Early Childhood Care and Development: Current Issues and Future Challenges[1]

Karunatissa Atukorala

1. Introduction

Though the central government is responsible for formal education, the Early Childhood Care and Development (ECCD) is the responsibility of the provincial governments according to the present constitution of Sri Lanka (13th Amendment). By now most of the provincial governments have begun to pay attention to ECCD knowing the importance of this sector to overall development. However the management systems established for the supervision and monitoring of the ECCD sector by provincial councils differ from province to province. Some provinces have introduced authorities e.g. North-Central and Wayamba Provinces while some have set up units. The Central Province however, after a

[1]. This article is based on the Keynote Address delivered by Karunatissa Atukorala at the symposium titled "Innovations for Early Childhood Education" which was conducted on 30th August 2017 by PALM Foundation and UNICEF, held in Nuwara Eliya.

careful study of the pros and cons of such organizational structures, has introduced an ECCD unit which represents all the stakeholders of the ECCD sector.

It is a known fact that the preschool plays a vital role in the future of a child and the youth in one hand and in the development, peace and harmony of the country on the other. If a preschool child is disciplined well and engineered properly, most of the problems of children, youth, adults and even old people can be sorted out. Therefore in many developed countries, the ECCD sector is given very high priority in their national policies. As ECCD has not been given priority in the past, Sri Lanka currently experiences several problems. These are discussed in this paper.

2. Key Social Issues in Sri Lanka

The social problems that people focus attention on may change from time to time mainly due to the publicity given by mass media to a problem. Most of the problems experienced today are directly or indirectly related to social behavior. For instance, Dengue epidemic, road accidents, domestic violence, drug and alcohol use, suicide, homicide, corruption, ethnic disharmony, youth

protests, abuse of social media and child abuse are key problems faced by Sri Lanka that have a social orientation and need urgent attention.

2.1 Corruption

One of the major problems experienced today in Sri Lanka is corruption according to information provided by mass media. Corruption is the abuse of political, official, economic and socio-cultural powers by people. Corruption is promoted in Sri Lanka by the family and other socialization institutions. Therefore this problem can be prevented if it is addressed at preschool, primary and secondary educational levels.

According to Wikipedia[2] “corruption is a form of dishonest or unethical conduct by a person entrusted with a position of authority, often to acquire personal benefit. Corruption may include many activities including bribery and embezzlement, though it may also involve practices that are legal in many countries. Government, or 'political', corruption occurs when an office-holder or

[2]. Downloaded on 25th June 2016.

other governmental employee acts in an official capacity for personal gain".

Various types of corrupt practices are found in Sri Lanka[3] where it is believed that the Executive President tried to control the judicial system for the benefit of the Executive President. Petty corruption occurs on a smaller scale and takes place at the implementation level when the public meet the officials. Financial gifts or other gifts are expected by officials to give authorization i.e. when passing a plan. This form of corruption is usually pursued by junior and middle level officials, who are significantly underpaid. The use of personal connections to obtain favors or a speedy completion of a routine government procedure or to obtain information or to get quality services, etc. is another form of corruption prevalent in the country.

[3]. According to the CPI, the corruption in Sri Lanka has been on the increase during last 2 decades. The CPI value for Sri Lanka was 4.2 in 2002 and in 2015 it was 3.7 showing the increase of corrupt practices. It is believed that the figure is above 6, corruption to some degree is controlled. The CPI value clearly shows that corruption has been a series problem in Sri Lanka.

What is important here is to understand that the genesis of the corruption prevalent in all sectors in all levels is in the poor socialization of children at home and in other socialization institutions such as ECCD centres and schools. In Sri Lanka It is a common secret that to get admission to a good school in the town, if one does not live close the school, it is possible to get all the required documents to prove one's eligibility illegally for a price. The tragedy is that the child seeking admission is trained by the parents to lie to the interview board by affirming information given in the fake documents. In most times the principal who is also on bribe knows of the fake documents and the child is aware of this. Hence, the child takes the first step towards his/her school career with the knowledge that the person who holds the highest authority to discipline him/her is a corrupt personality and also that corruption paves the way. Further, neither the parents (family) nor the teachers (ECCD centre/school) discipline the children to wait till they get their chance to get some service. For instance, it is frequently observed that in school canteens or in bookshops the teachers cut the line or push children who are in the queues to get to the counter to buy what they want. The powerless children learn from their

teachers and elders not wait for their chance but to use physical power to get things done. When parents and teachers display such attitudes and practices the children learn to abuse power when they get old. This is an area where attention should be paid when making policy decisions and plans regarding ECCD as that is where socialization begins.

2.2 Violence

Human beings have a natural tendency for violent behavior and to enjoy it to some extent. Tribal people who live in isolation have to fight with animals and other tribal groups for their survival[4]. This has been observed by early social and cultural anthropologists. Some of these tribes have vanished or integrated into the main stream. Some still continue to live in the jungle. In some cultures sports, games, art[5], and day-to-day activities

[4]. Comanche, Apache, Lakota, Cherokee, Zuni, Chippewa, Omaha, Iroquois, Ottawa, Blackfeet, The Cree, Mohawk, Sioux, Cheyenne, Crow, Navajo, Kiowa, Pawnee and Nez Perce are some violent tribes. Downloaded from Internet; Top 10 Deadliest Native American Tribes. Also read "Enumeration of Primitive Tribes in A&N Islands – A hallenge" *Based on inputs from the Director of Census Operations, A& N Islands in 2010. Down loaded from Internet.*

[5]. *For instance, the painting of the Last Judgment* by the artist Giotto during 1305-06 shows In the hell, man's genitals bitten by a demon:

are observed to be aggressive or violent. Some sports practiced in the modern day 'civilized' societies are highly violent (bull fighting, bull racing, rugby, martial arts, boxing, etc.). Yet, people like to watch and enjoy such events. Though such sports are not popular in Sri Lanka, a high level of violent behavior can be observed among Sri Lankans. This may be due to the influences of mythology and folk lore regarding violent historical incidents shared by the people.

The advent of Buddhism[6]to Sri Lanka made a significant influence on its art, literature and history. They in turn shape the attitudes, morals, values and customs of the people and are passed on to the future generations through socialization institutions like the family, pre-school, school etc. Members of the new generations continue to share the values and traditions of their culture.

The painting of Flaying of Sisamnes by the artist Gerard David in 1498 shows skin of a man is removed while still living.

[6]. Some regions have no philosophical aspect. However Buddhism has the both. Religion plays the role for establishing power through the introduction of norms, traditions, and ethics, etc. Therefore most of the traditions and norms, etc. could be different from the Buddhist philosophy. This article discusses only the religion part of Buddhism.

The point here is that acceptance of violent behavior is socialized at ECCD centers through folklore and historical stories that promote violence. For instance, in the play Sinhabahu, Sinhaba the son who later fathers the Sinhalese, kills the father as the father who is half lion starts killing people of the kingdom he wishes lay claim to. Here, though patricide is not celebrated it is accepted. In the J*athaka* story *Vessantara*, Lord Buddha in a previous life as a *Bodhisathva* gives away his children to an unknown person who wanted them but later started using them for child labor. Here, though the ability to give away or not hold on to anything is highlighted the abuse of children is not rejected. In the story of Madduma Bandara, Madduma Bandara is portrayed as a hero who showed his elders how to face death bravely when the regime gave his family death penalty unfairly. Though his bravery is highlighted here it is still a story where a child's violent death is shown. These stories are acted out as dramas or are recounted as heroic or exemplary tales. When such violent behavior is seen and taught as 'accepted' at an early age it would result in the acceptance or tolerance of violent behavior or engagement in violent behavior when they grow old. Therefore we have to rethink about what

should be promoted in the ECCD centers when preparing teaching plans and the curriculum.

2.3 Suicide

Suicide is one of the main social problems faced by Sri Lanka today. It became a grave social problem only after independence. The number of suicides recorded in 1880 was 64 (2.3 per 100,000). In 1950, the national suicide rate of Sri Lanka stood at 6.5 per 100,000. During the decade 1950-60, a total of 6472 suicides were reported. Between 1960 to 1970 the total number of suicides reported was 15,582. During 1970-80, 27,150 cases were reported. During 1980-90 nearly 70,000 cases were reported. However the number has recently come down to less than 3000 deaths per annum. However Sri Lanka is still in the list of countries that report high rates of suicide.

The main factors associated with child suicide are poor coping skills and poor social integration. Majority of children commit or attempt suicide when they fail examinations and when love affairs break up. The children are not trained by the family or the educational institutions to cope with psychological problems and

work with other children. Their social integration needs to be improved and the children should be encouraged at ECCD centers to discuss their problems. The ECCD curriculum should address need to train children to cope with problems.

2.4 Homicide

Compared with neighboring countries Sri Lanka reports a relatively high rate of homicide. In 2011 Sri Lanka reported 707 cases which is 3.4 per 100,000 population, 2014 India reported 3.2 per 100,000 population, in 2014 Bhutan reported 2.7 per 100,000 population, in 2014 Bangladesh reported 2.8 per100,000 population, and in 2011 Nepal reported 2.9 per 100,000 population. Homicide occurs mainly due to lack of tolerance among the people. It is observed by people who have visited other countries that the level of tolerance in Sri Lankans is poor compared to many other nations. Majority of people in Sri Lanka are unable to tolerate the opinion of other people or to wait until their turn to comes. A main reason for this is the lack of time to rest, enjoy or engage in sports or other extra-curricular activities for children from the preschool age to Advanced Level age. This is due to the fact that they have to go to school and to

various private tuition classes after school and during the weekends. The loss of positive communication between parents and children is another contributive factor for the restlessness in the society. Parents concentrate mainly on the improvement of the children's' educational achievements and guide them or push them in their studies. Majority of the parents have little or no time to communicate with their children nor do they see the need to imbue good values in them. There was a practice of sending children to Sunday Schools (*Daham pasala*) where children learnt good qualities like tolerance, kindness forgiveness etc. through religious teachings and practices. Today a majority of the children do not go to Sunday Schools as they have no time. Wherever one goes one can observe that people are restless and have no patience. For instance, many Sri Lanka drivers do not have the patience to follow traffic rules. The pedestrians do not cross the road at zebra crossings on one hand and on the other many accidents occur on the yellow lines due to the impatience of the drivers and pedestrians. Many of these 'wrong doings' by adults happen in the presence of their children. If the children are taught to follow the correct rules and are trained to tolerate, listen to other people and to accept

others' opinions at ECCD centers there would be a disciplined public and less offences in the society.

