

**CHILD RIGHTS FACING THE RECENT  
PEDIATRIC, NEUROCOGNITIVE,  
SOCIAL ADVANCES AND  
CHALLENGES**

**H K BAHAAELDIN**

# TALKING POINTS

Every generation has to reinvent it's culture, history & knowledge ,integrating its heritage with new discoveries

- Research & science have provided us in the last 2 decades with **Breakthrough discoveries** which have revolutionized our knowledge on many aspects of child health:
  - effect of **bonding, nurture ,breast feeding, optimum nutrition ,early stimulation &early education on brain development &multiple intelligences**
  - **new technologies to detect & prevent disease**
- **Drastic changes have occurred in our world**, affecting all aspects of human life & composing a great challenge and danger to our children, yet child rights stand as a symbol of human conscience ,trying to set order &justice in our lives :
  - **increasing child abuse, environmental pollution, military Nintendo industry, globalization &new AIDS**
- **The interface between up-to-date child health &child rights** has become an important new challenge we have to face

## Slide 2

---

**Prof H.K4** New technologies including new vaccines, Tandem mass spectrometry non invasive diagnostic techniques and recussitation equipment&proceedures  
Dr.Hussein; 30.07.2007

# CHALLENGES OF 21<sup>st</sup> CENTURY

- **Information Revolution**
- **Knowledge Intensive Production**
- **Tailored Economy of Velocity & Creativity**
- **Ideas, Programs & Software Replacing Hardware**
- **Brain Power as the Decisive Competitive edge**
- **Brain Power Development as the Most Cost Effective Investment of the 21<sup>st</sup> Century**
- **Impending cognitive gap marginalizing a great proportion of world children**

# **BELL'S CURVE**

## **RACIAL & CLASS I.Q. DISTRIBUTION**

*RICHARD HERNSTEIN & CHARLES MURRAY 1994*

- **RACIST, MYOPIC & PSEUDOSCIENCE WORK**
- **BAD SCIENCE LEADS TO BAD CONCLUSIONS**
- **FLAGRANT CULTURAL BIAS**
- **SCIENCE DOES NOT NEGLECT NURTURE & ENVIRONMENT**
- **TOTALLY IGNORING THE ROLE OF EDUCATION**
- **STATISTICAL ANALYSIS DELIBERATELY MANIPULATED**
- **OUTRAGEOUS DISCRIMINATION ENDANGERING HUMAN & CHILD RIGHTS**

**INTELLIGENCE OR BRAIN POWER IS NOT A PREDESTINED FATE IT IS A RESOURCE TO BE INVESTED & A POTENTIAL TO BE DEVELOPED**

**PROPER ECD CAN DO WONDERS TO BOOST THE POTENTIALS OF ANY CHILD**

## Slide 4

---

**Prof H.K1** we were stunned in the early years of the brain decade by a highly controversial theory which was severely criticized by a large no of scientists including STEPHAN GOULD&HOWARD GARDNER  
Dr.Hussein; 27.06.2007

# NEW DISCOVERIES

- The brain decade with the advances in neurophysiology, neurochemistry, cognitive & dietetic sciences has proved the importance of early childhood development esp. in the first 6 golden years of life
- Brain power can, to a great extent, be developed and multiple intelligences can & should all be developed capitalizing on the period of open windows of opportunities
- The role of the family esp. mother, father, siblings and society, is crucial entailing new duties, specialized training and funding, top priorities for the state, community & family levels
- New techniques to anticipate & early detect serious inborn errors of metabolism (Tandem Mass Spectrometry & New Vaccines) are now available and can help prevent and decrease morbidity and mortality

# NEW DISCOVERIES

## (continued)

- The effect of optimum nutrition primarily **breastfeeding, including important micronutrients, LCPUFA, essential amino acids, lycopene, carotenoids & probiotics** can never be overemphasized
- The effect of **early music training, physical exercise, interactive computer games, instructional toys & early childhood education** in boosting cognitive development should be emphasized
- The extended umbrella of **new vaccines** should be universally available

**Mental exercise can have profound effects on mental capacity**

**Exposure to complex & novel experiences boost the components that process information in the brain:**

- **Brain cell survival increases,**
- **The neural appendages grow**
- **The connections between Cells multiply**

