of packaged foods,** which are high in cost and low in nutrition; however villages perceive these as being higher in nutritional value. There is a danger that an increase in purchasing power may have a negative impact on children's nutrition and there are indications from other districts to back this up. Changes in tradition may have adverse effects for children.

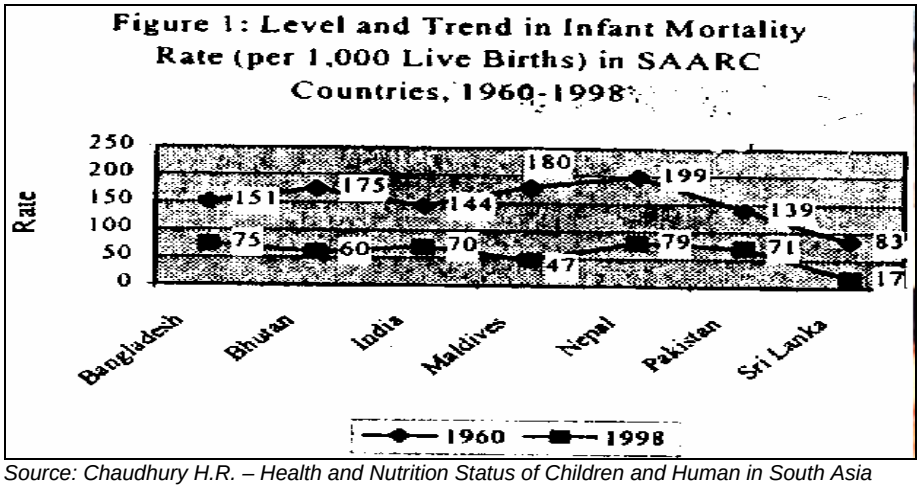
Nutritional Status of Children in South Asia

In a recent paper on "Health and Nutrition Status of Children and Women in South Asia" (Chaudhury, 2000) the writer has characterized the features of health status of children and women by emphasizing:

- Persistence of high infant mortality,
- Large proportion of malnourished children,
- Poor nutrition,
- Unsatisfactory antenatal care, and
- Persistence of high fertility rate for the poor nutritional status of women and children in South Asia.

According to the author, in spite of a considerable decline in infant and under-five mortality rates between 1960-1998, these rates are still very high

by regional and international standards and fall short of the ICPD (International Conference on Population and Development) goals except in Sri Lanka and the Maldives. IMR per live births is highest for Nepal (79) and lowest for Sri Lanka (17). To achieve the ICDP goal of IMR at 50 per 1,000 live births, by 2005 will require a reduction from 37 percent for Nepal to 17 percent for Bhutan; as well as an average of 29-33 percent for the rest of the countries in the region.



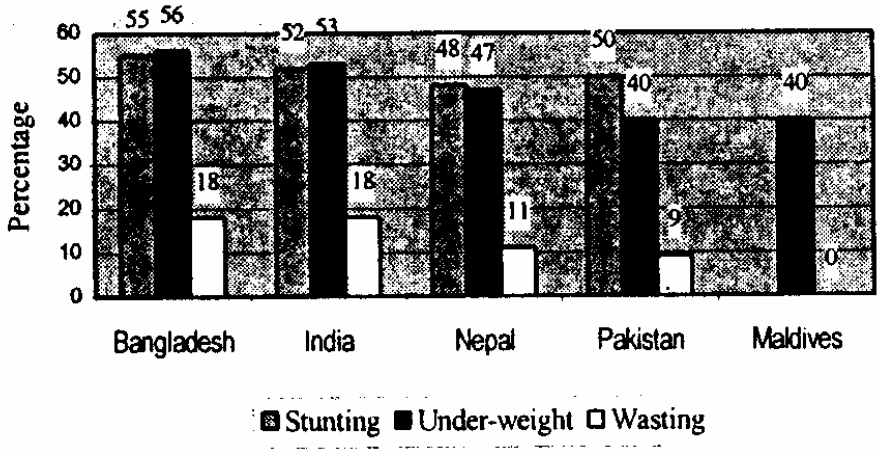
Source: Chaudhury H.R. – Health and Nutrition Status of Children and Human in South Asia

Population and Development in Nepal – Volume 7, Central Department of Population Studies T.U. – May 2000.

The Infant and under-five mortality rates vary by urban\rural residence. Children in the rural area as compared to the urban area experience a 25-56 and 36-74 percent high risk of dying before their first and fifth birthday respectively.

The nutritional status of children, as measured by three anthropometrics indices, is still very bleak in all countries of the region with 48-55 percent, 40-56 percent and 9-18 percent of children under three remaining *Stunted* (short for age), *underweight for age*, and *wasted* (under weight for height). Data shows no marked differences in nutritional status of male and female children.

Figure 7: Percentage of Children Under Three Years of Age who are Classified as Malnourished According to Three Anthropometric Indices of Nutritional Status, SAARC Countries



Source: Same as Above

Approximately one percent of children under six suffer from night blindness per year due to vitamin A deficiency in Nepal and Bangladesh. About 40-50 percent of children aged 6-11 and 5-11 suffer from goiter per year due to iodine deficiency in Nepal and Bangladesh respectively. While 53 to 81 percent of children 6-59 and 6-48 months suffer from anemia, due to iron deficiency in Bangladesh and Nepal (Chaudhury, 2000). However there is considerable improvement in clinical Vitamin A status among preschool children because of biannual high dose vitamin A supplementation. This is a rational strategy and needs to be continued unless alternative intervention approaches such as food fortification and awareness about the dietary intake become possible.

In order to establish a relationship between the nutrition and the development of children, it is important to understand the terms **Development and Growth,** which are continuous processes and begin from the moment of conception and can be observed from birth. *Growth* refers to increase in size, weight and abilities whereas *Development* is more complex and more difficult to measure and reflects different aspects of development, such as physical, motor, sensory, cognitive and social developments. These aspects

take place simultaneously and are interdependent. Development is not limited to growing larger, instead it consists of progressive series of changes towards the goal of maturity in all dimensions. Therefore Development refers to functions- their complexity, number and degree of control. During the first five years of life, growth and development is rapid and distinct as compared to later stages of childhood and adulthood. The main indicators of growth in infancy are *height and weight* of children, the easiest and most used indicator to assess nutritional and health status of a child.

An average baby weighs about 2.5 to 3 kg at birth and if the child is growing normally should double her birth weight (5-6kg) at six months and gain triple wt. (8-10kg) in one year. After that there is increase in weight by 2kg a year till the age of six on the average.

According to an action research in CERID, 1994 the average weight of Nepali children Male and Female from 3-5 years should be as follows:

Age	**Weight *(male)***	**Weight *(female)***
3 years	12.42kg	12.57kg
4 years	14.52kg	13.04kg
5 years+	15.75kg	14.44kg

Regarding height, a normal baby is 45-50cm in length at birth and increases by 25cm during the first year and 12cm in the second year and after that 6-8cm increase each year till child reaches 5 years of age. Growth (increase in height and weight) of a young child is highly influenced by the quantity and quality of nutritional intake, healthy hygienic habits and stimulating environments. A child who is deprived of breast feeding for six months and nutritious supplementary feeding in the first year is likely to have low weight, with retarded "growth spurt" as compared to normal children; as well they are susceptible to illnesses and requiring more care and attention. "Healthy Mind in healthy bodies" is a popular saying and is applicable in this case. For example a setback or weakness in one area will affect the other areas of development. A malnourished child will be slow in attaining daily life skills such as walking, running, speaking, reading and writing. These skills are indirectly affected by malnutrition. Furthermore, these children are more prone to infections and diseases and slow in psychosocial development (UNICEF, 1997).

The earlier evaluative studies conducted by CERID " Pre School Education for Better Nutrition: An Approach to Early Childhood Development" and "In Search of Early Childhood Care and Development (ECCD) Indicators: A

Contribution to the EFA Year 2000 Assessment" have developed some useful information in connection with the level of health and nutrition component and major activities prevalent in the ECD programs and the services provided by the various child-focused programs in various districts. Both the studies reflect that ECCD programs targeted for children aged 3-5 lack comprehensive health and nutrition-related services. Based on the field work in establishing and sustaining ECD programs in Banke, Makwanpur, Morang and other Plan/Nepal-focused districts, the author has seen the difficulties to convince the guardian/parents who are reluctant to contribute towards feeding midday snacks to their children. Parents' contribution whether in terms of time, labor, kind or cash and participation is vital in the ECD program. It is an indicator of their responsibility and concern towards their children and ownership of the program.

Promotion of Nutritional Status of Children through ECD Programs

UNICEF, INGOs, bi-lateral programs and the World Bank are now placing increased emphasis on Early Childhood Programs within their overall strategies. The result is that a number of local NGOs and CBOs are supporting ECD interventions. But still there are insufficient efforts for the number of children who are in need of such services. The major purpose of ECD/ECCD is to have a positive effect on child's developmental status. This has been proved by various interventions that children exposed to ECCD programs performed better in cognitive skills related to analytical, reasoning and logical thinking while those children who have not been exposed to ECD performed better in recall and memorization (CERID, 1998). However there is no significant research indication of improvement in health and nutritional status of children attending ECD programs. There is need to make a systematic study to assess the nutritional status of children in ECD programs and other child-focused programs as these programs vary in the level of attention given to health and nutrition. The component of health and nutrition must be strengthened in the program by introducing community nutrition education for parents and mobilizing local resources to fulfill children's nutritional needs.