2.5 Group Dynamics

As discussed above the majority of people display a poor level of sharing, corporation, respect for others views and tolerance. These skills improve when they work with the peers. Except in sport activities, in ECCD centres and schools, children have no time for group dynamics. In towns, children are not sent to play with neighboring children. The only opportunity to get together with peers for these children is at birthday parties of close peers. Group activity in such occasions is limited as they these parties are formal and artificial in nature. The children who become prisoners in their own homes are in serious danger getting addicted to cyber games and other activities in the internet. Especially, the teenagers spend most of their time in the internet chatting with known and unknown friends. Though the internet has become a dynamic resource for everybody to learn, engage, play, participate, work or socialize, it also provides unlimited opportunities for everybody, including children, to meet their unmet desires. Through the internet the children are exposed to enormous new

risks too. While on one hand the internet exposes children to pornography on the other it exposes them to pedophiles putting their lives at risk. Another negative effect of computer addiction is that it kills a child's ability to work with people in the real world. As the development partners today tend to adopt *a rights based development approach,* the duty bearers of children, mainly governing bodies have to make a balance between the risks of internet use and the benefits of its use. The proper use of internet could be incorporated to the ECCD syllabus in order to prevent negative impact on society in the future.

2.6 Dependent Mentality

A main feature of the personality of many Sri Lankans is the dependent mentality. Majority of the people always expects welfare from the government, projects, or other institutions or persons. This is a main development constraint and this situation develops personality disorders. The dependent personality disorder is a psychiatric condition marked by an over reliance on other people to meet one's emotional and physical needs. There are many psychological problems created

as a direct or indirect result of poor training at ECCD centres. These problems are listed below.

1. Reluctance to change
2. Lack of risk taking ability
3. Poor coping skills
4. Lack of emotional maturity
5. Poor leadership qualities
6. Lack of aesthetical skills
7. Lack of analytical skills and interpretative skills
8. Road Accidents

With regard to the above situation these question come up;

- Are the parents aware of the above situation?
- What are the parents' expectations of the children?
- Are the preschool teachers aware of these national problems and do they have the correct vision, knowledge and skills to perform their duties well?

- Are the policy-makers and other duty bearers aware of the country's situation and have they established policies and an administrative set up to deal with the problem?

Finally it should be mentioned that all the duty bearers and stakeholders of the ECCD should be mindful of the current situation and make positive interventions at their levels to find solutions to abovementioned issues.

The next section of this paper analyses of the ECCD situation in the Central Province with special reference to the Plantation Sector.

3. ECCD Situation in the Central Province[7]

3.1 ECCD Centres: The total number of ECCD centres/Day-Care centres including Crèches distributed in the province is over 2500.

Over 82% of the preschools located in the urban areas could be easily identified because they display a name board in front of the preschool. One third of the

[7]. This section of the paper is mainly based on data of the database prepared by the Consultant with the financial and logistic support of the provincial council and the NGOs. The database is prepared in the year 2015.

preschools in the rural sector and 61% of the preschools in the estate sectors had a name board.

Half the preschools in Kandy and Matale districts and 43% of the preschools in Nuwara Eliya district have been functioning since 2000. Except in the estate sector, the majority of preschools in other sectors are owned and run by the preschool teachers with the fees levied by the parents. See table 1.1. The preschools in the estate sector (Nuwara Eliya) are established and managed by the PHDT.

Nearly two thirds of the preschools have been registered in a line agency or the PHDT (estate sector). Of the registered preschools, half are registered in the *Pradeshiya Saba*[8].

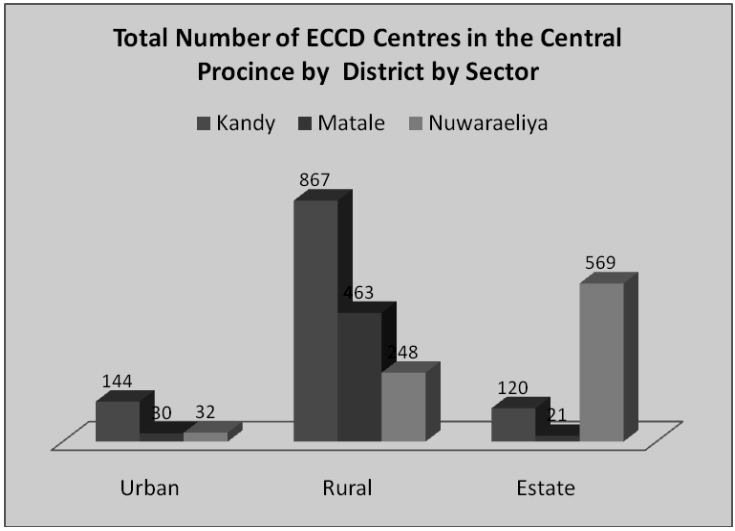
Around 90% of the preschool buildings are constructed out of permanent materials. 20% of the preschools in Matale and Kandy districts and 25% of the preschools in Nuwara Eliya district do not have a floor area of 10 sq.ft. per child (which is the nationally accepted child-space ratio). The insufficient space of the centre may (i)

[8]. After the establishment of the ECCD Unit at the Provincial Council of Central Province, at the ECCD centres have been requested to register in the ECCD Unit.

prevent children to move around the place (ii) poor physical and mental health (iii) lack of group dynamics and (iv) teacher to apply only seating method for teaching.

Table 1.1: Monthly Fee Received from Parents

Monthly Fee (Rs)	Kandy	Matale	Nuwara Eliya	Province
Free	84 7.6%	16 3.2%	157 24.3%	257 11.4%
0-99	12 1.1%	1 0.2%	11 1.7%	24 1.1%
100-499	206 18.7%	125 24.8%	241 37.3%	572 25.4%
500-999	639 58.3%	346 68.7%	223 34.5%	1208 53.8%
1000 & over	155 14.1%	16 3.2%	14 2.0%	185 8.2%
Total	1096 100.0%	504 100.0%	646 100.0%	2246 100.0%



Nearly 90% of the preschools have sufficient light and ventilation. Majority of preschools of the province are owned by preschool teachers while some are run by temples.

As high as 86% of the preschools of the province had toilets. Of them 75% of the toilets are clean, 66% are safe and 54% are child-friendly according to the observations made by the investigators. However, only 48% of the toilets of preschools in the province met all three aspects. Water supply was not available in 56% of the preschools in the province. Of the preschools with water supply, according to the observation of the

investigators 97% are clean, 94% are safe and 88% are child friendly. It is very important to note here that majority of the service providers and the preschool teachers were not aware of the concept of “child-friendliness”. This needs to be paid urgent attention by the relevant authorities.

37% of the preschools do not have an outside play area (garden). Half of the pre-schools do not have a fence. Of the fences that are available 35% are unsafe. In 88% of the preschools the inside (class room/s) is reported to be clean, 81% are observed to be safe and 65% are child-friendly. Only 63% of the classrooms met all the three aspects.

The preschools receive assistance and support from the LGAs, the plantation management, PHDT, NGOs (Plan Sri Lanka, World Vision, Predo, Room to Read and Sarvodaya), temples and churches. Construction and repairs to preschool buildings, provision of equipment, furniture, play items and training are the types of assistance received by the preschools.

Almost all the preschools (they run as a Day-care centre as well) in the estate sector are managed by PHDT.

What is observed with regard to support and assistance is the lack of coordination among these organizations to provide assistance on an equitable basis. If a mechanism is introduced by the ECCD Unit, the available resources from partners could be distributed efficiently and effectively.

Number and age of preschool children: The average number of children in a preschool in the province is 27.9 including children below 3 years. Of them, over 70% belong to the age group between 4-5 years and over 23.0% belong to the age group between 3-4 years. This indicates that the majority of parents send their children to preschool when they reach four. It is believed that children need to undergo a training of two years to achieve the required skills. Therefore even if preschools are prepared to provide 2 year age-specific training, such training could not be obtained by 70% of children at ECCD centres in the province.

Though the average number of children in a preschool is 28, 44% of preschools in Kandy, 54% in Matale and 50% in Nuwara Eliya have less than 20 children in a preschool. Further about 81% of the preschools in Kandy, 88% of the preschools in Matale and 86%

preschools in Nuwara Eliya have less than 40 children. However sector–wise distribution shows a different picture (84% of preschools in the estate sector, 72% in the preschools in the rural sector and 43% preschools in the urban sector have less than 30 children. Due to this 80% of preschools in the estate and the rural sectors and 55% of preschools in the urban sector conduct one class. 82% of the preschools in the estate sector have a day-care center in the preschool premises. There are only 7% such preschools in the rural sector while in the urban sector the number is 28%. See table 1.2.

The above figures show that when the total number is small teachers do not tend to conduct two age-specific classes due to lack of teachers. Most of the places are managed by one teacher due to the insufficient income from a small group of children. Therefore over registration of ECCD centres just as an income generation activity for unemployed female youth may be a serious challenge to overcome this problem. As high as 97% of the preschools in the urban and the rural sectors and 23% of the preschools in the estate sector have a formal application for admission. The preschools in the estate sector are mainly supervised by the

plantation management and the PHDT and in the urban sector this is mostly done by local authorities.

