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Health promotion and early childhood development: some emerging global research issues



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In developing nations, health promotion is becoming increasingly linked with early child development (ECD) as a part of integrated programming to improve child status. Comprehensive ECD programmes often include services for health, nutrition, sanitation, safety, parenting, infant and child psychosocial stimulation, preschool education, transition to primary school, juridical protection and protective services. Recent policy guidelines for preparing national ECD policies, policy frameworks and action plans emphasize the importance of taking an integrated approach to ECD and health promotion (Vargas-Barón 2005).

Recent studies on the high return on investment (ROI) of quality ECD programmes have drawn the attention of many national policy planners and leaders. Returns range from US\$ 3 to US\$ 17 for each US\$ 1 invested – which is among the highest ROI of any social or economic investment (Lynch 2004). Estimates of the impact of ECD programmes on gross domestic product are similarly striking (Dickens, Sawhill & Tebbs 2006). These and many other studies have led policy specialists to enquire about the contents, methods and quality of ECD programmes that have achieved such striking results (Hyde 2006). It is interesting to note that most of the programmes that were evaluated to assess ROI featured content integration across health, nutrition and education, including parent education. Also, most of them began their services during the birth to three-year period and featured home visits as well as centre-based preschool services beginning at two to three years of age.

The World Health Organization (WHO) is becoming increasingly involved in integrated programming for ECD. A recent WHO study, “The importance of caregiver-child interaction for the survival and healthy development of young children” reviewed salient results in the field (Richter 2004). The WHO article, “Mental health and severe food shortage situations: psychosocial considerations” (Morris et al 2005) stressed that “...it is crucial that nutritional and psychosocial interventions are integrated”. The World Bank also promotes integrated ECD, health and nutrition programming (Behrman, Alderman & Hoddinott 2004). Unfortunately, this is not always the case in developing countries where narrowly focused sectoral programmes still abound. Indeed, even within the health sector, separate micronutrient and immunization systems continue to exist – often due more to

donor requirements than to national policy. Sometimes sectoral and sub-sectoral programmes have led to costly, unnecessary and counterproductive duplications of “delivery systems” for young children and their parents leaving many vulnerable children without primary health and ECD services.

The following section presents four brief descriptions of integrated programmes for health promotion and ECD. The final section offers a few topics for future research.

Four national integrated programmes for health promotion and ECD

To illustrate some of the kinds of health promotion and ECD programmes that have been developed, four national ECD and health interventions were selected in the Central African Republic, Cameroon, Kazakhstan and Belarus (Vargas-Barón 2006). All four programmes were inspired by UNICEF technical support for integrated ECD. They represent very different levels of development and types of child and maternal needs, as exhibited by the World Bank’s 2006 Global Monitoring Report for the Millennium Development Goals (MDGs) that provides a good selection of child and maternal statistics on these nations (see Table 1). Seven of the eight MDGs are directly related to child and maternal status and development, and it has become clear that significantly higher investments in integrated health promotion and ECD programmes will be needed to attain these global goals.

Central African Republic (CAR)

The Programme for the Integrated Development of the Young Child (DIJE) is a community-based programme for child survival and development. The DIJE was designed to prevent maternal, infant and child mortality; chronic disease; developmental delays; and malnutrition. It seeks to improve child development through parent education, preschool education, community empowerment, women’s education, water and sanitation improvement and community gardens. Due to years of national conflict and restricted financial, human and material resources, the CAR had very limited health and education infrastructures. For this reason, a community-based approach featuring village empowerment was essential.

The Ministry of Planning provides programme leadership

and ensures strong participation by the Ministries of Health, Education and Protection, university specialists and others. UNICEF, UNDP, WFP, and FAO collaborate to provide technical and material support for national specialists who implement the programme.

An initial baseline study of health, nutrition and parenting practices conducted in three provinces was used to design the DIJE programme that provides universal integrated services at the community level. All services are managed by community members who receive pre- and in-service training in: primary health education and care; nutrition education and supplementation; parent education; psychosocial stimulation; preschool contents and methods; home and community water, sanitation and safety; and child rights, birth registration and social protection. Educational contents have been adapted or derived by national specialists for local cultures. All training of trainers and parent education is provided using active methodologies that feature demonstration, practice, marionettes, songs and dance. Programme approaches include high levels of parent and community involvement as well as mother and child-centred learning. Innovative educational materials, learning toys and media have been developed, thereby enabling relatively easy programme replication. The programme features an internal evaluation and monitoring system, and initial evaluation results are very promising. Programme leadership is planning to expand the DIJE throughout CAR while seeking to find ways to ensure programme growth and sustainability in an exceedingly resource-challenged environment. Members of the DIJE currently are contributing to the preparation of a national ECD policy.