The UNICEF sectoral programs are also improving the overall health and nutrition status of young children so that they will be able to survive the onslaught of numerous diseases. These diseases are primarily caused by deplorable nutritional status of the children in Nepal.

It is quite encouraging to see the initiatives taken of "Growth monitoring" in many community-based child development programs. The programs assess the nutritional status of children from birth to 5 years. But taking

measurements (height and weight) of the children alone does not have any meaning unless it is administered at regular intervals and records are maintained to follow up children's health and referral services.

Communication strategies should be developed and promoted to raise the awareness. Community-based early childhood program should integrate educational messages to promote maternal weight gain during pregnancy in order to reduce the prevalence of low birth weight in babies and break the intergenerational cycle of growth failure. There is lack of clear understanding of the ECD program at the policy and public levels, and lack of coordination with health and educational agencies that must be partners with ECD program.

The following activities are recommended to be implemented at family, ECD center and community levels.

Family Level

1. Identification of the causes of malnutrition at family level by making informal visits to family.
2. Contacting parents and encouraging them to discuss and to create awareness about the mal feeding practices, which hamper child's growth and development.
3. Talking to parents about nutritional needs of expectant mothers and young children (nutritious food, immunization, medical checkup).
4. Importance of regular immunization, hygiene and health habits for protection of children.
5. Importance of colostrums and breast-feeding.
6. Avoiding accidents in home by taking safety measures.
7. Encouraging parents to grow green vegetables and fruits in available land.

Interventions at ECD Center Level

- The facilitator plays a prominent role in promoting and conducting the nutrition-and health-related activities in the center with the cooperation of parents, community people and children.
- The facilitators should collect pictures, prepare charts and display materials in the center to depict the importance of good nutrition, healthy habits and hygienic practices for young children**.**

- Arrangement should be made to cook a balanced and palatable, nutritious midday meal for children in the ECD center. The meal can be prepared with locally available cereals and legumes and vegetables such as maize, soybean, green vegetables, potatoes, and fruits- whichever is easily accessible and seasonal. Encourage children to eat more vegetables and fruits. Provide different food items (rotation-wise) in meals as far as possible.
- Encourage children to participate in preparing a kitchen garden behind the center to grow vegetables and fruits as a part of daily play activities. These vegetables can be later used while preparing meals for children.
- Parents' participation in preparation of kitchen garden, cooking meals and their participation and contribution in the form of labor, kind or cash should be encouraged.
- Provide children with clean and safe drinking water in the center and provide sufficient water for washing hands before and after eating.
- Talk about the importance of sanitation/hygiene/health during informal talk and story telling time.
- Every ECD center must be provided with a clean toilet and the facilitator should train the children to use the toilet for urination and defecation purpose and help them wash hands with soap regularly.
- Arrange demonstration for mothers and caregivers to acquaint them with the rules of simple cooking of complementary foods for young children.
- Encourage children to bring a clean piece of cloth or small handkerchief from home and use it to wipe hands and noses with. Guide children to clean their noses well and wash hands after cleaning.
- Maintain monthly records of the weight and height of children for regular growth.
- Monitoring of children in the center. Maintaining attendance records (regularity) and health records of children in order to get advice from health officials in case of sickness and to assess the progress made by the children attending ECD program.
- Organize simple games, role-play, sing songs and tell stories to children to promote the development of positive attitudes towards nutritious food, personal cleanliness and good health habits.

- Take help of children in preparation of activities, winding up of activities after play, cleaning the classroom and disposing of the refuse at the proper place and help cultivate the habit of keeping the surroundings clean.
- Arrange parents' meeting in ECD center to discuss the parents' concerns and problems about their children's health and nutritional status and provide opportunities to parents to promote their knowledge and skills.
- Communicate the parents about the importance of nutritious food for the child's total development by means of documentary shows, audio-visual medias, posters, charts, puppet shows and street plays.

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Revisiting the Child's Brain
Insights into Latest Development in Brain Research

- Abhiyan Jung Rana

A child's brain is truly an amazing work in progress. It is constantly growing and changing, and the way it changes is not only due to the genes that a child is born with but also to what the child encounters as its environment. This paper will attempt to show the reader what new technical breakthroughs in medical science has evidenced in how a child's brain develops and what are the factors affecting that development.

Although the human brain weighs only three pounds, it is the most complex structure in our world and is also the body's most vital organ. The human brain is truly an amazing organ. It moderates all of our thoughts, feelings and behaviors. It allows us to create, share and hope. It allows us to communicate and connect, to teach and to learn. The brain moulds in us our humanity.

Everything that a human brain must do requires billions of brain cells, or neurons. A newborn's brain has approximately 100 billion neurons. Those neurons cannot function on their own, they need to be organized into networks, and that requires trillions of connections, or synapses, among them. The human brain starts out with relatively few connections. By adulthood, we need really complex networks. We go from about 50 trillion connections at birth to 1,000 trillion by the time we are three and down to 500 trillion as an adult.

How are these connections formed? Every neuron has an axon, the output device, which sends electrical signals to other neurons. And every neuron has many hairline structures called dendrites, which receive incoming signals. A synapse is produced when the axon of one neuron connects with the dendrite of another.

It is important to pay attention to when all of this happens. In the pre-school years, the brain produces twice as many connections as it will eventually need. During the elementary school, the number of synapses remains about the same. When most children reach the middle school - at about age 11 - the number of connection begins to decline. By age 20, about half of the early connections have been eliminated or "pruned", leaving about 500 trillion connections. A college graduate's neural network is only half as dense as it

was in pre-school, and the connections that endure are the ones that have become stabilized through repeated use.

It is very important to remember that these synapses are made and strengthened by experiences - repetitive, consistent, predictable and nurturing experiences. And it is becoming increasingly clear that it is the experiences of early childhood that play a vital role in determining the foundational capabilities of the brain.

The experiences, environments and opportunities we provide to our children help determine their strengths and vulnerabilities. If the child's world is violent and emotionally or cognitively deprived, their potential will remain checked. If the child's world is safe, nurturing and rich in social, emotional and cognitive opportunities, he or she will flourish. And central to a child's healthy development is the opportunity to act on their natural curiosity - to explore, to play and, as a result, to learn.

Of all the discoveries from neuroscience in recent years, the finding that the electrical activity of brain cells changes the physical structure of the brain is perhaps the most breathtaking. For, the rhythmic firing of neurons is no longer assumed to be a by-product of building the brain but essential to the process, and it begins well before birth. A brain is not a computer. Nature does not cobble it together, and then turn it on. No, the brain begins working long before it is finished. And the same process that wires the brain before birth also drives the explosion of learning that occurs immediately afterward.

We knew, of course, that babies' growth is dramatic. A lot of parents suspected that a great deal was going on in their children's development. But many of us vastly underestimated the importance and the extent of brain development in the early years. In recent years scientists have made some real breakthroughs in research. They are providing us with detailed pictures of how brains develop at a cellular level. It boils down to two main findings.

First, from the first weeks of life, young children's brains are incredibly active and complex. The things that our children see, hear, feel, and touch don't just have a vague, general influence. Early experience actually affects the way our brains are physically wired. And second, as parents, teachers, relatives, neighbors, and employers - and as a nation - we have more opportunities that we ever realized to affect how children's brains develop.

The PET scan, which stands for Positron Emission Tomography is a tool that enables scientists to look inside a brain. PET scans produce computer-generated images of living, working brains. PET scans allow scientists to measure the activity levels of various parts of the brain. They do this by showing how much fuel – in the form of glucose - is being used by particular parts of the brains when the scan is done.

High glucose consumption is a pretty good indication that there is intense activity in a part of the brain. By comparing brain scans taken at various ages, scientists can observe the sequence and rate of brain development. We used to think that babies' brains develop very slowly. Now we know this isn't so. Using PET scan technology, it has been documented that in the early years the human brain has a much higher metabolic rate than it will have later in life. PET scans have provided dramatic evidence that a one-year-old's brain more closely resembles an adult's brain than a new-born's.

The pruning of the synapses that starts around the age of one does not happen in a random process. Genes do not predetermine how neural networks are pruned. This is where the child's early experience plays a crucial role. Every time an activity is repeated, certain connections are formed or used. Each time a synapse is used in the early years, it gets stronger. As pruning proceeds during adolescence, synapses that have been used frequently through repeated early experience tend to become permanent, synapses that were not used at all or not used frequently enough in the early years tend to be eliminated. In this way, the experiences - positive or negative - that young children have in the first years of life influence how their brains will be wired as adults.

Lessons Learned

With such findings that brain scientists have evidenced for us, we can come to some conclusions on lessons that these findings provide:

The **first lesson** of early brain development is that human development hinges on the interplay between nature and nurture. Scientists used to think that brain development was pretty much driven by genes. Now they have changed their view, although we can't underestimate the importance of genes. Genes give each of us a set of predisposition. We all know that from birth, some individuals seem to have more visual, musical or linguistic ability than others. But genetic endowment is only part of the equation. It is the complex dance between nature and nurture that shapes human development. It is a dance in which both partners are absolutely necessary and can't be separated.

Both before and after birth, each one of us interacts with our environment. Before birth, that environment is the mother's uterus, the nutrition and substances that cross the placenta, and the sounds and sensations that can be sensed or felt from within. After birth, the mother's, father's or caregiver's body, room temperature, the sound of a lullaby or shouting or the television, the toy hanging over the crib, the sense of security or the lack of it-all make up the environment. These environments have an impact on how brains develop. Brain scientists tell us that interaction with the environment is an

absolute requirement of brain development. It helps to determine how brain cells will be connected.