Table 1.2: Classification of Preschools by Number of Children

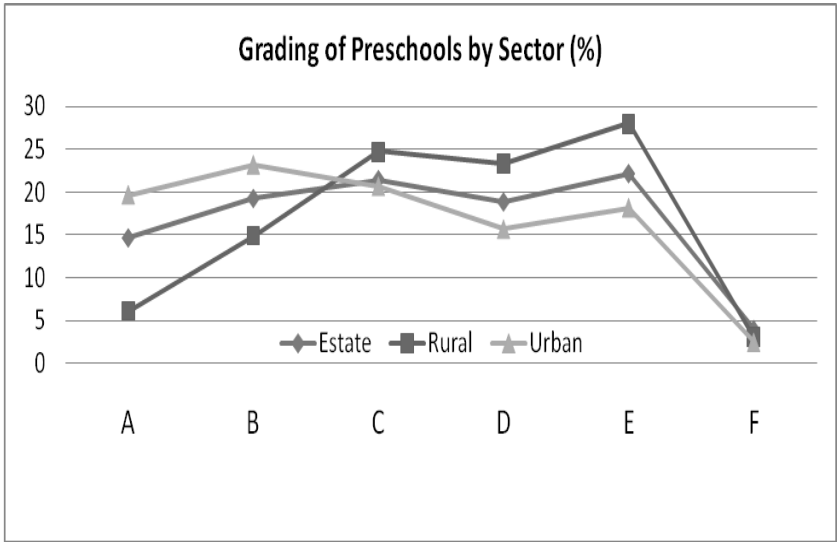
No of Children	Kandy	Matale	N Eliya
Up to 20	312 43.7%	154 54.4%	106 50.3%
21-40	262 37.0%	96 33.8%	75 35.5%
41-60	101 14.2%	26 9.1%	22 10.5%
Above 60	37 5.1%	8 2.7%	8 3.7%
Total	712 100.0%	284 1000.0%	211 100.0%

Using 80 variables in the survey, the preschools were graded. Only very few preschools scored enough points to receive “A” Grade. In Kandy District 8.3% of preschools, in Matale 7.5% of preschools and in Nuwara Eliya 12.6% of preschools received marks for “A” grade.

Majority of the preschools run by temples got low gradings. See table 1.3.

Table 1.3: Grading of Preschools in Nuwara Eliya District

Grades	Nuwara Eliya	Estate Sector	Rural Sector	Urban Sector
A	86 12.6%	79 14.6%	91 6.1%	39 19.7%
B	118 17.3%	104 19.2%	222 14.9%	46 23.2%
C	152 22.3%	116 21.4%	367 24.7%	41 20.7%
D	127 18.6%	102 18.8%	346 23.3%	31 15.7%
E	171 25.1%	121 22.1%	416 28.0%	36 18.2%
F	28 4.1%	21 3.9%	44 3.0%	5 2.5%
Total	682 100.0%	543 100.0%	1486 100.0%	198 100.0%



3.2 Preschool Teacher

It can be estimated that there are 4000-4500 preschools teachers serving in the Central Province. This shows that the sector has provided employment opportunities for a considerable percentage of females in labor force in the province.

All the preschool teachers are women; about 75% of them belong to the age category between 20-50 years; 68% are married. Over 62% of them walk to the preschool indicating that the majority lives close to the preschool.

Majority of the teachers had been unemployed prior to finding employment as preschool teachers. Nearly 40% of preschool teachers are reported to have passed the Advance Level Examination (Kandy 41%, Matale 39% and Nuwara Eliya 27%). 43% are Preschool Diploma holders (Kandy 40%, Matale 42% and Nuwara Eliya 47%). In addition they have participated in a variety of short term trainings related to ECCD. See table 1.4.

Of the preschool teachers in Nuwara Eliya district, 75.0% were unemployed before they started preschool teaching as their vocation. The trend is same for the entire province.

Table 1.4: Training Received by the Preschool Teachers in Nuwara Eliya District

ECCD Diploma	ECCD certificate course	Following ECCD Diploma	Training not specified	Training not received	Total
175	63	0	22	109	369
47.4%	17.1%	0.0%	6.0%	29.5%	100.0%

A simple test was conducted on preschool teachers to examine whether they have the bare minimum skills to be suitable to guide children. It was found that 72% of Muslim preschools teachers, 68% of Tamil teachers and 53% of Sinhala teachers had a basic knowledge of all three languages. Majority of the teachers were able to count up to 100 and were able to identify basic colors. However only 43% of Muslim, 32% of Tamil and 29% of Sinhala preschool teachers were able to identify the three shapes oval, triangle and circle correctly. See tables 1.5-1.88.

Table 1.5: Language Skills of Preschool Teacher by Ethnicity

Ethnicity of Teacher	Language Skills (%)			
	Counting in Sinhala	Counting in Tamil	Counting in English	Counting in 3 Languages
Sinhala	97.0	31.0	72.0	66.7
Tamil	64.0	95.0	83.0	80.7
Muslim	77.0	90.0	86.0	84.3

Table 1.6: Ability to Recognize Colours Clearly by Ethnicity

Ethnicity of Teacher	Ability to recognize Colours (%)			
	Colours in Sinhala	Colours in Tamil	Colours in English	Colours in 3 languages
Sinhala	98.0	19.0	75.0	64.0
Tamil	65.0	97.0	85.0	82.2
Muslim	79.0	90.0	95.0	88.0

Table 1.7: Ability to Recognize Basic Shapes by Ethnicity

Ethnicity of Teacher	Ability to Recognize Basic Shapes			
	Shapes in Sinhala	Shapes in Tamil	Shapes in English	Shapes in 3 languages
Sinhala	55	5	26	28.7
Tamil	17	50	30	32.3
Muslim	30	55	45	43.3

Table 1.8: Ability to Understand Symbols by Ethnicity

Ethnicity of Teacher	Ability to Understand Symbols			
	Symbols in Sinhala	Symbols in Tamil	Symbols in English	Symbols in 3 languages
Sinhala	81	10	49	46.7
Tamil	45	77	58	60.0
Muslim	54	69	68	63.7

Salaries received by the preschool teachers vary. Majority of teachers in Kandy and Matale districts earn between Rs 10,000-14,999/= per month. The majority of teachers in the estate sector are paid by the plantation management or the JEDB.

Curriculum Used: 48% of the preschool teachers in the estate and the urban sectors and 68% of teachers in the rural sector use an already developed module for guiding children. Of the variety of modules available, half the preschools teachers in the estate sector, 70% of the teachers in the rural sector and 25% of the teachers in the urban sector use the module developed and introduced by Plan Sri Lanka. A considerable number of

preschool teachers use newspapers to prepare their lesson material. *Dimuthu* is the mostly used newspaper by teachers in the province. 30% of teachers in the estate sector, 45% of teachers in the rural sector and 56% of teachers in the urban sector reported that they prepared the lesson material/ plans using either newspapers or a module.

Over half the preschool teachers reported that they had an annual and a weekly lesson plan. 80% of the teachers reported that they used games (play) and a free mode for guiding children. A high percentage of teachers use singing and dancing (aesthetic approach) methods of guiding children. The main method adopted by teachers is the seated mode. 69% of teachers in the estate sector, 89% in the rural sector and 97% in the urban sector use the seated method for guiding children. 65% of teachers in the estate sector, 80% of teachers in the rural sector and 74% of teachers in the urban sector appreciate what children do to encourage them.

4. Issues Related to ECCD

Various problematic issues related to ECCD were identified. They are classified under preschool/

preschool teacher, system/society and parents. There are several interrelated issues with multi-dimensions.

4.1 Issues Related to Preschool and the Preschool Teacher

With regard to preschools, the non-availability of basic required equipment and the use of improper physical equipment in the ECCD centres are some of the major issued identified.

Preschools and daycare centres (Crèches in the estate sector) are conducted/housed in one place. There were no separate rooms for age-specific guidance in most of the preschools.

Teaching (some actually teach not guide) volume is too much. In many preschools reading, writing, mathematics and English is taught as parents demanded it. Some preschool teachers know that writing, mathematics and languages should not be taught in pre-schools but complain that parents request them to teach those.

When a language other than the mother tongue is used at the ECCD center, it affects the children negatively when they enter grade 1 (year 1) as in formal schools the mother tongue is used in teaching in grade 1. Tamil

children who go to Sinhala preschools face the same difficulty. As there is competition to get admission to grade one many parents think it is essential to teach the child languages, letters and mathematics. This situation cannot be changed by the preschool teacher alone but need some decision making at policy level.

It is also observed that some preschool teachers in Nuwara Eliya district, especially in the estate sector, use the capital punishment and hares children verbally.

Majority of the preschool teachers lack knowledge on age-specific guidance and lack ECCD training. Diploma holders have difficulty in practicing their conceptual knowledge. They lack guiding skills. Some preschool teachers have obtained their diploma a long time ago and hence are not updated on new knowledge on the subject. Many preschool teachers are not familiar with the grade one (primary) curriculum and teach lessons similar to that taught in grade one at the preschool.

Some preschool teachers are old. There is no official recruitment and retirement age for preschool teacher. It is believed that children are attracted by young teachers with training and experience in ECCD. Very old teachers

may not be able to understand things in a child friendly manner.

Preschools are highly commercialized. A majority of preschool teachers cannot recognize children with special needs. A vast majority of them have not got any training on how to guide or handle children with special needs. It is reported that some preschool teachers do not like to accept children with special needs to their preschools.