**These changes can occur later in Life.**

**Severe lack of mental exercise limits the brain plan**

## **Learning Windows (Windows of Opportunity)**

**During a child's development, there are a series of critical periods, or "windows," in which a child can best learn or refine a particular ability, such as speech. After this time period is over, it becomes much more difficult, sometimes impossible, for the child to learn the same thing.**

**The window of emotional intelligence from 6-18 months**

**At the age of 5-7yr windows for language nearly close or are slightly ajar i.e. older children and adults exert greater effort to learn a new language.**

**Windows of fine motor skills (e.g. PC & music) ends at 10 years. Windows of Opportunity are most important in early childhood**

# EMOTIONAL INTELLIGENCE

**EMOTIONAL INTELLIGENCE IS ESSENTIAL FOR EFFECTIVE LEARNING & BUILDING BRAIN POWER**

**EMOTIONAL INTELLIGENCE IS A MASTER APTITUDE, A CAPACITY THAT PROFOUNDLY AFFECTS ALL OTHER ABILITIES & INTELLIGENCES. It comprises:**

- **SELF MOTIVATION, SELF CONFIDENCE, KNOWING ONE-SELF & KNOWING AND FEELING OTHERS.**
- **SELF CONTROL & PERSEVERANCE, ENDURANCE & WILL POWER,**
- **ABILITY TO INCORPORATE FEELING INTO ANALYSIS, REASONING AND PROBLEM SOLVING & DECISION MAKING**
- **EMOTIONAL INTELLIGENCE WINDOW OF OPPORTUNITY IS MAXIMALLY OPEN FROM 6 MONTHS TO 18 MONTHS (PERIOD OF BREAST FEEDING)**

# Parental Care and The Brain

## THE EFFECT OF BONDING & NURTURE



Infants benefit from the close physical attention of their caregivers. An increasing amount of biological research is determining that while a number of factors are vital for proper brain development, physical attention & close contact appears to play a role in maintaining brain chemistry, brain architecture and possibly some mental functioning.

# **BREASTFEEDING IMPROVES THE COGNITIVE DEVELOPMENT**

**There is a dose response relationship  
between the duration of BF and IQ**

**The Newborn is a genius in genesis.  
If it fails to do it, it is the responsibility  
of a society which wasted & drained  
its most precious resource .**



# EFFECTS OF BREAST FEEDING

- **CONSOLIDATION OF SENSE OF SECURITY**  
RELAY OF IMPULSES: VERBAL, AUDITORY,  
VISIONAL & EMOTIONAL TO HIGHER CENTERS →  
ENHANCED CEREBRAL ORGANIZATION
- ENCOURAGING STIMULI TOUCH, SMELL,  
SINGING, TALKING, COOING ETC. **STIMULATE** →  
**GENES WHICH RELEASE POWERFUL GROWTH**  
**FACTORS AND SUPPRESS GENES WHICH**  
**ENCODE WITH SYNAPSE DESTROYING**  
**FACTORS**
- **BREAST MILK IS RICH IN DHA, ARACHIDONIC**  
**ACID & PHOSPHOLIPIDS WHICH ENHANCE**  
**MYELINATION AND TAURINE ESSENTIAL FOR**  
**BRAIN DEVELOPMENT & FUNCTION; ALL ARE**  
**POTENT NEURONE PROTECTIVE AGENTS**  
**DURING INFANCY.**
- **DEVELOPS EMOTIONAL INTELLIGENCE WHILE**  
**ITS WINDOW IS STILL OPEN (UNTIL 2 YEARS).**

# NEW ALARMING DANGERS

- Increasing threats of **environmental pollution** with the advent of new technologies
- Accelerating pace of life endangering family life & undermining parental care
- The rapidly expanding **violence on children**, including home, schools, community, armed struggles & wars and the new military Nintendo industry
- The growing threat of **AIDS orphans** and of the **new AIDS** (anti information deficiency syndrome) posed by unlimited, frequent, unethical, indiscriminate or non suitable mass media