The **second lesson** is that early care and nurturing have a decisive and long-lasting impact on how people develop, their ability to learn, and their capacity to regulate emotions. This is clearly one of the most important lessons. Many kinds of experience affect how young brains are wired, but none is more important than early care and nurturing. When infants are held, cuddled, and touched by way of comforting them, it has a healthy effect on their brain. The bottom line is that warm, responsive care promotes healthy brain development.

The **third lesson** is that the human brain has a remarkable capacity to change, but timing is crucial. We know a lot about what children need in the early years. But what if they don't get the positive experience or love that they need? What if something goes wrong? While learning continues throughout the life cycle, there are prime times for certain types of optimal development - periods during which the brain is particularly efficient at specific types of learning. Scientists call them "sensitive periods". During these periods, neurons can create synapses most easily and efficiently. Once the sensitive period has passed, opportunities for forging neural pathways appear to shrink. Learning certainly continues throughout life, but some kinds of learning get more difficult later on. It has long been known that there are optimal periods for different kinds of learning. Young children who move to a new country can pick up a new language easily, while their adolescent brothers and sisters may have more trouble shedding their accents and their parents may struggle even more with a new language. Because the brain cells that process language are being wired in the early years, they are especially responsive to experience during this time.

Because there are opportunities for change throughout life, brain plasticity is good news for teachers and parents. But the brain's vulnerability to adverse conditions is also cause for concern. This is the **fourth lesson** of recent brain research; when children don't get the care they need during developmental prime times, or if they experience trauma, abuse, or neglect, their brain development may be compromised.

The **fifth lesson** points to the efficacy of early interventions. Substantial evidence amassed by neuroscientists and child development experts over the last decade point to the wisdom and efficacy of early intervention. We can take the maximum advantage of investment made in human development, if we invest it in the earliest years. However, data facts show that most of the investment for human development is put in later years of life. Evidence has been shown that the malleability of the brain, or its ability to be molded, is the greatest before the age of three and it drastically begins

to wane after that age. Therefore, to make the most of the opportunity on how the brain is developed, interventions have to be made at the earliest possible age.

The **sixth lesson** is with integrated services for children. It is known that children need to be healthy and well nourished to flourish. It was also accepted that a healthy outcome in a child helped the child in his or her nutritional status. In other words, if a child were not sick his/her body would be able to absorb the nutrition provided more efficiently and hence help his/her nutritional outcome. Similarly, well-nourished children assist their own healthy outcomes, that is well-nourished children seldom fall sick. It is also believed that both healthy outcomes and good nutritional status of children lead to better psychosocial and cognitive development of those children.

In addition to the preceding belief, science has demonstrated that a child that is psychosocially and cognitively thriving has a better chance of a healthy outcome if he/she is well nourished. In simpler words, a child that is happy is more likely to absorb the nutrition that is provided and is less likely to fall sick. Therefore, the lesson is children's need should be looked at more holistically, not only at the physical needs of children.

Some Frequently Asked Questions

There are many questions germane to brain research and to the brain itself. Many still go unanswered. The following are some of the most frequently asked questions. These questions may provide further insights into the realm of children's brain development.

Does Experience Change the Actual Structure of the Brain?

Yes. Brain development is "activity-dependent," meaning that the electrical activity in every circuit--sensory, motor, emotional, cognitive--shapes the way that circuit gets put together. Like computer circuits, neural circuits process information through the flow of electricity. Unlike computer circuits, however, the circuits in our brains are not fixed structures. Every experience--whether it is seeing one's first rainbow, riding a bicycle, reading a book, and sharing a joke--excites certain neural circuits and leaves others inactive. Those that are consistently turned on over time will be strengthened, while those that are rarely excited may be dropped away. Or, as neuroscientists sometimes say, "Cells that fire together, wire together." The elimination of unused neural circuits, also referred to as "pruning," may sound harsh, but it is generally a good thing. It streamlines children's neural processing; making the remaining circuits work more quickly and efficiently.

What is a "Critical Period" in Brain Development?

Pruning or selection of active neural circuits takes place throughout life, but is far more common in early childhood. Animal studies have shown that there are certain windows or time during which the young are especially sensitive to their environment. Thus, babies also require normal visual input or they may suffer permanent impairment; children born with crossed or "lazy" eyes will fail to develop full acuity and depth perception if the problem is not promptly corrected. Language skills depend critically on verbal input (or sign language, for babies with hearing impairments) in the first few years or certain skills, particularly grammar and pronunciation, may be permanently impacted. The critical period for language learning begins to close around five years of age and ends around puberty. This is why individuals who learn a new language after puberty almost always speak it with a foreign accent.

When is the Brain Fully Developed?

In some way, never. Our brains are continually re-shaping themselves to meet the demands of everyday life, even throughout adulthood. However, there are certain aspects of brain structure and function that do level off during development. For example, the number of neurons peaks even before birth; some 100 billion are formed during just the first five months of gestation. (Recent evidence suggests that new neurons are produced throughout life, though far less rapidly, and probably in numbers sufficient only to replace those that gradually die off.)

In spite of the great number of neurons present at birth, brain size itself increases more gradually: a newborn's brain is only about one-quarter the size of an adult's. It grows to about 80 percent of adult size by three years of age and 90 percent by age five. This growth is largely due to changes in individual neurons, which are structured much like trees. Thus, each brain cell begins as a tiny sapling and only gradually sprouts its hundreds of long, branching dendrites. Brain growth (measured as either weight or volume) is largely due to the growth of these dendrites, which serve as the receiving point for synaptic input from other neurons.

How does Nutrition Affect the Developing Brain?

Brain development is most sensitive to a baby's nutrition between mid-gestation and two years of age. Children who are malnourished throughout this period do not adequately grow, either physically or mentally. Their brains are smaller than normal, because of reduced dendritic growth. Inadequate brain growth explains why children who were malnourished as fetuses and infants suffer often-lasting behavioral and cognitive deficits,

including slower language and fine motor development, lower IQ, and poorer school performance.

A baby's birth weight-and brain size-do depend on the quality of his or her mother's nutrition during pregnancy. Pregnant women should gain about 20 percent of their ideal pre-pregnancy weight. After birth, brain growth depends critically on the quality of a child's nutrition. Breast milk offers the best mix of nutrients for promoting brain growth, provided that breast-fed infants receive some form of iron supplementation beginning around six months of age. Iron deficiency has been clearly linked to cognitive deficits in young children. Iron is critical for maintaining an adequate number of oxygen-carrying red blood cells, which in turn are necessary to fuel brain growth.

What are the Most Important Influences of Brain Development Before Birth?

Many factors can influence fetal brain development, but most healthy pregnant women do not need to radically alter their lifestyles in order to promote optimal brain development. Good nutrition is important, since brain growth, like the growth of the rest of the fetus' body, is influenced by the quality of a pregnant woman's diet. Alcohol and cigarettes should be avoided, since these can impair the formation and wiring of brain cells. Some chemicals and forms of radiation are potentially harmful to fetal brain development, but most need concern only women exposed through their occupations--that is, those who work on farm or in factories, laboratories, hospitals, dry-cleaning stores, or other sites that expose them to dangerous chemicals, radiation, or infections.

Infections pose perhaps the greatest risk to the developing fetus' brain. Many seemingly harmless infections can seriously interrupt fetal development, including the formation and wiring of brain cells. Prenatal testing and treatment can minimize the risk of some of these, but generally speaking, pregnant women can best protect their babies' brains by practicing strict hygiene: wash your hands frequently, avoid sick friends and co-workers, etc.

What Role do Parents Play in a Baby's Brain Development?

Parents are another important part of the developmental equation. Infants prefer human stimuli -- your face, voice, touch, and even smell -- over everything else. They innately orient to people's faces and would rather listen to a speech or singing than any other kind of sound.

Just as newborn babies are born with a set of very useful instincts for surviving and orienting to their new environment, parents are equally programmed to love and respond to our babies' cues. Most adults (and children) find infants irresistible, and instinctively want to nurture and protect them. It is certainly no accident that the affection most parents feel towards their babies and the kind of attention we most want to shower them with (touching, holding, comforting, rocking, singing and talking) to provide precisely the best kind of stimulation for their growing brains. Because brain development is so heavily dependent on early experience, most babies will receive the right kind of nurturing from their earliest days, through our loving urges and parenting instincts.

Normal living, responsive caregiving seems to provide babies with the ideal environment for encouraging their own exploration, which is always the best route to learning. The one form of stimulation that has been proven to make a difference is language: infants and children who are conversed with, read to, and otherwise engaged in lots of verbal interaction show somewhat more advanced linguistic skills than children who are not as verbally engaged by their caregivers. Because language is fundamental to most of the rest of cognitive development, this simple action--talking and listening to your child--is one of the best ways to make the most of his or her critical brain-building years.

Are there Any Differences in the Development of Boys' and Girls' Brains?

Yes, but they are subtle, and are a product of both nature and nurture. Neuroscientists have known for many years that the brains of men and women are not identical. Men's brains tend to be more liberalized--that is, the two hemispheres operate more independently during specific mental tasks like speaking or navigating around one's environment. For the same kind of tasks, females tend to use both their cerebral hemispheres more equally. Another difference is size: males of all ages tend to have slightly larger brains, on average, than females, even after correcting for differences in body size. Electrical measurements reveal differences in boys' and girls' brain function from the moment of birth. By three months of age, boys' and girls' brains respond differently to the sound of human speech. Because they appear so early in life, such differences are presumably a product of sex-related genes or hormones.