Orientation programs and various types of awareness programs are conducted by preschools for the parents after the child is admitted to the preschool. It is too late for the parents to decide on the suitability/non suitability of the preschool for their child. It is a very difficult task for the parents to identify the most suitable preschool to apply for admission.

Preschools appear to give importance to concerts and other ceremonies. Children are pushed to do activities that are not suitable for their age.

4.2 Issues Related to Society

Many preschools lack the required standards. There was no responsible institution for preschool registration[9] and there was no institution directly responsible for ECCD (lack of owner/duty bearer). Private and international preschools (registered under BOI and business registration) cannot be monitored or supervised by state institutions. There is no coordination among the institutes that work on ECCD.

There was no forum or mechanism to share the experiences of the stakeholders. Though there is a Network of Children's Committees from national to community levels, the majority of them do not function well. If they do, there is no organization to monitor the progress. No organization has the authority to close down a preschool even if one engages in non-acceptable activities.

Unequal distribution of resources among the preschools by both the government and the non-government organizations is observed to be a problem yet to be solved. Children of residents in the estate who are not

[9]. By now the ECCD Unit is established at the Provincial Council of Central Province.

laborers are not admitted to preschools run by the plantation management.

According to line agency officers, many supervising officers do not have updated knowledge on ECCD. Some of the estates that are not under TRUST have no organization to address the issues of ECCD.

Poor state support for some of the preschools in the estate sector is also found to be an issue not yet settled.

The local government run preschools provide an opportunity for government servants to house their children in them till they come back from office. Therefore there is a great demand for such preschools/ day-care centers. These centers admit children who are 4 years old. This practice contradicts with the ECCD requirements.

The LGAs have no resources to improve the quality of the ECCD centers as there is no income coming from the centres.

There is no model preschool in each district for the preschool teachers and preschool owners to learn from,

model after and improve their preschools (to learn from best practices).

There are no resource centers for preschool teachers to learn (even a library with ECCD material) and for parents (especially mothers) to make use of while they wait near the preschool waiting for their children.

It is reported that Admission Tests are conducted by some pre-schools to admit children.

4.3 Issues Related to Parents

It was observed that parents had high expectations regarding achievements of their children from the preschools. They expect the child to learn reading, writing, language (English) skills and mathematics at the preschool.

Poor or lack of knowledge in parents on child care and on age appropriate activities is observed. Some parents think that the preschool is a place to keep the children when they are at work. They seem to have no knowledge on the psychological requirements of children.

There is a tendency to evaluate preschools by parents through its external appearance, the year-end-concerts organized by the preschool and the teaching of English.

4.4 Multi-dimensional Issues Related to ECCD

Perceptional difference between parents, preschool teachers and the primary teachers are found to be an issue. There is no room for them to understand the role each party plays in ECCD.

Both preschool teachers and parents have little knowledge on ECCD. Majority of preschool teachers tries to teach children letters. This is due to the popular demand and pressurizes some schools. Further newspapers that are printed for children below 5 years make an impact on preschool teachers in the preparation of lesson plans.

In Buddhist and Hindu culture '*Akuru kiyaveema'* is an important socio-cultural event of the life of a child. Therefore the teaching of '*akuru*' or letters to small children is expected in the Sri Lankan culture. This may have some influence on parents demand for letter writing and reading at preschools.

Local government authorities have developed a set of requirements/guidelines/conditions for registration of preschools. However LGAs do not consider these guidelines and register preschool on sympathetic grounds or on political influence.

There is no methodology/practice/rule adopted by authorities to recruit teachers for preschools. The fee of preschools differs from place to place. Some parents cannot afford to pay high fees.

There is no commonly accepted/agreed curriculum though there are number of curricula developed by Plan Sri Lanka, PHDT, etc. Various curricula are used by preschool teachers. Some preschools use monthly newspaper and work books as the curriculum. Further there are ECCD diploma offering institutions that do not maintain the required standards. As there is a high demand for ECCD diplomas, some institutions try to make a profit by supplying low quality ECCD diplomas.

5. Resources Available for ECCD

It was found that many written training material prepared by various organizations is available. Among them Plan

International has prepared several training documents[10]. They are:

- Preschool Teacher Training Material
- Hand book for preschool teacher trainers
- Guidelines for preschool teachers to use in the activities given in the Training Manuel
- Background theories and area of development related to ECCD
- Learning Activities
- Assessment kit of entry competencies
- Inclusive education for preschool children: Manuel for Trainers and Preschool Teachers[11]
- Parental Training: Module on Good Parenting[12]. This coverers, understanding the preschool child,

[10]. Plan International with the support of a team consisting of Professor Lal Perera (one of the former Directors of National Institute of Education), Mr A.A. Nawaratne, Mr Auther Wedamulla and Ms Nalani Perera has prepared several documents.

[11]. Prepared by Plan Sri Lanka with the assistance of Professor Ranjith Wickramasinghe (Team Leader) and 12 subject specialists (Kelaniya Medical Faculty)

being a productive parent, providing a supportive environment for young children, developing a balanced personality, preparing the child for preschool and ensuring the rights of the children.

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[12]. Prepared by Plan Sri Lanka with the assistance of Professor Elsie Kotalawala, Dr. Indrani Talagala Dr. Neil Talagala.

Relationship Between Pre-school Teachers' Educational Qualifications and The Expected Pre-school Standards In A Selected Rural Area

PraneethFonseka

1. Introduction

The notion of early childhood[13]as the period of most rapid human growth with greatest sensitivity to environmental influences during the first five years of life is widely acclaimed. A child's brain develops rapidly during the first five years of life, especially in the first three years. It is a time of rapid cognitive, linguistic, social, emotional and moral development. For example, a child learns many words starting at around 15–18 months. Rapid language learning continues into the preschool years (UNICEF, 2001). When the child's brain grows she/he sees, feels, tastes, smells and hears. Each time the child uses one of the senses, a neural connection is made in the child's brain. New experiences

[13]. Some use the term 'the early years' in slightly different ways. To some it means the years from birth to eight years; to others it means the years before school; while others focus mainly on the first three years of life.

repeated many times help make new connections, which shape the way the child thinks, feels, behaves and learns now and in the future.

Child development refers to the changes that occur as a child grows and develops in relation to being physically healthy, mentally alert, emotionally sound, socially competent and ready to learn. The first five years of a child's life is the foundation that shapes children's future health, happiness, growth, development and learning achievement at school, in the family and community, and in life in general. Early experiences of a child provide the base for the brain's organizational development and functioning throughout life. They have a direct impact on how children develop learning skills as well as social and emotional abilities. Children grow, learn and develop rapidly when they receive love and affection, attention, encouragement and mental stimulation, as well as nutritious meals and good health care. Children are born ready to learn and interested in the world around them. It is natural for them to use all their abilities to learn. The important thing that we should provide children is opportunities for children to learn develop and have fun during those years (Barnett, 1995).

Positive experiences help the brain to develop in healthy ways while negative experiences such as neglect and abuse, on the other hand, affect brain development in more harmful ways, and contribute to emotional and behavioral problems later in life. So the experiences a child has in the early years can either support learning or interfere with it (UNICEF, 2000).

There is some evidence that the first three years may be a "critical period" for mental health and social functioning. Studies with animals (rats and primates) have shown that individuals subject to continuously high levels of stress at early ages experience changes in the parts of the brain that regulate stress hormones and in areas of the brain responsible for learning and memorizing (Darling and Youngs, 2002).

While there have been no direct studies of the effects of stress on the brain structure of human infants (experiments would be highly unethical), there is evidence that human infants subject to severe stress (because of abuse, or cold and distant caregivers) have similar abnormalities in the ambient levels of stress hormones. High levels of these stress hormones have

been associated with an inability to pay attention and a lack of self-control in humans. However, if these highly stressed infants are given warm, sensitive alternative caregivers, they experience reductions in the levels of stress hormones, at least temporarily. Hence, the evidence does suggest that children at risk of abuse or neglect could gain special benefits from spending time with alternative, nurturing caregivers (Darling and Youngs, 2002).

One of the most important things children learn in the early years is about themselves – that is, they develop a picture of themselves that affects the ways they approach any situation, task, or relationship with another person. In other words, they develop a self-concept. There are many different ways to categories learning in the early years, but whatever the categories, it is important for parents and others who work and live with children, to keep in mind the broad range of kinds of learning that are important in the early years. Some important areas of learning are use of the body, including hands, respect for others, how to relate to others - both adults and other children, how to resolve conflicts, problem solving skills, communication, getting

used to the things that make people different from each other (Barnett, 1995).

Preschool offers an educational framework for children between the ages of 3 to 6 that significantly contributes to their development and addresses their needs at the start of their journey. It is important for this first encounter to be a constructive experience for children and their families, establishing a sense of trust and confidence that will accompany them from preschool throughout the whole school career. In the preschool, children join their peer group, forming various social interactions. Theoretically speaking children learn social mores and acceptable behavior patterns; develop sensitivity, awareness and empathy and moral values and social integrity. Through their diverse experiences, children become acquainted with the world and their natural curiosity leads them to investigate further, solve problems and realize their potential in a variety of subjects. Children learn to creatively express themselves in a variety of ways; preschool provides them with the space to experience movement and develops their self-confidence and sense of competence and control. Each child's unique personality is developed while

emphasizing individuality on the one hand and a feeling of belonging on the other. The educational staff of an ideal preschool works according to a systemic child friendly approach. Different contents and subjects are learned in a variety of ways and the implementation of core curriculum programs, in accordance to the children's age, development and preferences is carried out.

From the beginning of preschool until the end of secondary education, the amount of time a child spends with his/her teacher/s is only second to that spent with his/her parents. The role played by teachers in the socialization of children along with the children's parents is very well known. According to Facts of Life (UN, 2010) a child absorbs and applies 75% of first three year experiences in the child's future life. This proves that the preschool teacher contributes more in child's socialization than school teachers. Teacher's personality, knowledge and teaching capacity directly affect the development of children.