**Children are greatly vulnerable to environmental threats**

**Environmental hazards kill 3 million children under 5 years of age each year**

**Children in this age group constitute more than 40% of population suffering from environmental pollution**

# EFFECT OF CHILD ABUSE

**Physical , sexual, emotional,  
neglect or the recent**

## ***MILITARY NINTENDO COMPLEX***

**Violent, brutal military based games , toys &  
electronic games**

- **DELAYED BRAIN POWER DEVELOPMENT (MOTOR, EMOTIONAL & COGNITIVE )**
- **ACQUIRED VIOLENCE IMMUNE DEFICIENCY SYNDROME**
- **ACQUIRED ATTENTION DEFICIT**
- **AGGRESSIVE BEHAVIOR**

**Columbine high school, Littleton:15 killed 1999  
Erfurt,Germany:19 killed 2002**

# **CHILD RIGHTS IN FACE OF GLOBALIZATION**

- **INCREASING CHASM BETWEEN THE RICH & POOR , THUS INCREASING INEQUALITY  
20% OF HUMAN POPULATION ARE USING  
80% OF GLOBAL RESOURCES**
- **INCREASING MARGINALIZATION OF CHILDREN & WOMEN (MOTHERS)**
- **INCREASING CHILD LABOR & STREET CHILDREN**
- **INCREASING TENDENCY TO CURTAIL SUBSIDIZATION, INCREASING POVERTY & MALNUTRITION**
- **INCREASING TENDENCY TO PRIVATIZE EDUCATION AFFECTING MOSTLY THE POOR**

# **CHILD RIGHTS IN FACE OF GLOBALIZATION**

**(continued)**

- **GLOBALIZATION IS INCREASINGLY DELEGATING THE RESPONSIBILITY OF PUBLIC WELFARE TO INEFFICIENT OR FICTITIOUS INSTITUTIONS**
- **PREVAILING & THREATENING ,INEQUALITY, CULTURE OF VIOLENCE, WARS & ARMED CONFLICTS ,MILITARY NINTENDO SYNDROME ,INCREASING FAMILY DISRUPTION & CORPORAL PUNISHMENT**
- **THESE TENDENCIES ARE SEVERELY INFRINGING CHILD RIGHTS & CHILD HEALTH ,ENDANGERING WORLD AND NATIONAL SECURITY**

# **COST BENEFIT OF ECD**

## **DOLLAR RETURN OF VARIOUS INVESTMENTS**

<b>IRRIGATION PROJECT IN PHILIPPINES</b>	<b>1.48</b>
<b>LIVE STOCK PROJECT IN URUGUAY</b>	<b>1.59</b>
<b>CEMENT FACTORY IN ESTONIA</b>	<b>2.27</b>
<b>ECD IN USA</b>	<b>7.16</b>

**AIID**

**World Bank & MOE Cairo May 2001**

Slide 18

---

Prof H.K3 Jaques van der Gaag  
Amsterdam institute of  
development  
Dr.Hussein; 28.06.2007

# **COST BENEFIT OF ECD**

## **(CONTINUED)**

- **WHATEVER THE COSTS OF ECD THE RETURN TO HUMANITY IS MUCH MORE**
- **ECD IS NOT ONLY HIGHLY ECONOMIC, COST EFFECTIVE (PREVIOUS SLIDE) BUT MUCH MORE IT HAS ITS HEALTH ,SOCIAL & CULTURAL PROFOUND EFFECTS & RETURNS**
- **FAILURE TO PROVIDE NECESSARY FUNDS WILL BE A SERIOUS DRAIN OF OUR MOST IMPORTANT RESOURCE .THE STATE, THE PRIVATE SECTOR AND THE COMMUNITY WILL BE THE LOSERS**

# CHILD RIGHTS in face of NEW ADVANCES & CHALLENGES

- It is clear that present child rights after a period approaching 2 decades is primarily concerned with a defensive, preventive attitude
- The present version was formulated at a time when the full magnitude of of early childhood potentials &the present dimensions& potentials of child health& child rights were not yet perceived
- Moreover the grave consequences of an impending brain gap (social ,economic, political or national& international security) were not fully conceptualized

*It is time now to have a new account of child rights in a clear & explicit vocabulary which primarily highlights equity, development, empowering &boosting of child potentials particularly his brain power*