Sex differences in the brain are reflected in the somewhat different developmental timetables of girls and boys. By most measures of sensory and cognitive development, girls are slightly more advanced: vision, hearing memory, smell, and touch are all more acute in female than male infants.

Girl babies also tend to be somewhat more socially-attuned--responding to more readily infant's cry--and they generally lead boys in the emergence of fine motor and language skills. Boys eventually catch up in many of these areas. By age three, they tend to out-perform girls in one cognitive area: visual-spatial integration, which is involved in navigation, assembling jigsaw puzzles, and certain types of hand-eye co-ordination. Males of all ages tend to perform better than females on turned ninety degrees) while females of all ages tend to perform better than males at certain verbal tasks and at identifying emotional expression in another person's face.

Genes and hormones set the ball rolling, but they do not fully account for sex differences in children's brains. Experience also plays a fundamental role. Consider, for example, the "typical' boy, with his more advanced spatial skills, he may well prefer activities like climbing or pushing trucks around--all of which further hone his visual-spatial skills. The 'typical' girl, by contrast, may gravitate more toward games with dolls and siblings, which further reinforce her verbal and social skills. It is not hard to see how initial strengths are magnified.

TIPS for Families

Finally, some tips for the families on how they can provide good care to their children so they know they are doing the right things for their children's optimum brain development.

Be warm, loving and responsive. When children receive warm care, they are more likely to feel safe and secure with the adults who take care of them and become attached to them.

Respond to the child's cues and clues. Being responsive is an important concept because it includes understanding what the child is saying and then responding. It may be responding to a child emotionally, comforting him when he is hurt. It may be responding socially, helping a child see that she doesn't have to hit another child to get what she wants but can use words. It may be responding intellectually - bringing a child a storybook on bugs when he has become fascinated with bugs.

Talk, sing and read to children. It's not just reading a story, but reading a story in a way that gets a child to participate by finding something in the picture, guessing what will happen next, or repeating the rhyme in the book. It's not just listening to music, but singing to the child so he or she sings back to you.

Establish rituals and routines. Teach young children to know when it is time for bed by developing routines such as singing a song and pulling down the curtains. Daily routines and rituals then become associated with

pleasurable feelings and are reassuring to children. They become the memories children will have forever.

Encourage safe exploration and play. As infants grow, they begin to explore the world beyond their caregivers. Parents should encourage this exploration. While many of us think of learning as simply acquiring facts, children actually learn through playing.

Use discipline as an opportunity to teach. In addition to consistent and loving adult supervision, teach children limits. Never hit or shake a child.

Recognize that each child is unique. But expect children to succeed. Children grow at different rates. Their ideas and feelings about themselves reflect, in large measure, parents and caregivers' attitude towards them.

Caregivers need to take care of themselves. They need nurturing too. When parents and caregivers are exhausted, irritable, depressed or overwhelmed, they may have a harder time meeting the needs of your children.

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Acknowledgement for the paper goes to the following papers written by the following authors:

Curiosity, Pleasure and Play: A Neuro Developmental Perspective
Bruce D. Perry, M.D., Ph.D.; Lea Hogan, M.Ed. Sarah J. Marlin

Rethinking the Brain
Families and Work Institutes

Fertle Minds in Time magazine
J Madeleine Nash

Brain Development
Karen DeBord, Ph.D.
Extension State Specialist, Child Development
North Caroline Cooperative Extensive Service

The Relationship Between Television Violence and Neurodevelopment of Young Children

- Wayne Eastman, Ed. D.

The human brain, a three-pound organ, is the pathway to human development. "Most neuroscientists today argue that the biological organ inside our skulls is both the source and repository of our elusive identity and of all aspects of cognition and emotion" (Conlan, 1999, p. 3). Furthermore, "The brain is the master control of our health and well being, competencies and coping skills. It directs all aspects of bodily functions through established biological pathways" (Bertrand, 2001, p. 9). Research confirms that a person's brain reaches its full maturation at around age 12.

Neuroscientists have shown that the first two years of a child's life is when the most rapid development of the brain occurs (Bertrand, 2001). The first five years of a child's life is the critical period for developing language and cognition. In the context of the preceding statement, it should be noted that the more a brain is stimulated the more it is capable of doing. This growth is often inhibited by the reality that many young children are watching on an average of two or four hours of television per day (Eastman, 2002). This scenario is further compounded by the amount of television violence witnessed by children. It is estimated that by the time an average Canadian or American child leaves elementary school he or she will have seen 8,000 murders and over 100,000 other acts of television violence (Eastman, 2002).

It is obvious that television plays a dominant role in our culture. However, television, on its own, is neither bad nor good. It offers children benefits such as education and entertainment but television can impact negatively on children - limiting their participation in physical activity and dramatic play. The effect of television on children's behavior is further accentuated when one considers that very young children have difficulty separating fact from fantasy.

This article is intended to give an overview of the relationship between television violence and neurodevelopment of young children as well as outline implications for parents and early childhood educators as they endeavor to take control of television viewing. We, as parents and early childhood educators, deem it important to teach young children rules and life skills, however, with television intruding into the lives of preschoolers, it is now essential that we teach children television literacy.

Effects of TV on Children

What effect does television have on a child's behavior? As parents and early childhood educators, we need to be cognizant of the reality that television can have an impact upon children's behavior, development, and even their health. Watching television in itself is not necessarily a problem. Of concern is what children are not doing when they are watching TV - for instance, not reading or playing creatively or socializing.

Possibly the more television children watch, the greater the negative influence on their lives. What is heavy viewing? Experts often define viewing not in terms of hours but in relationship to exclusion of other activities, such as playing. However, there are researchers that state four hours a day is the maximum viewing time for young children. Others recommend that preschoolers be exposed to only one to two programs per day, and with a maximum of two hours at a time (Eastman, 1995).

When considering the negative effects of television on young children, most parents and early childhood educators see violence and aggression as the greatest concern. The most frequent reasons for this are as follows: children tend to imitate behavior they view on television; frequent exposure to TV violence can make children think that violence is normal, even in real life; children who take in large quantities of televised violence tend to see the world as a frightening place and grow leery of neighbors and strangers; and children who see, over and over again, that violence is an acceptable solution to problems, tend to work out their problems in the same way. The later statement merits attention because young children's aggressive skills are acquired earlier than mental or social skills (Beaty, 1995). Consequently, "Children who admire aggressiveness in their heroes and heroines may see little reason for devoting time and effort to learning other ways of problem solving" (Singer, 1988).

Early childhood educators should consider TV programs in the context of developmental appropriateness. Developmental appropriateness should be the criterion used for evaluating television programs. With respect to TV appropriateness, Levin (1994) conceived a developmental framework for assessing television.

Levin's (1994) framework included three categories: developmental issues, what children see on TV, and what children should see. The developmental issues included the following: to establish a sense of trust and safety, to develop a sense of autonomy with connectedness, to develop a sense of improvement, to establish gender identity, to develop an appreciation of diversity among people, and to have opportunities for meaningful play. Within this framework, Levin (1994) contends that television negatively

impacts on the healthy social, emotional, and intellectual development of young children.

Television Violence and Neurodevelopment of Children

In the report, Starting Points, the Carnegie Corporation of New York talks about the significance of a child's first three years of life as vital to brain development (Kotulak, 1999). The Carnegie report reiterates the concern that the lack of proper stimulation may be damaging the brains of young children (Kotulak, 1999). As a corollary to the preceding statement, too much exposure to the wrong kind of stimulation, such as television violence, may be equally damaging to the developing brains of children. As a possible reaction to the relentless viewing of television violence, the brain may adapt by cells rewiring trillions of connections that establish the chemical pathways of aggression (Kotulak, 1996).

An infant is born with approximately 100 billion brain cells. These neurons are designed to store and transmit information (CCCF, 2001). Children's brains are at its most receptive stage in infancy and early childhood, when experiences, positive or negative, will affect how groups of neurons are either strengthened or disregarded (CCCF, 2001). Thus, these early experiences play a crucial role in shaping how children perceive the world. Television violence may deprive children of experiences that help to develop neural pathways, which are necessary for healthy brain development. Furthermore, "Extensive viewing of violent television shows and video games can lead to an emotional desensitization. Children may seek increasing horrific programming just to feel some emotional response" (De Gaetano, 1999, p. 5).

Because young children have difficulties distinguishing between fantasy and reality, they are vulnerable to the negative effects of TV violence. Children who take in large quantities of TV violence tend to see the world as a frightening place as well they may be more fearful of the world around them. Consequently, the preceding factors may cause stress. Research has indicated that "The neural pathways that control how we respond to stress seem to be particularly powerful in shaping how we learn and behave, and our overall health" (CCCF, 2001). Thus, if children are exposed to sustained stress during the time when the brain is going through its major sculpting process, they can be adversely affected in later life (CCCF, 2001).

Not only do most young children have difficulty distinguishing between reality and fantasy, they also can not articulate a rationale for the violence they witness in the media culture. Furthermore, they lack the cognitive attributes to put these violent images into meaningful contexts (De Gaetano, 1999). This inability to put fear-inspiring experiences into a cognitive setting implies

that children under the age of eight years are extremely vulnerable to the violent imagery portrayed in many television programs (De Gaetano, 1999). Exposure to large amounts of TV violence can make children think that violence is normal (Eastman, 2000).