The minimum requirements and qualifications for preschool teachers have not been identified despite the

fact that it forms the foundation of a child's educational experiences. The primary school expects a child to be ready for the school activities. But the problem is, whether the children produced by the preschools in Sri Lanka are ready for primary education. In Sri Lanka, anyone can teach in a preschool if he/she wants to.

When focusing on increasing preschool teachers' educational qualifications, it's important to talk about the institutes that provide preschool teaching diplomas and certificate courses. There are recommended institutes by government to provide preschool teacher education and diplomas. Preschool teachers in the rural sector find it difficult to access these institutes located in the urban sector. It is observed that the quality of training provided by the available private institutes (diploma and certificate courses) in rural areas is poor.

Many children do not reach their full human potential because of their families' income status, geographic location, ethnicity, disability, religion or sexual orientation. They do not receive adequate nutrition, care and opportunities to learn. Good nutrition and health and consistent loving care and encouragement to learn in the

early years of life help children to do better at school, be healthier, have higher earnings and participate more in society in later life. A good foundation in the early years makes a difference through adulthood and even gives the next generation a better start. Educated and healthy people participate in, and contribute to, the financial and social wealth of their societies.

Health services, health workers and community providers have an important role in promoting development of young children. Focusing exclusively on targeted interventions such as health and nutrition without considering the holistic nature of early childhood development risks the hindrance of children’s complete growth and development. Both biological and environmental factors affect brain development and behavior. For example, young children who experience extreme stress are at greater risk for developing cognitive, behavioral or emotional difficulties. These impediments can have lasting effects on children's readiness for school and later on their performance in school. For disadvantaged children, the initial lack of interventions for development has a multiplying effect: children raised in poverty complete far less education

than middle class children, due in part to their lowered ability to learn in school (UNICEF, 2001).

Studies on the effect of teacher experience on student learning have found a positive relationship between teacher effectiveness and their years of experience, but not always a significant or an entirely linear one (Kitgaard and Hall, 1974).The relationship between teacher experience and student achievement is difficult to interpret since this variable is highly affected by market conditions or motivation to work during child rearing period Harris and Sass (2007).

There is mixed evidence on the effect of teachers' participation in professional development activities on student outcomes. On the one hand there are some studies on in-service professional development, which found no effect (Angrist and Lavy, 2001), while other studies found that higher levels of student achievement were linked to mathematics teacher participation in content-specific pedagogy activities related to the curriculum (Brown et al.,1995). Wenglinsky (2000) found a positive effect of professional development activities that focused on the needs of special education students, on higher-order skills, and on laboratory skills in science.

More recently Harris and Sass (2007) identified what they call the "lagged effect of professional development", i.e., the larger effect of professional development three years after taking place.

2. Research Problem

One can observe the education qualifications of the rural preschool teachers to be at a lower level when comparing with the preschool teachers of the urban sector. The system and mechanism introduced by Provincial Councils to standardize preschools and preschool teachers is observed to be slow. There is opportunity for anyone to open a preschool and teach in a preschool irrespective of their educational qualifications. Since the teacher's educational qualifications and student outcome are interconnected, these unqualified teachers are one of the reasons for low quality ECCD in rural sector of Sri Lanka.

3. Objectives

The main objectives of the paper are to;

(i). examine the existing educational qualifications of preschool teachers in rural areas and

(ii). study the present government framework for preschools and the quality of preschool teacher education in rural sector.

4. Methodology of the Study

Key informant interviews were held with relevant authorities in relation to ECCD, roles and responsibilities of authorities of ECCD, issues related to preschools, preschool teachers and children, type of partnerships between preschools and authorities of ECCD and standards of selected private institutes that provide preschool diplomas. Information was also collected through personal observations at selected preschools, Focus Group Discussions with teachers and parents and through a survey of 20 preschool teachers. 20 female preschool teachers (9 Tamil and 11 Sinhala) of Lunugala Divisional Secretariat Division in Badulla district were randomly selected for this survey. They represent both

Tamils and Sinhalese and they continue to teach in those schools at present.

5. Profile of Preschool Teachers in the Selected Preschools

Out of 20 female preschool teachers, two were below 25 years. 85% of them reported preschool teaching to be their only income. Teaching experience is considered as one of the important factors in the uplifting of the quality of teaching. The experience gained through teaching helps teachers to resolve issues and improve their self-confidence which in turn leads teachers to upsurge their teaching capacity. Of the selected preschool teachers, 65% had less than 5 years of preschool teaching experience. Preschool teachers in the rural sector reported that they did not continue their profession for a long due to:

(i) induction of these teachers had taken place without a fool proof government mechanism,
(ii) marriage or other personal reasons and
(iii) finding other employment.

According to international standards, a teacher in primary or secondary school should handle an average of 20 to 30 students, but when it comes to preschool education, it is reduces to 15 to 20 students since personal attention and time that should be allocated for a preschool student is comparatively more. The preschools are small considering the number of children that attends one. 70% of the preschools have less than 25 children.

Though preschool teachers should have the basic, minimum qualifications the study shows that the teachers who engaged in preschool education do not even have the basic qualifications (O/Levels) that are mandatory for such profession. Of the 20 teachers 8 (40%) have sat for O/Ls, 5 (25%) have sat for A/Levels and 7 (35%) have obtained a preschool diploma. The minimum educational qualification for preschool teachers according to the relevant government authority is a preschool diploma[14]. This indicates that the majority of the preschool teachers surveyed is not qualified to teach

[14]. Children's Secretariat, Ministry of Child and Women Affairs.

in preschools[15]. It is doubtful whether these teachers are able to contribute effectively in early childhood development.

It was found that all the teachers with preschool diplomas had participated in many early childhood development and teacher capacity development programs run by various institutions. It was revealed that the involvement of non-governmental organizations in teacher capacity development in rural sector was at a satisfactory level. It is a proven fact that child protection and child psychology are two main areas that should be mastered by preschool teachers. The reason is that only a teacher with knowledge on child psychology will be able to identify the needs of a preschool child. The training programs offered by various organizations had covered the areas of child protection, child psychology and types of psychological therapy, methods of visual teaching, hierarchy of teachers and its importance and preparation of annual time tables and schedules for preschools. However, it was revealed that 90% of the

[15]. Government has not clearly declared the minimum standard of preschool diploma and the institutions that are qualified to offer preschool diplomas.

teachers had poor understating of the concept of child protection and child psychology. The early childhood specialists say that a preschool teacher should be well conversant with the nutritional needs of children, what balanced and nutritious foods are and the way a child should part take of them. The knowledge of parents regarding child nutrition in Sri Lanka remains at very low level compared to preschool teachers[16]. Teaching students to part take nutritious foods in the pre-school is considered as one significant indicator of a pre-school falling within the minimum qualified level. However, the survey results indicate that the level knowledge of pre-school teacher son nutritious foods is at an unsatisfactory level.

It is identified that there is no commonly accepted preschool educational program for all the preschools in Sri Lanka. Hence different preschools adopt different teaching methods to impart preschool education amongst children. Due to this reason, children with different educational levels enter into primary education. It is found that different provinces of Sri Lanka adopt

[16]. The Family Health Worker imparts this knowledge among parents with children of 1 – 5 years.

different preschool educational methods to impart knowledge amongst children. The Uva Province has preschool educational program developed by the Early Childhood Development Authority. However all the preschools in the province do not adhere to this programme. Though there is a module (prepared and distributed by ECCD authority) that gives preschool educational activities that should be carried out, preschool teachers implement whatever the activity that is deemed appropriate by them according to their convenience. Further though the ECCD authority has introduced a mechanism to measure the level of achievement of children at preschool admission, it is not fully implemented by all preschools in the province.

It was found that preschools in rural villages go to the extent of teaching how to write letters though it is not in the preschool curriculum as per the instructions issued by the formal authority. May be some teachers are aware of the fact but they teach writing letters due to the demands of the parents.

Though there are several officers responsible for early childhood development and care activities, the

awareness of the existence of such officers by rural preschool teachers remains poor. Of the 20 teachers, only 8 (40%) were aware of the availability of government officials to oversee preschool education. The awareness on the national policy on early childhood development amongst teachers also remains at a low level. Only one third of the teachers were aware of the availability of such policies.

6. Role of State on Preschool Education

Education is an important component that should be well managed by the government of any country. The well managed formal education system in Sri Lanka has been able to achieve and maintain the highest level of adult literacy in South Asia. However, there are few drawbacks in relation to the ECCD sector. The provincial councils are responsible for the ECCD sector and the involvement of the central government is only at policy level. Further there are officers recruited by the central government and the provincial governments to serve

early childhood development activities[17]. In the Uva Province ECCD Authority is responsible for all the activities related to the ECCD sector. However there are several officers representing the central government (e.g. CRPO and officers attached to Department of Education) too who serve in the provinces. This has resulted in the lack coordination of activities by the officers representing the central government and those of the provincial council. The most important point here is that the ECCD authority that is the main authority in charge of the ECCD sector has insufficient qualified human resources. All these institutions implement numerous educational programs in preschools but fail to make a significant positive impact on the quality of education due to the lack of coordination. Preschool teachers pointed out that they waste invaluable time allocated for preschool teaching as they had to attend various conferences, to meet numerous officers and had to report to number of officers.

[17]. ECCD Officer (at Pradeshiya Sabahawa) Child Rights Promotion Officer (at Division Secretariat Office) and Planning Officer (Zonal Education Office).