# CHILD RIGHTS CHILD HEALTH INTERFACE

- **EVERY CHILD ANYWHERE HAS THE RIGHT TO HAVE THE BEST MEDICAL CARE AVAILABLE ANYWHERE**
- **THE RIGHT TO BOOST HIS OR HER POTENTIALS BY PARENTAL LOVE & NURTURE , INTEGRATED NUTRITION, MUSIC, SPORTS, NOVEL, COMPLEX & DIVERSE STIMULI AND INFORMATION & EARLY CHILDHOOD AND HIGHER EDUCATION LATER ON , WITHOUT ANY TYPE OF DISCRIMINATION (RACIAL, CLASS, SEX OR ANY OTHER)**

# **URGENTLY NEEDED ADVOCACY ISSUES**

- **CHILD'S RIGHT TO HAVE AN ATTENTIVE DEVOTED & BREAST FEEDING MOTHER FOR 2 YEARS. WORKING MOTHERS SHOULD HAVE A PAID LEAVE OR AT LEAST A FULLY EQUIPPED NURSING FACILITY AT WORK & FREQUENT BREAKS TO NURSE HER CHILD**
- **FUTURE PARENTS, HEALTH WORKERS & MEDIA PEOPLE SHOULD HAVE NECESSARY EDUCATION STARTING FROM SCHOOL CURRICULA FOLLOWED BY SPECIALIZED TRAINING FOCUSING ON EARLY CHILDHOOD DEVELOPMENT AND CARE**

# **URGENTLY NEEDED ADVOCACY ISSUES (continued)**

- **UNITED NATIONS, STATES, WORLD MONETARY INSTITUTIONS INDUSTRY & PRIVATE SECTOR SHOULD PUT EARLY CHILDHOOD PROJECTS AS A TOP PRIORITY IN THEIR PLANS & BUDGETS, AS AN INTERNATIONAL & NATIONAL SECURITY ISSUE & AS A MAIN PILLAR OF SOCIAL STABILITY, THE BEST INSURANCE OF THE RICH & THE PRIVATE SECTOR AND THE BEST SECURITY OF WORLD PEACE**
- **POLITICAL ,LEGISLATIVE & MASS MEDIA INITIATIVES SHOULD BE TAKEN TO CURTAIL AND RECTIFY THE PHENOMENON OF MILITARY NINTENDO INDUSTRY BUILDING A CULTURE OF VIOLENCE**
- **ADVOCACY GROUPS INCLUDING NGO'S PARLIAMENTARIANS ,MEDIA, PARENTS ASSOCIATIONS & PEDIATRIC SOCIETIES SHOULD BE ENCOURAGED TO RAISE PUBLIC AWARENESS AND CLOSELY MONITOR PROPER IMPLEMENTATION OF CHILD RIGHTS**

**CHILD**

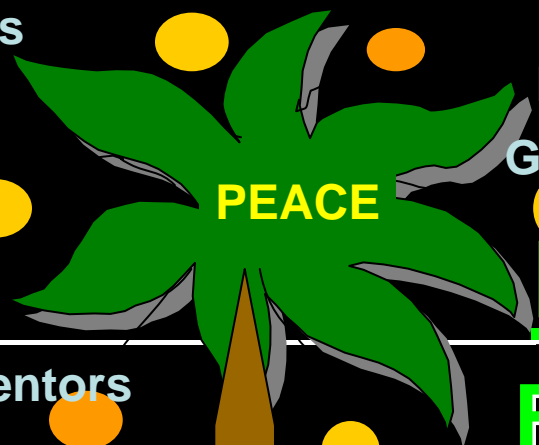
**RIGHTS**

Leaders  
Affluent & Highly developed society

Lifelong Perfect health  
Genius, high IQ

**OPTIMUM**

**HEALTH**



**PEACE**

**BRAIN**

Inventors

**POWER**

Dedicated artists

**DEVELOP**

**MENT**

**CONSOLIDATION**

**& TAKE-OFF**

**FERTILIZERS &**

**IRRIGATION**

**SAFE DELIVERY & PROPER RESUSCITATION**

**PRECONCEPTIONAL & FETAL**

**ROOTS**

Genetic influences

Prevention of: contact with chemicals, radiation & infections

Prevention of abnormal uterine position, premature delivery & Obstructed labor & asphyxia

Maternal state of mind

Intrauterine music stimulation