There are those who speculate that children's brains are not developing the way they should because of viewing excessive television violence. Heavy TV watching during the early years when the brain is malleable and sensitive prolongs the dominance of the right brain functions (Long and Buglion, 2000) thus, inhibiting the left-brain, which is responsible for verbal-logical functions (Long, 2000). Furthermore, numerous studies over the years have demonstrated that there is a correlation between TV violence and aggressive behavior. Recent evidence indicates that "- - - there is a sensitive period that begins before age eight when children are especially susceptible to the effects of violence shown on TV" (Long, 2000, P. 4)

Ledingham (2001) states "Young children do not process information in the same way as adults." She further articulates, "Nor do they have the experience to evaluate what they see" (p. 2-3). Thus Ledingham (2001) concludes that since many young children watch a considerable amount of TV, this makes them especially susceptible to the adverse impacts of television. Because of the excess amount of violence in television shows for children, many heavy viewers develop a distorted sense of reality (Long, N. D.). It has been estimated that the number of violent acts in children's programs is six times greater than adult shows.

What are the mechanisms by which exposure to television violence might affect young children? One explanation is Bandura's model of social learning. This model infers that watching television violence can lead to aggression because "- - children observe novel aggressive behaviors and learn vicariously that aggressive acts are rewarded" (Ledingham, Ledingham, and Richardson, 1993, p. 8). Furthermore, "They store these new behaviors in memory as part of the repertoire of actions that are available to get them what they want" (Ledingham, et al, 1993, p. 8). Thus, the more real children perceive the violence they witness on television the more they will endeavor to imitate that violent behavior (Ledingham, et al, 1993).

Violent television images can keep a child's instincts and emotions in a constant state of alertness for flight or fight and at the same time reduce their thinking functions (Eastman, 2002). Known as the 'orienting response', the human brain is wired to fix the eyes on sudden changes in the environment. Unlike adults, young children are more susceptible to rapid changing television images. This vulnerability is accentuated by their choice of television programs, for example, cartoons. It has been estimated that

images change approximately every 4 to 6 seconds during children cartoon shows. This potential negative effect is further compounded by the reality that children's cartoons often portray many more acts of violence than adult programming (Eastman, 2002).

When children decide to imitate a behavior, morality is not a part of this decision process (De Gaetano, 1999). Centerwall (1992) writes, "That young children do not possess an instinct for gauging whether a behavior ought to be imitated." He further states that "They will imitate anything, including behaviors that most adults would regard as destructive and antisocial - -" (p. 3059). This inability to distinguish between safe and potentially dangerous behaviors makes children extremely vulnerable to the negative effects of violent TV programming.

As children view television violence the chemical transmitter, noradrenaline, comes into play. As they watch graphic programs the production of noradrenaline increases in children's brains. The brain's alarm network is located at the base of the brain and sends noradrenaline to other brain centers that control such functions as emotions (De Gaetano, 1999). "As the images assault the brain, the noradrenaline level rises, keeping the body in a constant state of readiness - easy to startle, quick to blow up"(De Gaetano, 1999). The preceding rationale is a contributing factor in why after watching violent television scenes children are more prone to act in aggressive ways like shouting, bullying and play and real fighting.

In concluding this section of the paper it is suffice to state that not only does television violence affect the neurodevelopment of children but it also deprives them of sensory-rich experiences necessary for healthy brain development (De Gaetano, 1999). A growing apprehension among brain researchers is that large amounts of television viewing may affect the development of strong and widespread neural pathways necessary for a 'good' brain (De Gaetano, 1999).

Implications for Parents and Early Childhood Educators

It is obvious that TV viewing reduces a child's play time. Several authors, for example Winn (1985), state that the loss of play time can be devastating because "... play is clearly a vehicle for many of the child's most important learning and the means whereby he is able to practice and develop behaviors necessary to his success as a social being." Winn (1985) further states that "Not only does TV viewing lead to a reduction in play time; there is evidence to suggest that it has affected the nature of children's play, particularly indoor play." As a corollary to Winn's findings, there are early childhood educators who feel that preschoolers' dramatic plays have become

much more aggressive, less creative and imaginative and dominated by violent TV characters (Beaty, 1995; Carlsson-Paige, 1995).

Parents need to create a setting where their children feel safe. Hence, parents must monitor television viewing so that their young child watches appropriate TV, which personifies this feeling of safety. As Symons (1991) states: "When programs are chosen carefully, when TV time is limited, and when parents watch too, actively, then the 'boob tube' can, indeed, enrich our children's lives."

A report by the Ontario Medical Association indicated that watching television is a major contributor to sleeplessness, depression, and hyperactivity in young children (Rosenkrantz, 1994). If such findings disturb families, then parents must enact strategies to lessen the possible negative effects of the 'Plug-In Drug'. There is a litany of strategies germane to television screening and young children. Listed below are some, and by no means inclusive, positive steps parents can take to facilitate television guidance:

When your child is watching television, watch with him or her. Being proactive affords parents the opportunity to develop television literacy. If parents are sincere in managing the television they must conceptualize their goals; for example one goal may be to have their child watch less violence.

Parents should limit the amount of time their preschoolers watch television. Some parents develop formal rules and are selective in the programs they allow their children to view. For instance, in regard to what to watch, very young children could be given a TV allowance - for example two shows a day, or only television on the weekend.

Television should not be the sole source of recreational time in a household. Thus, for parents this means planning alternative activities such as family picnic, visiting a library, taking walks, etc.

Parents should be careful about indiscriminate viewing of news programs. Young children who are exposed to a lot of news can become desensitized to acts of violence (Rosenkrantz, 1994).

Parents can plan special viewing times with their children (Rosenkrantz, 1994). Even very young children can plan their weekly television guides or select programs to be videoed and watched at a more convenient time (Rodgers, 1994).

Parents can get preschoolers to think about what they are viewing. One way to accomplish this goal is by turning the TV into a treasure hunt. Children should concentrate on one thing at a time, for example commercials, and then move on to other items (Rodgers, '94).

Conversations are much more effective than lectures with young children. This is because young children have difficulty comprehending abstract ideas like equality and socially acceptable problem solving techniques. Thus, parents can assist their child to understand these concepts by demonstrating how they work in real life (Rodgers, '94).

Parents should be cognizant of the TV being left on just for background noise and turn it off. A corollary to the idea of leaving the TV on for no particular purpose is the avoidance of television as a babysitter. Allowing the TV to be on constantly sets a pattern of TV dependence. For example, if parents are busy, why not turn-off the TV and have the children listen to music or do crafts (Rosendrantz, 1994).

"Talk with your child about what is real and not real on television. Talk about the concept of acting - relate acting to a game of make-believe. Also, talk about cartoon characters. You might occasionally want to ask your child if the characters are real and what would happen to real people and animals if they were in similar situations" (Rosenkrantz, 1994).

Possibly the most important suggestion to parents is that they be aware of their child's reaction to what they view and if he or she becomes disturbed by a particular program then turn the TV off and do something else together (Rosenkrantz, 1994).

As professionals working with very young children, early childhood educators can do much to assist preschoolers understand the role of television in our society. More specifically, early childhood educators can plan the curriculum "...so that it provides opportunities for children to share their views, gain knowledge, go beyond TV visions, develop critical viewing skills, make critical choices, build on resources, work together with parents, and have the freedom to play" (Stone-Zukowski, 1994).

Stone-Zukowski (1994) outlines the following activities early childhood educators can incorporate into their center's curriculum in order to help children cope with the television:

Discussion: assure children that you share their concerns. When dealing with young children ensure that they know trusted adults are there to protect them.

Knowledge: Provide opportunities for children to learn how movies and television shows are made. You can have children visit a TV station, make or draw cartoons about TV shows, make a video, and make a commercial.

Critical Choices: Encourage children to make critical choices about the shows they watch on TV. Help parents recognize the importance of making choices that fit with their family standards. Learn about the rating systems

established by the CRTC. Provide resources for parents and children that will help them make choices.

Fantasy: Encourage opportunities for children to express their feelings in ways that feel good, are non-threatening and removed from reality. This can be done by: role playing monsters, creatures from outer space, dinosaurs, and fairytale characters; singing and writing songs about the rain forest animals, etc.; and telling true or make-believe stories and using puppets to share concerns.

Action Groups: Children can work with adults to become aware of various lobby groups and government agencies that can have a positive impact on the issues raised on TV.

Conclusion

For educators and parents, possibly the greatest issue is the effect of television violence on children's behavior. Young children have limited cognitive abilities to process and cope with violence. Consequently, Dr. Benjamin Spock advocates that children under the age of four have limited or no exposure to media violence (Stone-Zukowski, 1994). This may be an unrealistic expectation given the pervasive nature of television in today's world. Since the introduction of the television in the 1950's, it has invaded every aspect of society. In the context of the effects television violence has on the neurodevelopment of young children, it is essential that adults promote media literacy skills, thus, empowering children with abilities to deal with images and issues portrayed on TV.

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Parental Education

- Radha Krishna Joshi, Ph.D.