7. Role of Non-Government Organizations

NGO partners reported that they provided assistance to some preschools in their operational areas. They provide assistance in meeting basic requirements of registration, arrange capacity building programs for preschool teachers and create opportunities for teachers to obtain preschool diplomas in order to develop the early childhood of children. According to some NGO partners, though they provide financial assistance to teachers to obtain preschool diplomas, they are not satisfied with the standards of the rural level institutions that provide diplomas in pre-school education. Moreover, these NGOs remain unhappy about the involvement and the coordination of activities of the government in the early childhood development. However, NGOs have committed to upsurge (i) the capacity development of teachers in the fields of child protection and child psychology, (ii) grouping and organizing of preschool teachers to gain their rights and (iii) assistance the government institutions in preparation of preschool curriculums and syllabuses.

8. Issues Related to Pre-school Diploma

A preschool diploma is expected as the minimum qualification by the Provincial Councils that have set up authorities/units to oversee early childhood development in Sri Lanka. However, only 35% of the pre-school teachers surveyed had completed a diploma program according to the current study. Through there are number of institutions that offer preschool diplomas, only few are accepted and approved by the government. The Open University of Sri Lanka and the National Academic Institution are two institutions that have been approved by the government to offer preschool diplomas.

As already discussed, 75% of the brain development of children occur during 3-5+ period, a teacher should be well aware of the food nutrients, preparation and feeding of foods, and about good hygiene habits necessary for a child. Moreover, she should possess the basic knowledge of nutrients that is received from different types of foods. The reason is that, in the absence of nutritious food for rural children, teachers should know how to provide the necessary nutrients through some alternative food items.

Secondly, the preschool is a place where the teacher identifies the needs and feelings of the child. According to psychologists, the children in this age group learn everything from what they see, observe and listen. Children tend to hide their wrongdoings when they reach the age of 4 to 5 to avoid difficult situations. A preschool teacher should possess a sound psychological knowledge to understand the mental status of the students. This helps the teacher to handle the child with correct psychological care.

As such, it is necessary to review the contents of the above preschool diploma to check whether the psychological component is in cooperated. Moreover, it is not focused on practical preschool activities like sports and hand work. Also, the teachers have taken up teaching subjects like aesthetic studies, languages and history.

On the whole, it is evident that there are inherent problems in connection with the content of the diploma programs found the rural sector and in the instructors of those diploma programs. This creates a doubt on the

teaching standards of the upcoming preschool teachers and of their contribution towards early childhood development.

9. Conclusion

It is observed that the majority of preschool teachers have only O/L qualification. Even though some teachers have preschool diplomas, they have not been obtained from recognized institutions. Since, there are issues related to the content and the quality of preschool diplomas and the standards of rural institutions which offer preschool diplomas, the provision of attention of relevant authorities on this is vital. Since some provincial councils have stipulated a pre-school diploma as the basic qualification to become a preschool teacher and as the opportunities for rural teachers to access to those approved educational institutions is hard, the establishment of training institutions is essential.

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An Analysis Of School Entry Competencies – A Study Conducted In 20 Schools In Badulla District

Sugath Adhikaram

1. Introduction

The education system of Sri Lanka has a long history of over 2500 years. Its beginnings can be traced back to the introduction of Buddhism to the island. From the beginning education was associated with the promotion of religious values and spiritual development which were carried out in temples and monasteries by the Buddhist clergy. This traditional education system can be taken as the first era of the Sri Lankan education system. The second era begins in 1505, with the beginning of the colonial period. The objectives of the colonial education system introduced by the Portuguese and further developed and continued by the Dutch and the British were changed from spiritual development to skills acquisition. The Education system was also changed from a non-formal approach to a formal institutionalized system. The third era begins with the introduction of free education inmid-1940s. As a result of the free education

policy, children from the poor segment of the country were able to receive education free of charge. After 1940s, the government took the initiative to open schools in the rural and the remote rural areas in order for all the children to have access to free education. However, the objective of education was limited to acquisition of skills which matched with the needs of clerical and administrative jobs. The modern era of the Sri Lankan education system begins with the introduction of new educational reforms in 1997[18]. After centuries, the objective of education was changed from acquisition of skills to development of cognitive skills and enhancing life competencies with the reforms of 1997.

The concept of measuring school entry competencies was introduced with the new educational reforms with a pilot program being carried out in Gampaha district in 1999 (Angela, 2000). Before this concept was

[18]. Key expected competencies of the new education reforms were as follows;

- Competencies in communication
- Competencies relating to the natural, social and artificial environment
- Competencies in Ethics and Religion
- Competencies in play and the use of leisure
- Competencies in learning : learning how to learn

introduced, children who reached the age of 5 were admitted to grade one and were made to follow the curriculum directly without identifying individual competencies. This measuring process of entry competencies is named “A Joyful Start For Schooling”. According to this arrangement the children who entered grade one of the formal schools, have to participate in 16 (NIA,1997: 12) organized activities within a period of two weeks. During this period children do not wear the school uniform. They are allowed to come in informal wear and are allowed to bring toys. After two weeks, the formal curriculum is introduced to the children.

The main objective of this process is to identify each child’s readiness to start formal education. The other objectives of this identification process are;

To make the teachers and parents of the children aware of the levels of the competency each child has acquired through early childhood educational (ECE) interventions and at home, before the start of formal schooling.

i. To create a positive attitude among the newly enrolled children about schooling and thereby

reduce their anxiety of being away from the parents.

ii. To create smooth and child friendly transitional process from preschool to formal school.

iii. To help teachers identify the abilities and inabilities of each child so that they can plan child centered lessons.

iv. To assess the effectiveness of the early childhood development (ECD) interventions which the children have undergone for one or two years prior to entering the formal schools.

Entering grade one in the formal school is one of the most significant events in the life of every child. They are entering a totally new environment where they do not find their usual care givers like parents, grandparents, other family members and nannies. In this unfamiliar environment children develop tension and other minor psychological problems that would negatively affect the development of a positive perception of the school and its environment in children. ‘A Joyful Start For Schooling’

program is designed to minimize the anxieties which children face in the first few weeks of schooling. This program allows the children to happily engage with other children and the teacher through play activities.

As already mentioned, 16 simple activities that the children need to do in groups, in the first two weeks, under the guidance of the teachers, are carried out under this program. These 16 activities have been developed based on 7 basic competencies which the children are supposed to acquire during their preschool age either from the preschool or from home.

When the children engage in these 16 activities, the class teacher should carefully observe and assess the children on given 69 sub-competencies. Each of these sub competencies are in line with one or two main competencies. The relationship between the expected competencies, the 69 sub competencies and the 16 activities are given below[19].

[19]. In the government schools, every teacher who is responsible for grade one is supposed to carry out this two week program for all children who enter grade one.

Main Competency	Relevant Activities	Sub Competencies
1. Gross motor domain	1. Running, Jumping and Climbing	The child can run short distance easily
		The child can climb to the top of climbing ladder and come down
		The child can use the swing without the help of others
		The child can jump a short distance
		The child can walk along the balance bar
2. Fine motor domain	2. Cutting& Pasting	The child can hold a scissor and a piece of paper
		The child can cut a circle along the drawn line
		The child can paste the circle that was cut on another circle
	3. Wrapping and balling papers	The child can tear a paper into small pieces
		The child can crush the torn papers into a ball
		The child can paste pictures around the paper ball

		The child pays his concern about the completeness of the picture
	4. Tearing papers and making flowers	The child can fold a paper horizontally along the given line
		The child can tear the paper along the folded line
		The child can make a flower with the pieces of paper
		The child can dance holding the flower
3. Cognitive competencies	5. Matching the parts of pictures	The child can make a complete picture by putting the parts together
		The child can name the completed picture
		The child can express few words about the picture
	6. Creating and innovating	The child can make a simple creation with given items
		The child can name the creation
		The child can express few words about the creation
	7. Identifying different patterns	The child can select the next item or shape in a given pattern
		The child can complete the first pattern correctly
		The child can select the next item or shape of a given second pattern

		The child can complete the second pattern correctly
	8. Simple calculations	The child can count the numbers form one to five
		The child can identify the picture that comes before and after in a given line of pictures
		The child can identify the nearest and furthest picture of a given line of pictures
4. Social competencies	9. Playing in the playhouse	The child is chatting friendlily with others
		The child plays cooperatively
		The child helps others
		The child likes to exchange play materials with others
	10. Enjoying with friends	The child can sing a song alone
		The child can wait until he/she gets his/her chance
		The child encourages others to sing
		The child helps others to sing
5. Language competencies	11. Story books	The child can hold the book correctly
		The child can turn the pages correctly
		The child can identify the pictures separately

		The child can show the front and back pages of the book
	12. Listening	The child listens and pays attention on different sounds of the environment
		The child can identify and name the different sounds of the environment
		The child can name two instruments which make sounds
	13. Develop a story	The child can identify and name the three items which appear on the three picture cards given
		The child can place the cards logically so they make a story
		The child can make a story
		The child can match the story with the pictures in the cards
6. Creativity and Imagination Competencies	14. Drawing pictures	The child can draw a picture of what he/she is shown in the environment
		The child can name the things which appear on the picture
		The child can describe things which appear on the picture
	15. Singing and dancing	The child can sing a song with actions
		The child can perform a dance
		The child enjoys the dance
7. Personal	16. Hygiene	The child washes hands with soap as a

Hygiene and Competencies Of Learning	practices /Competencies of learning	habit before meals
		The child can take meals alone
		The child takes meals without spilling
		The child is concerned about the cleanness of his/her nails, hair and clothes
		The child can complete his /her personal hygiene practices alone
		The child thanks the others when he/she gets help
		The child apologies for his/her mistakes
		The child shows enthusiasm
		The child can move easily from one activity to another
		The child can complete an activity
		The child become happy when he/she completes the activity
		The child is concerned about the completeness of given activities
		The child can place the material orderly

2. Rationale

When reviewing the available literature related to the educational sector of Sri Lanka, a number of studies

have focused on the achievements at the grade 5 scholarship examination, the ordinarily level examination, the advance level examination and the achievements of Essential Learning Competencies (ELC) in each key stage of primary education. These reports provide valuable inputs for corrective and proactive actions, i.e. National Education Research and Evaluation Center (NEREC) conducts various assessments every year regarding the achievements in different grades in schools.