Republic of Cameroon

The Convergence Zone programme was developed by the UNICEF office in Cameroon as an innovative way to integrate its sectoral services for ECD, parent education, health, nutrition, sanitation and protection. Services are provided by national nongovernmental organizations (NGOs) that work

closely with impoverished communities in Adamaoua province. The programme seeks to: ensure child protection; register children at birth; improve prenatal and postnatal health care; ensure immunization; prevent malaria and HIV infection; improve personal, food and environmental sanitation; and prepare children for success in school.

The programme provides services for pregnant women and children from birth to eight years of age. Its strategy is to build upon existing structures and to help them interrelate by providing five entry points in each community that will ensure all who enter one point will be referred to all other points. Universal services are provided in the villages and towns participating in the programme. The programme features activities with all types of potential partners: traditional authorities, religious groups, governmental programmes, and national and international NGOs. The programme model uses trained community volunteers to provide parent education. In addition to French, local languages are used, and educational materials have been extensively field-tested. Training methods include: role playing, dialogue, community theatre, songs and other activities. The programme is family-focused and child-centred, and features parent and community involvement.

The programme conducted a baseline study, and has a strong evaluation and monitoring system that is already producing impressive results. Discussions are under way about how to take the programme to scale throughout Cameroon. Sustainability will depend upon government appropriation of the approach as well as continued support by national and international NGOs.

Kazakhstan

In contrast to the CAR and Cameroon, Kazakhstan has an extensive primary health system that has been maintained despite serious reductions in funding after the fall of the Soviet Union. However, as noted in Table 1, Kazakhstan still faces some major health and sanitation challenges that affect young children. Preschool education that flourished in Soviet

Country	Goal 1: Poverty (% US\$ 1/day headcount ratio)	Goal 2: Primary education completion (%, gross intake to final primary grade)	Goal 3: Gender ratio in primary & secondary school (%)	Goal 4: Child mortality (under-5 mortality rate per 1,000)	Goal 4: Measles immuni- zation (% of children 12–23 months)	Goal 5: Maternal mortality (per 100,000 live births)	Goal 5: Skilled birth attendance (% of total)	Goal 6: HIV prevalence (% of popu- lation, 15–49 years)	Goal 6: Tubercu- losis incidence (per 100,000 persons)	Goal 7: Access to improved water source (% of popu- lation)	Goal 7: Access to improved sanitation facilities (% of popu- lation)
Central African Republic	56*	49*	NA	195 (+)	35	1,100	44	13.5	322	75	27
Cameroon	17.1	72	87	149	64	730	62	5.5	179	63	48
Kazakhstan	<2	110	98	73	99	210	NA	0.2	151	86	72
Belarus	<2	101	100	11	99	35	100	NA	60	100	NA

NA = Not available

* From Draft Zero of National PRSP, 2006

(Source: Sundberg 2006)

Table 1: Country-level status re Millennium Development Goal indicators linked to early childhood development

times has been drastically reduced, and many parents are poorly prepared for parenting. The Better Parenting Programme (BPP) seeks to improve child development by imparting key parenting skills. It hopes to achieve its objectives through improving the skills of professionals who provide health-care services directly to families with children from zero to three years of age. The BPP and its training materials were developed by the National Healthy Lifestyles Centre (NHLC) in conjunction with the Ministry of Health (MOH) within the framework of the National Programme on Reform and Development of the Health Care System of 2005 to 2010 (UNICEF 2004). Although the Ministry of Education assisted at the outset, it is not involved in programme development. An excellent baseline study revealed basic child care-giving needs, and as a result 14 key family and community practices were identified to promote child survival and development.

The BPP addresses the following major types of problems:

- ❖ lack of parenting skills for health care, breastfeeding, nutrition and child development;
- ❖ poor professional capacity for parent education, including home visiting and counselling techniques, breastfeeding, complementary feeding, child development, health care, prenatal nutrition and health care, and other topics;
- ❖ the health system's focus on the sick child rather than on preventive primary health care for mothers and children; and
- ❖ lack of understanding about child-centred, family-focused, community-based and integrated ECD services at all levels: planners, decision-makers, communities, parents and national mass media.

The BPP provides universal services with integrated contents, and has developed materials in Russian and Kazak. It makes effective use of interactive training methods to prepare outreach nurses who provide home visits for pregnant women and parents with infants and young children. The programme evaluates training results but as yet has not evaluated outcomes related to improving parenting skills and child development. The BPP does not feature community participation and parents have not been involved in programme management or programme development processes; however, its services are family-focused and child-centred.

The BPP has inspired interest in developing a national ECD policy. At the present time, the MOH plans to take the programme to scale within Kazakhstan, and it is developing standards and training systems to enable this expansion.