Introduction

With current developments in science and technology, society has been changing very fast. In this context, the family patterns, also, have been changing very quickly. The traditional joint family system has got transformed into nuclear families. The parents of both the extended and the nuclear families are usually busy in their occupations. Hence, they want to enroll their children in pre-schools, which are generally termed as “Kindergarten”, or 'Montessori schools' in the urban areas and 'child-care centers' or "child development centers' in the rural areas. In the Nepalese context, the children, generally 3 to 5 years, are placed in pre-schools. The young babies, generally 1 to 2 years, are placed in "day care centers' or 'baby nurseries'. In the traditional system the grand parents were kept engaged in taking care of the babies, while the parents were working. But in the nuclear families, day care centers and pre-schools have been meeting these essential needs of working parents. Though parents do play a role in taking care of and educating their children at home. Their parents' traditional knowledge and skills are in today’s context not adequate to take care of their children. Hence, they need parental education, which will provide them with relevant knowledge and skills to take care of their children in a proper way.

Home is the first school and the mother is the first teacher for young children. A child first learns to speak at home with his/her mother and learns to play, sing, and dance with his/her mother and other family-members. Hence, home exerts a great impact on the subsequent development of the children. For instance a happy home makes the child happy and a broken home makes the child delinquent. Hence, parental education is essential in order for parents to facilitate the development of their children's potentials. Parental education can be defined as a process, which would help parents in learning the technical know-how of taking care of their children from a holistic perspective. The holistic approach refers to the physical, intellectual, emotional, social, and creative development of children.

Importance of Parental Education

As traditional knowledge and skills are not adequate, parents should have some technical know-how in taking care of their children so that the children can develop to their fullest potential. Hence, some of the major points which parents should take into consideration are as follows:

Child Growth and Development

Parents should have a sound knowledge of child growth and development in order to help the children grow in a proper way. The rate of growth and development of a prenatal baby is high during the pregnancy period. The temperament as well as the food intake of the mother will have an impact on the growth and development of a newly born baby. Hence, a pregnant woman should have access to nutritious food so that the newly born baby will be well developed at birth. If the mother is an alcoholic and smokes, this will have a negative impact on the child's health. If the food intake of a pregnant woman lacks iodine, her newly born child is more likely to be mentally retarded. If a pregnant woman lacks protein in her regular diet, she is more likely to give birth to an under-weight baby; under-weight babies have a lower survival rate. Because of these reasons, the infant mortality rate is high in Nepal. Hence, a pregnant woman should consume an adequate amount of nutritious food rich in protein, vitamins, and minerals so that she can give birth to a healthy baby.

The first five years of life are very critical in terms of development. The rate of development at this stage is higher than any other subsequent stages of development. Research studies have indicated that an intensive level of intervention during the first five years positively modifies subsequent classroom behavior and academic skills. It is reported that the brain grows up eighty percent during the first four years. Hence, young children should be exposed to stimulating activities in order for them to develop to their full potentials.

Impact of Music

Gardom Shaw and Frances Rauscher studied the impact of music on children's learning. They gave 19 preschools piano or singing lessons for eight months, whereas another controlled group of 19 children were not given any lessons on music. After eight months of interventions, it was found that the music group improved dramatically in spatial reasoning as compared with the controlled group without any music lessons. Thus, it shows that music has a positive impact on children's learning. This study has signified the importance of the Hindu Goddess of Education, Saraswati, carrying a musical instrument called "Bina" in her two hands. Moreover, Plato, a Greek Philosopher, once said that music is a more potent instrument than anything else for education. But music has not been introduced in the preprimary schools in Nepal. Hence, the children are encouraged to learn English text by heart. Parents should press preschools to introduce music into the curriculum. They should encourage their children to sing and dance for fun at home, too.

Rote Learning vs Conceptual Learning

In our school system children are compelled to memorize the numbers counting from 1 to 100 without making them conceptually clear. They are encouraged to learn multiplication tables by heart without understanding them. The children are encouraged to learn English text by heart also. Once, I visited a very popular private school in Kathmandu where English was used as a medium of instruction and asked the principal for permission to observe the preprimary classes. He accepted my request and subsequently took me into the nursery classes. The classroom looked colorful with the kindergarten materials displayed on the wall as well as in the corners. Addressing me the principal said, "Dr. Joshi, we start English right from the nursery class." Then I asked one of the children, "What is your name?" He replied, "My name is Hari Bahadur. My father's name is Krishna Bahadur. I live in Naya Bazar". Then I asked him his father's name. He again replied, "My name is Hari Bahadur. My father's name is Krishna Bahadur. I live in Naya Bazar". I again asked, "Where do you live?" He again repeated the same, "My name is Hari Bahadur. My father's name is Krishna Bahadur. I live in Naya Bazar". This is the way a child learns English in private schools. In reality, English and Mathematics should be taught with visual aids in a lively context so that the children can learn conceptually. Hence, parents should put pressure on schools to introduce conceptual learning in a conducive environment; visual aids should also be included.

Informal vs Formal Learning

Young children learn at home and other settings by touching, looking, hearing, tasting, and smelling. Thus, children learn informally by using their senses. In other words, children learn by playing. Children love to play by nature. Hence play is the best method for the kids to learn because playing involves using the senses. Moreover it provides joyful experiences to children.

The pre-primary schools in Nepal still teach formal courses such as Nepali, English, Mathematics, Science, Social Studies, Arts, etc in the pre-primary classes. Subject teachers, usually untrained, teach each subject matter in a formal way to the young children. Children have to learn the subject matter by heart irrespective of whether they understand it or not. In a city one can usually watch the young kids going to school carrying a heavy load of books on their backs. Reading and writing exercises are given as homework even for the kids of 3 or 4 years old. At the end of the session the children are promoted to the upper class or detained in the same class on the basis of their examination results. This formal method of teaching-learning not only

hinders the spontaneous growth and development, but also deteriorates the originality and creativity of the children. Hence, the present practices of formal approaches should be replaced by informal teaching and learning practices. The preprimary schools should provide a conducive environment where the children can freely express their feelings and ideas through activities. Thus, the teaching-learning activities should be child-centered.

Play is necessary for children to learn. Researchers know that exercise is not only good for the heart but is also good for the brain, feeding it nutrients in the form of glucose and increasing nerve connections - all of which make it easier for kids of all ages to learn. Numerous studies show that children who exercise regularly do better in school than the children who do not. Robert Sylvester, an Oregon education professor, says that knowledge is retained longer if children connect not only aurally but also emotionally and physically to the materials. Early educators like Rousseau, Pestalozzi, and Froebel protested against drilling and rote memory in education and emphasized the role of play as a natural vehicle for learning. Several studies show that play is essential for physical, cognitive, social, emotional, and creative development of children.

Mother Tongue vs English Language

A child learns his mother tongue by listening to his mother and other family members and in response he expresses his feelings and ideas by speaking to them. Listening and speaking is the first step for the beginners to learn a language. Once he is able to listen and speak in his mother tongue he will be on the way to read and write it. This is a natural way to learn a language. Contrary to this principle, a child of 3 years old in the pre-primary schools of Nepal is taught to read and write the English alphabet and words without any practices of listening and speaking in the English language. At the age of 3, a child can not even read and write his/her mother tongue. Under this condition how can one expect a child to learn English? A child cannot develop his in-born qualities, if he is forced to read and write at the age of three. A child at this age is not mature enough to coordinate his hand with his eyes. Teaching him to read and write at the age of 3 is not only wasting time but also deteriorating the originality and creativity of the children. Generally, children at the age of 5 or 6 will be ready to learn reading and writing skills in their own language. English should be introduced only after the children are able to think, read and write in terms of their own language. However, English should be taught with visual aids in a meaningful context rather than by using a text.

Impact of Health and Nutrition on Child Growth and Development

Parents should take care of the health and nutrition status of their children. A UNICEF study shows that the children in Nepal are vulnerable to such diseases and ailments as acute respiratory infections, diarrhoea - related diseases, vaccine - preventable diseases, mal-nutrition, etc. Hence parents should be aware of protecting their children from such diseases and ailments through vaccination and other measures, so that their children can grow up in a proper way. They should also keep in mind that early childhood is a period of rapid growth and development. During this period, if a child has been sick for a long time, his brain does not grow properly. Consequently he will be mentally retarded. Hence, parents should take care of their children's health so that they can grow up and develop to their full potential.

Parents should, in general, be aware of the nutrition value necessary for the healthy growth and development of their children. The food intake of their children should contain a variety of food items rich in carbohydrate, protein, vitamins, and minerals. Hence, the food intake of the children should include at least one item from each of the following food groups:

a. *Group one:* **Carbohydrates**

   Rice, wheat, corn, potato, vegetable oil, animal fat, etc.

b. *Group two:* **Proteins**

   Variety of beans, grams, peas, variety of pulses, egg, meat, fish, etc.

c. *Group three:* **Vitamins and Minerals**
   Green leafy vegetables, yellow and red vegetables like carrots, fruits like mangoes, papaya, apricot, guava, oranges, tomatoes, and milk.

A CERID study shows that the food generally consumed by Nepalese children contains more amount of "Bhat", "Dhido" and "Roti" (carbohydrates) with a small amount of "Tarkari" (Vegetables). Fruits are available only in seasons. Only wealthy people can afford for protein rich food like milk products, eggs, meat, fish, a variety of beans and lentils, etc. Protein-rich food for the poor people are generally available only on special days like festivals and ceremonial occasions. However, parents should keep in mind that their children need a variety of food rich in carbohydrates, proteins, vitamins and minerals, so that their children can grow up properly, mentally and physically.