The Department of Planning and Evaluation of the National Institute of Education (NIE) conducts evaluation studies on the achievements at national examinations such as the grade five examination, the ordinary level and advanced level examinations. These studies are conducted annually after the issuing of results of these national examinations.

However it was found that there was not a single study conducted regarding the school entry competencies of Sri Lanka. Therefore the current study will fill this gap by analyzing school entry competencies. Further, this analysis would help in finding the effectiveness of preschool education in Sri Lanka.

Further the outcome of the current study would provide the partners of ECEs (ECE authorities, parents and primary education authorities) to understand the areas that need to be focused on early childhood education.

3. Objectives of the Paper

The objectives of the study are:

1. To identify ethnic and gender differences in the achievements at the school entry competencies and
2. To examine the differences in the achievements at the school entry competencies in children who have attended preschools and those who haven't attended preschools.

3. Methodology

20 schools (14 Sinhala schools and 6 Tamil schools) were selected from Haputale, Haldumulla and Passara Education Divisions of the Badulla District in, Uva Province. Systematic and purposive sampling system was used for selection of the sample to ensure representation of both the Sinhalese and the Tamil schools. In the 20 schools, 298 children have entered

grade one in 2016. This entire student population was selected for the study.

The grade one teacher is expected to complete the assessment report of each child by observing the children while they are engaged in the activities recommended by the child identification process. This standard format has been issued by the National Institute of Education (NIE). If a child achieves the mastery level in any competency, the teacher has mark two rights (√√) in front of the particular competency. If a child is partially competent she/he gets one right mark. If a child fails to achieve a competency, a blank is left. The assessment reports completed by the grade one teachers were used as the main data collection tool. Thus 298 assessment reports were collected from the selected schools. Of the total children in the sample, nearly 90% (66% 2 years and 24% one year) of the children had attended a preschool before they got admission to grade one (See tables 3.1 and 3.2) In addition to the assessment reports, unstructured interviews were conducted with 20 teachers of grade one to collect qualitative information.

Table 3.1: Sample Size & Distribution of Sample by Ethnicity

Category	Sinhala			Tamil			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Children	72	96	168	97	33	130	169	129	298
Schools	14			6			20		

Table 3.2: Preschool Attendance of Children in the Sample

Category	Male	Female	Total
Attended for 2 years	109 64.5%	88 68.2%	197 66.1%
Attended for 1 year	40 23.7%	31 24.0%	71 23.8%
Never Attended	20 11.8%	10 7.8%	30 10.1%
Total	169 100.0%	129 100.0%	298 100.0%

4. The Concept of Child Development

Many social scientists and educationists have developed a large number of theories, concepts and models on child development. Erik Erikson (1963) proposed a psychoanalytic theory of psychosocial development comprising eight stages from infancy to adulthood. Some scholars suggest that this is an extension of Sigmund Freud's theory of Psychosexual Stages. Erikson's theory of psychosocial development has eight distinct stages. Five of these stages go up to the age of 18 and the other three go up to adulthood.

According to this theory, the successful completion of each stage results in the development of a healthy personality and the acquisition of basic virtues. Basic virtues are character strengths which the ego can use to resolve subsequent crises. Failure to successfully complete a stage can result in poor ability to complete the next stages and to develop an unhealthy personality.

During the first stage which is from 0 to 18 months, the infant is uncertain about the world in which he/she lives. To resolve these feelings of uncertainty, the infant looks towards their primary caregiver for stability and

consistency of care. If the care the infants receive is consistent, predictable and reliable, they will develop a sense of trust which they will carry with them to other relationships, and they will be able to feel secure even when threatened.

During the second stage which is from 18months to 3 years of age, the child is physically developed and becomes more mobile. The child begin to assert his/her independence by walking away from the mother, deciding which toy to play with and making choices about what he/she likes to wear, to eat, etc. The child discovers that he or she has many skills and abilities, such as putting on clothes and shoes, playing with toys, etc. Such skills illustrate the child's growing sense of independence and autonomy.

The third stage of the development process spans from age 3 to age 5. During this stage, the child rapidly develops and is sent to a preschool and he/she gets an opportunity to interact with other children of the same age. According to this theory, a child who is in the third stage always tries to initiate and experiment with new things. If these self-initiatives of the child are undermined or stopped, the child feels a sense of guilt. This feeling

may negatively affect the future development of the child. The current paper focuses mainly on this theory, specifically, the first three stages.

4.1 Level of Achievement of Competencies

This section focuses on the level of achievement of various competencies by children.

Gross Motor Competencies: There are five expected sub gross motor competencies which the child should acquire by the time he/she enters grade one in a formal school (see the competency table).Out of the 298 children, 32.9% have achieved double right marks (Mastery Level) for achieving gross motor competencies. However there were 23% of the children who achieved mastery level gross motor competency without attending a preschool.

There is a significant gender and ethnic variation in the achievement of gross motor competencies. Only 18.6 % girls acquired the mastery level in gross motor competencies while 44.0% boys acquired the same. With regard to ethnicity, 38.7% Sinhalese children and 25.4% of Tamil children were observed to have achieved the gross motor competencies. A further analysis shows

that the lowest achievement rate is reported by the Sinhalese girls (9.4%). See table 3.3.

This analysis also confirmed that there is no significant correlation between preschool attendance and the achievement of gross motor competencies as 23% of the children who have never attended a preschool have achieved the mastery level in gross motor competencies. See table 3.3.

Fine Motor Competencies: There are 11 sub competencies under fine motor competencies that children have to achieve when they enter grade one in formal school (See Competency Table). 48 children out of the 298 have achieved mastery level in all 11 sub competencies of the fine motor competency. This is 16% of the total sample. 84% of the children have entered to grade one without acquiring the fine motor competencies. A significant ethnic and gender variation can be identified (Sinhala 20.2%, Tamil 10.7%, male 10.1% and female 24.1%) with regard to the achievement of fine motor competencies. See table 3.4.

Table 3.3: Distribution of Children Who Achieved Gross Motor Competencies by Gender and Ethnicity

Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	56 77.7%	9 9.4%	65 38.7%
Tamil (m=97; f=33)	18 18.5%	15 45.4%	33 25.4%
Total (m=168; f=129)	74 44.0%	24 18.6%	98 32.9%

Table 3.4: Distribution of Children Who Achieved Fine Motor Competencies by Gender and Ethnicity

Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	14 19.4%	20 20.8%	34 20.2%
Tamil (m=97; f=33)	3 3.1%	11 33.3%	14 10.7%
Total (m=168; f=129)	17 10.1%	31 24.0%	48 16.1%

Further, there is a significant correlation between achievement of fine motor competencies and preschool attendance. Children who attended preschools show a higher level of achieving fine motor competencies than the children who have never attended preschools. 89% of the children who entered formal schools with the expected fine motor competencies have preschool experience of either one or two years. Only 1% of the children who did not get any preschool experience show mastery level in achievement of fine motor competencies.

Cognitive Competencies: 13 cognitive competencies are expected from the children are measured observing 4 activities. According to the findings of the present study, only 9.7%the children enter grade one with all the 13 cognitive competencies. The remaining 90.3% of the children enter without these competencies. There is a significant variation in this parameter between Sinhalese and Tamil children. However, the difference between girls and boys is very minimal. See table 3.5.

Table 3.5: Children Who Show Mastery Level in All 13 Cognitive Competencies

Ethnicity	Male	Female	Total
Sinhala Total	72 100.0	96 100.0	168 100.0
Sinhala with cognitive competency	14 19.4%	7 7.3%	21 12.5%
Tamil total	97 100.0	33 100.0	130 100.0
Tamil with cognitive competency	3 3.1	5 15.1	8 6.1
Both sexes total	169 100.0	129 100.0	298 100.0
Both sexes with cognitive competency	17 10.0	12 9.3	29 9.7

On the other hand, there is a direct correlation between preschool attendance and achievement of cognitive competencies. Out of the 29 children who show mastery level in all 13 cognitive competencies, 62.1% children have attended preschools for two years. 31.0% of the

children have a preschool experience of one year. Children who have never attended preschools represent 6.9 % of the total number of children who achieved the mastery level in all the 13 cognitive competencies. See table 3.6.

Table 3.6: Children Who Show Mastery Level in All 13 Cognitive Competencies

Preschool Attendance	No. of Children	%
2 years	18	62.1
1 year	9	31.0
Newer Attended	2	6.9
Total	29	100.0

Social Competencies: According to the school entry competency assessment process, the children who enter grade one should have acquired 8 sub competencies under the social competency (see the table of competencies). Out of the total, only 12.1% of the children had acquired this competency. There is a variation in the achievement of social competencies between Sinhalese (14.3%) and Tamil (9.2%) children and between male (10.1%) and female (14.7%) children.

What is more significant in this analysis is that the level of competency shown by the Sinhalese male children is higher than that shown by the Singhalese female children while the picture is opposite related to the Tamil children (male 4.1% and female 24.2%) where there is a huge difference between the male and the female children. See table 3.7.

Table 3.7: Distribution of Children Who Achieved Social Competencies by Gender and Ethnicity

Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	13 18.0%	11 11.5%	24 14.3%
Tamil (m=97; f=33)	4 4.1%	8 24.2%	12 9.2%
Total (m=168; f=129)	17 10.1%	19 14.7%	36 12.1%

The other important aspect is that of the 36 children who achieved mastery level in all the 8 sub social competencies as high as 29 (80.5%) children had

attended preschools for 2 years; 5 (13.9%) children had attended preschool only for 1 year and only 5% of the children who had not gone to preschool achieved the social competencies. This analysis clearly proves the fact that there is a direct correlation between the achievement of social competencies and preschool attendance.