Belarus

The Positive Parenting Programme (PPP) was developed to improve the physical, psychosocial and cognitive development of young children within a family-supportive environment. It seeks to improve parents' knowledge and skills in order to improve child development. The Ministries of Health, Education, and Labour and Social Protection are actively involved in the PPP. Intersectoral coordination is strikingly effective in Belarus. These three ministries lead the

PPP initiative, with support from various Belarusian universities, institutes, hospitals and clinics, and preschools.

A baseline study, conducted in 2002, revealed serious deficits in parental knowledge and skills. The Ministries developed a wide range of materials for professional and parent training for all parents, with a special emphasis on parents with children with disabilities, developmental delays or challenges in their family life. A wide range of culturally appropriate parenting materials and media were prepared in order to fill major gaps in materials for parents.

The PPP complements and supplements existing materials for parent education and support, especially in the fields of health and nutrition, which are used in several innovative programmes and initiatives for young children and parents. These programmes are strikingly child-centred and family-focused, and they include Early Childhood Intervention (ECI) services for children with developmental delays, special education centres for children with disabilities, urban and rural preschools and family therapy programmes. The PPP provides a wide variety of materials and media that respond to the expressed needs of parents and specialists for guidance, including many areas of health and nutrition. Varying models of parent education and support are called the "Parents' University", "Mothers' Schools", "Mothers' Clubs" or "Family Clubs". Regulations are being developed for these groups, constituting an initial form of standards for parent education and support in Belarus. These parenting programmes have been officially approved by the MOE for application in preschools and various health services throughout the nation.

The PPP has stimulated Belarus to develop a National ECD Policy Framework, national preschool standards and new open preschool models especially for rural preschools. Essentially, the PPP has become sustainable since all institutions providing parenting education in Belarus now use its materials.

Recommendations for research on health promotion and ECD

The linkage of the fields of health promotion and ECD represents an important domain for basic and action research. A series of research programmes is urgently needed to help ensure the maximization of programme investments, especially in developing nations with very scarce resources. At present, none of these programmes can be assessed by a standardized measure for both ECD and health promotion. Good health indicators exist but none are currently available for ECD. Our recommendations below reflect these prevailing needs:

1. It is essential that a standardized set of outcome indicators regarding child development be developed, field-tested and linked to household surveys, including the DHS and the MICS. Such indicators should also be nested within more comprehensive monitoring and evaluation approaches to help ensure that health and nutrition interventions are well integrated with psychosocial stimulation and parent education.
2. Increasingly, decentralized governmental units are

developing ECD and health programmes. How can we best ensure that communities rank their most compelling health and child development concerns as priorities for investment?

3. It is critically important that developmentally and culturally appropriate health education and services be included within ECD programmes. But do we know which health services and ECD components are the most appropriate in specific circumstances? What has worked well, where and why? Case studies and state-of-the-art reviews are needed on how health and nutrition education and care can be best integrated within ECD programmes at national, provincial and community/neighbourhood levels.

4. ECD, health and nutrition programmes require systems for pre- and in-service training. Which national systems for “polyvalent” (multisectoral) training have been most effective and why? What types of evaluation research should be conducted on integrated training programmes to identify the most effective training methods and contents?

5. Which types of programme monitoring and evaluation systems have been most effective in helping to ensure training results are achieved, not only in terms of training workshops but most importantly in terms of improved child, family and community outcomes?

6. What types of policy frameworks are most effective for ensuring the good and balanced development of young children? What types of policies help establish successful and sustainable integrated programmes for health promotion and ECD?

7. Several countries have developed integrated ECD policies that feature strong investment in health promotion. What has been the impact of these policies on health and child development outcomes?

8. Many nations with high levels of severe poverty have many children with developmental delays that are linked to malnutrition, chronic illnesses and a lack of basic health services. What assessments exist that would help national leaders and community workers to assess children with developmental delays?

9. Many nations with high levels of developmentally delayed and other vulnerable children lack quality Early Childhood Intervention (ECI) services. How can we best promote the implementation of experimental ECI

programmes in developing nations to ensure children receive developmentally appropriate services?

10. Inadequate funding is available for internal and external evaluations of integrated health promotion and ECD programmes. We recommend that at least 10% of intervention programmes should be dedicated to evaluation and monitoring.

11. Finally, it is clear that increased financial support is required for integrated health promotion and ECD. What types of international and national investment strategies that might help ensure programmes for health promotion and ECD will be expanded rapidly to meet needs for achieving MDGs and other goals for child development and poverty reduction?

These are only a few of the many challenges for future research on the interface of health promotion and ECD. Many more will occur to our readers, and we welcome an active exchange of ideas on this compelling topic. □

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