Rights of the Children

Parents should know that all children have the right to live from the time of conception. Nepal ratified the UN Convention on the Rights of the Child in 1990 (CRC) which sets a minimum standard for the rights of children to proper care and nurturing, to protection from disease, neglect, exploitation, and abuse, to development of their full potential, and to the benefits of a healthy and stimulating environment. As a result of the ratification of the CRC, Nepal adopted the Children Act, 2048 (1992), which lays down that:

a. Parents shall be under an obligation to make arrangements so as to bring up the child and to provide him with education, health care, sports and recreation facilities according to the economic status of their family;

b. No discrimination shall be made between a son and a daughter and between sons and daughters themselves in matters relating to their upbringing, education, and health care; and

c. No child shall be subjected to torture or cruel treatment.

All the parents in Nepal should be familiar with the fact that they are now legally obliged to provide education, recreation, health, and nutrition resources to their sons and daughters without making any discrimination.

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National Policies on Early Childhood Development in Nepal

- Laba Prasad Thipathee

Background

The Convention on the Rights of the Child (61st plenary meeting November 1989, Article 1) has defined a child as a human being below the age of eighteen years unless the law applicable to the child's maturity is attained earlier.

The convention on the rights of the child has pointed out that (1) states/parties recognize that every child has the inherent right to life. (2) States/parties shall ensure to the maximum possible extent the survival and development of the child (Article 6). Article 18 of the convention states that "For the purpose of guaranteeing and promoting the rights set forth in the present convention, states/parties shall render appropriate assistance to parents and legal guardians in the performance of their child-rearing responsibilities and shall ensure the development of institutions, facilities, and services for the care of the children."

Nepal has fully endorsed and committed itself to maintaining, the rights of the child as agreed in the convention on the rights of the child. The rights of the child include survival, care, growth, protection against violence, trafficking, exploitation, discrimination and physical, mental and social development. It is found that investments made and early interactions provided to the child's development and learning have tremendous impact on developing a child into adolescence. The child's brain has remarkable capacities for self-protection and recovery. But the loving care and nurture children receive in their first year or the lack of these critical experiences leaves lasting imprints on young minds. Early Childhood Development (ECD) is the program to support the child right program.

The term Early Childhood Development (ECD) refers to a comprehensive approach to policies and programs for children from birth to eight years of age, and for their parents and caregivers. Its purpose is to protect the child's right to develop mental and physical potential. Community-based services that meet the needs of infants and young children are vital to ECD and they should include attention to health, nutrition, education and water and environmental sanitation in houses and communities. The approach promotes and protects the rights of the young child to survival, growth and development.

The situation of children in Nepal is mixed, somewhere good but in many cases not good. On the one hand, child mortality is high, malnutrition is common, sanitation and indoor air quality are poor, and few children receive more than a few years of formal education. Poverty and the continual struggle for survival make it all but impossible to provide adequately for children.

On the other hand, some children flourish despite the socioeconomic odds against them. Many village children in Nepal have a clear sense of self-worth and social responsibility from the parts they play in doing household chores and agricultural tasks, such as grazing animals. When the child is young he works and plays and his learning process blends seamlessly. Before the chores become repetitive and interfere with education, active learning through work is a source of pride and satisfaction for children and a valuable opportunity to acquire the competence they so desire, and they respect in others.

One of the most important aspects of ECD is that it can build effectively on what already exists. It is not about reinventing the wheel but support they need for maximizing existing resources. With health, nutrition, water, sanitation, hygiene, education and child protection programs already available, it is vital to provide them for the whole child. Pastoral da Crianca is an example of the convergence of early childhood services through the health sector. In Colombia, the project for the importance of education (PROMESA) chose the education sector to integrate services. In education programs, groups of mothers learn how to stimulate the physical and intellectual development of their children from birth to age six.

If a country hopes to loosen the strangleholds to development that are currently warped tightly around the lives of families then it must follow four, equally essential things, at the same time.

- It must continue to make child survival a priority.
- It must ensure that surviving children play a healthy role and possess the skills to thrive and to live full and productive lives.
- It must prepare parents for their pivotal role in childcare and build the capacities of communities to support them.
- It must create a society that is free from violence and discrimination at all levels and that values the lives and contributions of children and women.

There is no single formula for success in implementing early childhood care programs. Experience has shown a variety of ways that are especially effective when used together.

1. **Educate and empower parents and caregivers**.

2. **Deliver services directly to children** using home visits, home day care, integrated child development centers and formal and informal learning activities.
3. **Promote community partnerships** to improve the physical environment and the knowledge and practices of the community, allowing common action and expanding the base for political and social negotiations.
4. **Strengthen national resources and capabilities.**
5. **Increase demand and awareness** of policy makers, planners and the general public.
6. **Develop national child and family policies** that allow parents increased time to meet their child-rearing and childcare responsibilities and that encourage increased possibilities for childcare by grandparents and other adult family members.
7. **Develop legal and regulatory frameworks** that increase awareness of rights and availability of legal resources among both women and children and that promote more effective use of legislation and improved compliance.

Definition of Early Childhood Care and Development

Early Childhood Care and Development is a relatively new field. It combines elements from the areas of infant stimulation, health and nutrition, early childhood education, community development, women's development, psychology, sociology, anthropology, child development and economics, among others. International attention on ECCD arose from the recognition that health, intellectual, emotional, spiritual, and physical development, socialization and attainment of culture, all interact and are inter-related in a young child's life. If we want to support young children and help them to thrive, then we need to understand the many facets of their development, and also address the contexts in which they are living. For the purpose of our discussion, we will define Early Childhood Care and Developments as follows:

Early Childhood Care and Development includes all the supports necessary for every child to realize his/her rights to survival, to protection and to care that will ensure optimal development from birth to age eight.

To understand more about what this means it is important to have a common understanding of what is meant by the key terms; Early Childhood Care and Development. Each is described below:

Early Childhood

- As it is currently used internationally, early childhood is defined as the period of a child's life from conception to age eight.
- The international definition of early childhood includes pre-natal development and continues through the early primary schools years (ages six to eight) because of the importance of the continuity of experiences for children.
- The experiences of a child in transition into the primary school (ages six through eight) are critical if what is learned prior to school is to be sustained, and if the child is to do well in school and in later life.

Care

- In the 1980s the term Care was added to the phrase Early Childhood Development to move policy makers and program providers away from thinking that early childhood programs were synonymous with preschools. Child-care programs were conceptually and literally separated from preschool, they were often linked to health, women's work and/or social services. In an attempt to include these programs within a broader early childhood framework, the term became early childhood care and development.
- Children with consistent, caring attention are generally better nourished, are less apt to be sick, and learn better than children who do not receive such care. Conversely, neglected children are prone to sickness and malnutrition and are less equipped and motivated to learn.
- The definition has evolved further; care is now being defined as a process that results in the creation of an enabling environment.

In summary, care is the integrated set of actions that ensures protection and support to the children for their health, nutrition, psycho-social and cognitive aspects of development. Therefore care is one of the key factors in the promotion of children's optimum development.

Development

- Development is defined as the process of change in which the child happens to master more and more complex levels of faculties -- thinking, feeling, and interacting with people and objects in the environment.

- Learning is also crucial to development. It is defined as the process of acquiring knowledge, skills, habits and values through experience, experimentation, observation, reflection, and study instruction.
- If we see our task as providing appropriate care in support of children's development, we must go beyond sectoral concerns and understand how to provide the kind of care that leads to the survival and maximum development and protection of the young child.
- This understanding will then guide us in creating child-friendly, family-focused, and community-based programs that support the child's development.

In summary, programming in early childhood care and development is about meeting the child's multiple needs by taking into account health, nutrition and psycho-social stimulation, while at the same time strengthening the environments in which children live. Thus, ECCD programming in addition to addressing the specific needs of children should include strengthening day care options, striving to support women and families through the provision of economic supports, and stimulating social mobilization.

International Commitments

The rights of children are guaranteed by the following: the World Conference of Education For All (EFA), the World Summit on Children, the Salamanca statement, and the Convention on the Elimination of all forms of Discrimination against Women and others. The following statements emerged from these world conferences and conventions:

- All children, without distinction of gender, race, language, religion or of any other kind, should have the opportunity to develop themselves to their full potential.
- Children, by reason of their physical and mental vulnerability, need special safeguards and care.
- Children living especially in difficult circumstances need special consideration.
- Parents and families (however defined), men as well as women, have the primary responsibility for the upbringing, development, and education of their children.
- Governments should establish a policy environment that enables families and communities to fulfill their responsibilities of childrearing and protection.

National Vision

Nepal is a signatory to the national commitment to Education for All (EFA) objectives as articulated in the Jomtien Declaration of 1990.

The Constitution of Nepal (1990) and the Child Rights and Welfare Act (2048) has made clear provision to safeguard the Rights of the Child.

In tune with the commitment made to EFA in Dakar, Nepal has drafted Education for All, Nepal National Plan of Actions 2001. The draft EFA, National Plan of Actions has included the following points:

HMG/Nepal acknowledges the importance of early childhood care and education, at the early stage of 3-5 years of age not only for immediate well-being of the child but also for future development.

HMG/Nepal has taken systematic steps for the development of ECD in the country since the beginning of the 7th National Development Plan. Accordingly, the 9th plan (1997-2002) has targeted the establishment of ten thousand early childhood centers by the end of the plan period.

The BPEP II (1999-2004) has developed ECD programs to ensure flourishing of the inherent potentialities of a child (3-5 years). The emphasis of the program is to provide activities on overall early childhood development. The program has been developed to support the community and the parents so that ECD ownership is taken by them.

HMG/N intends to support community-based ECD programs in collaboration with the other government and non-governmental agencies. The role of the government will be to facilitate the development of ECD through provision of training at various levels, development of curriculum and activity materials, support in the establishment of the ECD centers and providing monitoring and supervision. The local communities will be encouraged and assisted to take initiatives for the development, operation and monitoring of the ECD centers. Support of the local bodies including VCDs, CBOs NGOs, and INGOs will be utilized for the development of the ECD centers.

The Government of Nepal also recognized the important role of the various organizations (mainly the private sectors) that are providing nursery and kindergarten services and intends to let the provisions continue.

The draft tenth five-year plan (Jan. 2002) in its main objectives has mentioned "ECD as the main focus to prepare children for enrollment to the primary level of education emphasizing their physical, mental, social and emotional development (holistic development)." The other child development objectives, strategies and programs in the 10th Plan are:

1. To ensure the all-round development of children by establishing the community-based child development centers.
2. To provide pre-primary education to children below 5 and prepare them for primary education.
3. To enhance the capacity of organizations that are involved in running child development programs.
4. To set up child development centers with the participation of the local bodies by linking it up with parents' awareness programs and to encourage the operation of one-year pre-primary classes on local resources in the institutional/community schools.

The interim poverty reduction strategy paper (July, 2001) of the government has taken education as the main vehicle for poverty alleviation. The paper has planned the objective, strategies, programs and out-comes as follows:

1. Objective: Provide quality pre-primary education
2. Strategies: To ensure access to pre-primary school. To equip with physical facilities, train the teachers, educate the parents and equip with training materials.
3. Programs: Parents' awareness and facilitator training, development of physical facilities and training materials and revision of the curriculum of pre- primary (3 years and ongoing) are main programs.
4. Outcomes: The enrolment of pre-primary children will be also increased. The children will be prepared for good quality primary education.

The proposed seventh revision of Education Act has incorporated pre-primary education for 3-5 years children. The Act has made provision that the government can provide grants to the Child Development Centers established in collaboration with VDC and Municipalities. The pre-primary school is termed as a school that provides one year's pre-primary education to those children that have completed four years of age.

The proposed Education Regulation draft based on the Seventh Amendment of the Education Act has clarified the structure, modalities and community involvement in managing programs like "Education for All" and in implementation of ECD program in the country that will make additional contribution to human development. The provision of free education for the poor, backward communities, girls, disabled and indigenous groups will contribute towards raising the educational standard of every Nepali citizen.

The participants who attended workshop cum seminar on integrated planning in ECD, August 2001 organized by Seto Gurans has figured out ECD vision as "To provide stimulating and child-friendly learning environment to enable every child develop up to their optimum potentials through well managed services and supported by national policies, community participation and backed up by professional support services within the frameworks of child rights."

Policies, Working Procedures and Programs (Proposed in the 10th Plan)

The tenth plan has proposed the following policies, working procedures and programs for early childhood development in Nepal:

- To set a council for child development at the national level in order to frame policies by establishing coordination with various governmental and non-governmental organizations and to implement the same.
- To set the concept of community-based study and extend the same.
- To promote accretion of the cooperation, coordination and participation of governmental and non-governmental organizations, institutions and local bodies.
- HMG will provide a lump sum aid on the basis of the contract with the local bodies and bear the responsibility to provide the same with technical assistance.
- To establish 2 child development centers at each VDC and 2 at each ward of each municipality.
- To clarify the status position of pre-primary schools within the framework of the institutional and community schools.
- To conduct training programs by creating a pool of efficient trainers.
- To establish community-based child development centers and make the local communities responsible for them on a contract basis.
- To make primary education universal, free and compulsory.
- To provide primary education through the mother tongue, to make English compulsory and give continuity to the continuous assessment system.

Challenges for Future Development

The gross enrolment ratio of ECD i.e., the access to ECD using the ratio of the number of children who are enrolled in ECD centers as compared to the actual number (population of 3-5 yrs children) was 8.1 in 1997. The percentage of the new entrants at grade one having ECD program experience was 13.5 in the same year. The best way to address the data gap is to supplement it with the information on the population of the age group and the services available. Assuming the current population of 5-year-old children (647181) and considering that one ECD class will accommodate at the most 25 children, there will be a need to establish 25887 ECD classes to provide one year of pre-school education service to all the population of 5-year-old children in 2000. By 2015 there will be the need for over 33000 ECD classes. The number of ECD centers required to meet the ECD service need of 3 to 5 years old will be almost three times.

There is a need to make quantum jump in expanding the number of ECD centers in order to meet the EFA goals. There will also be a need for developing intuitions to train facilitators. Although the training provision in the country is far too insignificant to meet the needs, development of new institutions and sustaining them is still a challenge because of the lack of training demand.

Also, given the current situation that half of the population are still illiterate and are under the poverty line, mobilizing population to start ECD centers and to sustain the operations of the centers at the community level would be difficult.

Eliminating gender disparities in primary and secondary education by 2005 and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

The EFA National Plan of Action has the following targets set on ECD:

Indicators	Status in 1999	At the end of 9th plan 2002	By 2005	At the end of 10th plan 2007	At the end of 11th plan 2012	By 2015
GER for ECD	8.1	12	20	32	60	80
% of new entrants at grade 1 with ECD	13.5	21	30	40	65	80

Due to the lack of clarity between the concept "child development" and "pre-primary education" there is a possibility of mismatch in the priority.

The absence of a central body to assist in the implementation of programs related to child development is likely to be felt.

In the absence of the government's block grant in the community schools, it will be difficult to run the pre-primary classes.

The community may hesitate to bear the responsibility towards schools unless a clear-cut policy of block grants provided by HMG is formulated.

A lack of coordination between the governmental and non-governmental organizations may be experienced in connection with the implementation of program in the target community unless a strong legal basis is provided.

Strategy of ECD Service

At the moment there are two types of programs for 3 to 5-year-old children; school-based and community-based. BPEP II has plan for establishing and supporting 5700 community-based ECD centers by 2004. BPEP II has done preparatory exercise to form high level ECD council, which will recommend ECD policy and co-ordination in all levels. The government intends to prepare a comprehensive ECD by 2001/02. The policy will have provision for the following strategies:

- By 2007, each VDC and municipality ward will have at least one and four ECD centers respectively.
- VDCs and Municipalities will take full responsibility to establish and operate these centers with government support as well as with the resource mobilization at the local level.
- VCDs and Municipalities will collaborate with NGOs/INGOs, CBOs and other community level organizations as required.

- Private enterprises will be encouraged to run and support ECD centers.
- Community-based ECD centers will receive support from all concerned ministries and other related agencies. MOES with the support of ECD council will act as a coordinating body.

Summary

The Rights of the Child are guaranteed by the declaration of the World Conference on Education for All (EFA), the World Summit on Children, the Salamanca statement, the Convention on the Elimination of all forms of Discrimination against Women and others. These world conferences and conventions have concurred on the view that all children without distinction of gender, race, language, religion or of any other kind should have the opportunity to develop to their full potential. The constitution of Nepal (2047) has made provision to safeguard the rights of the child.

Nepal is a signatory to national commitment on Education for All (EFA) objectives as articulated in the Jomtien Declaration (1990) and to the Dakar Framework for Action on EFA (2001) which has projected ECD program as the main component for the period of 2015. Education, especially basic and primary education sub-sector, has been considered as one of the major interventions for poverty alleviation (the draft Tenth Five Year Plan 2002 and the Interim Poverty Reduction Strategy Paper, July 2001).

The BPEP II has implemented community-based ECD program in 42 districts (the targeted ECD centers under BPEP II is 5700 until 2004). The Tenth Five Year Plan has planned to establish further 13000 ECD centers for the plan period. The report of the High Level Working Committee on School Education (2001) has the national policy recommended on ECD. Following the recommendations of this committee and based on the promulgated Local Self Governance Act, MOES has promulgated the Seventh Amendment of Education Act and drafted Education Regulation in line with the Seventh Amendment of Education Act. Child Rights are guaranteed in Nepal by the Child Rights Act (2048).

The Department of Education has developed and implemented community-based ECD program since 1999. DOE is responsible to lead and co-ordinate different aspects and activities on ECD program for 3-5 year old children for their holistic development (physical, mental, social and emotional development). The major policies proposed in the Tenth Plan are:

- To set a council for child development at the national level in order to frame policies by establishing coordination with various governmental and non-governmental organizations and to implement the same;

- To set the concept of community-based study and extend the same;
- To promote accretion of the cooperation, coordination and participation of governmental and non-governmental organizations, institutions and local bodies;
- HMG will provide a lump sum aid on the basis of the contract with the local bodies and bear the responsibility to provide them with technical assistance;
- To establish 2 child development centers at each VDC and 2 at each ward of each municipality;
- To clarify the status position of pre-primary schools within the framework of the institutional and community schools;
- To conduct training programs by creating a pool of efficient trainers;
- To establish community-based child development centers and make the local communities responsible for them on a contract basis;
- To make primary education universal, free and compulsory;
- To provide primary education through the mother tongue, to make English compulsory and give continuity to the continuous assessment system.

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Published by

Tribhuvan University

Research Centre for Educational Innovation and Development (CERID)

ECD Resource Centre

Tripureshwar, Kathmandu, Nepal

URL http\\www.cerid.org, E-mail: cerid@mos.com.np