Language Competencies: According to the school entry competency assessment process, a child who enters grade one should have achieved 11 sub competencies related to the language competency. See table 3.8.

According to the findings of this survey, only 52 children (17.4%) out of the 298 had all 11 sub competencies when they entered grade one.

There is no significant difference between the Sinhalese and the Tamil children regarding achievements in the language competencies. Both the Singhalese and the Tamil children are in less than 20% range. The girls record a higher level of achievement in language competencies compared to the boys. Out of the 52

children who achieved all the 11 sub competencies of language 57 % are girls while boys represent 42.3 %.

Table 3.8: Distribution of Children Who Achieved Language Competencies by Gender and Ethnicity

Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	14 14.4%	19 19.8%	33 19.6%
Tamil (m=97; f=33)	8 8.2%	11 33.3%	19 14.6%
Total (m=168; f=129)	22 13.1%	30 23.5%	52 17.4%

A positive relationship can be observed between the achievement of language competences and preschool attendance. Out of the 52 children who have achieved all the sub competencies related to language, 82.6 % have attended preschools for two years. Only 2 (3.8%) children who did not attend preschool were able to achieve the language competencies.

Creativity and Imagination Competencies: When a child enters grade one in the formal school he/she should have acquired certain competencies in creativity and imagination. In the school readiness process all the children who enter grade one are evaluated on 10 identified creativity and imagination competencies such as singing a song with rhythm and performing a dance. Out of the 298 children which was the total study population 83 children had acquired all 10 given sub competencies related to Creativity and Imagination. This is 27.8% of the total studied population. On the other hand 72.1% of the children have not acquired the required creativity and imagination competencies. See table 3.9.

According to the above findings there is no significant difference between girls and boys regarding the achievement of creativity & imagination competency however there is a considerable variation between the Sinhalese and the Tamil children in the achievement of the same. 32.1% the Sinhalese children have achieved creativity & imagination competencies while only 22.3% of the Tamil children have achieved the same.

Table 3.9: Distribution of Children Who Achieved “A” For All 10 Creativity & Imagination Competencies by Gender and Ethnicity

Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	26 36.1%	28 29.2%	54 32.1%
Tamil (m=97; f=33)	18 18.6%	11 33.3%	29 22.3%
Total (m=168; f=129)	44 26.2%	39 30.2%	83 27.8%

According to the above findings there is no significant difference between girls and boys regarding the achievement of creativity & imagination competency however there is a considerable variation between the Sinhalese and the Tamil children in the achievement of the same. 32.1% the Sinhalese children have achieved creativity & imagination competencies while only 22.3% of the Tamil children have achieved the same.

It was revealed that out of the 83 children who achieved creativity & imagination competencies, 50 children have

attended preschool for two years. This is 60% of the total children who achieved these competencies. 31.3 % of children who have attended preschool for one year have also achieved the expected competencies in creativity &imagination. 7 children (8.4%) who have never attended a preschool have also achieved the same competencies. This information indicates that there is a direct correlation between achievement of competencies in creativity & imagination and preschool attendance.

Personal Hygiene and Competencies for Learning: The 13 sub competencies are measured under personal hygiene and learning competencies. This includes hand washing habits, taking meals alone without spilling, thanking and apologizing etc. According to the findings only 20.8% of the children out of the 298 have achieved "A" for all the 13 sub competencies related to personal hygiene and learning. See table 3.10.

There is a significant gender and ethnic variation in the achievement of these competencies. A positive correlation can also be observed between the presence of preschool education and the achievement of personal hygiene competencies and the competency of learning. Of 62 students who achieved this competency 61% (or

38) of the children who achieved “A” in all the 13 sub competencies have attended preschool for two years and 32.3% attended one year. Of the total only 6.5% of the children had not attended preschool at all to achieve these competencies.

Table 3.10: Distribution of Children Who Achieved “A” In All 13 Personal Hygiene Competencies and the Competency of Learning by Gender and Ethnicity

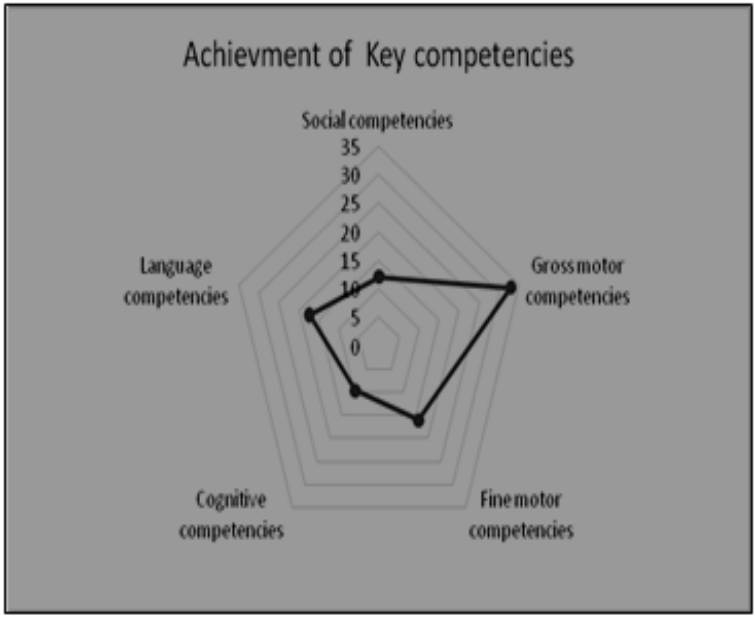
Ethnic Group	Gender		Both sexes
	Male	Female	
Sinhala (m=72; f=96)	14 19.4%	18 18.8%	32 19.0%
Tamil (m=97; f=33)	13 13.4%	17 51.5%	30 23.1%
Total (m=168; f=129)	27 16.1%	35 27.1%	62 20.8%

5. Conclusion

The findings of this study clearly indicate that the majority of the children enter grade one in the formal schools without achieving the expected entry

competencies. This study analyzed only five out of the seven key competency areas of the school entry competency process.

The lowest achievement by children is shown in the cognitive competencies with only around 10% achievement rate. The second and the third lowest achievement rates are seen in the social competencies (12%) and the fine motor competencies (16%) respectively. The language competencies stand as the 4th lowest with only a 17.4% achievement rate. The highest achievement is seen in the gross motor competencies with a 33% achievement. It is clear that in four key competencies out of five the achievement rate is below 20%. Even in the gross motor competency which shows the highest achievement rate, the achievement rate does not reach 40%.



One of the key findings of this study is that girls are far ahead than boys in achieving all the competencies discrediting traditional biological and social assumptions. On the other hand, this indicates the need for more gender sensitive ECD interventions which suit physical, biological and cognitive development of both girls and boys.

Another point to be considered here is the gap between the Sinhalese and the Tamil children in the achievement of the competencies. Data reveal that in all competencies other than the language competency the

gap in the achievement rate is almost double. In language competencies both the Sinhalese and the Tamil children show an equally low achievement.

According to the findings of the study there is a direct correlation between the achievement of the competencies and the presence of a preschool education. The children who have had a preschool education of two years show a significant difference in the achievement of competencies compared with those who have had no preschool education. There is a considerable gap between the children who attended preschool for two years and those that attended for one year in the achievement of competencies. This variable is common for both the Sinhalese and the Tamils and for both the genders.

The achievement level of gross motor competencies is higher compared to all the other four competencies in both the Sinhalese and the Tamil children. Similarly, the children who never had any preschool education have also achieved more in gross motor competencies compared with their achievements in all the other competencies. This indicates that children can attain

gross motor competencies without much effort even at the home.

6. Recommendations

The findings of this study clearly indicate the need for immediate reviewing of both ECD and ECE interventions in Sri Lanka. Both ECD and ECE interventions have failed to achieve the expected results in helping children to achieve key competencies such social, cognitive and language competencies.

ECD begins at the home and the early childhood is the most rapid period of development in human life. During this period, the child tries to achieve different competencies associated with the environment. The home environment should be a one that provides a balanced environment for children to achieve the key competencies. Current parenting practices at home lean more towards a mechanical one that is partial for achieving only few competencies. Awareness creation among parents and care givers on the necessity of a balanced development of the childhood is highly important.

Current ECE interventions mostly focus on the teaching of children to read and to write and do not focus on the holistic development of a child. These current interventions of ECE would help develop a mechanical child who is weak in social and cognitive competencies. This highlights the need for a common and comprehensive ECE curriculum that focuses on the holistic development of the child.

At present, the ECE sector is dominated by females. Preschool teachers always try to control the behavior of children. Boys biologically tend to be more active than girls especially, in their childhood. When their behavior is controlled without a proper plan and correct orientation the boys automatically become lethargic and backward. The effect of this experience by boys in their preschools, continue up to the primary and the secondary education levels. This again highlights the need for a gender sensitive early childhood intervention.

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A Study On Socio-Economic and Cultural Factors Affecting Malnutrition Among Children in the Plantation Sector of Sri Lanka

D.M.N.C.Abeywickrama

1. Introduction

Reducing child malnutrition is one of the key millennium development goals, as child malnutrition produces a wide and diverse range of adverse economic and social consequences. Malnutrition substantially raises the risk of infant and child deaths, and increases vulnerability to a variety of diseases in later life. In addition, malnutrition impairs cognitive ability and decreases school performance, and lowers labor productivity and lifetime earnings. Therefore combating child malnutrition is a serious challenge to the governments in order to achieve sustainable development.

The World Health Organization (WHO) estimated that by the year 2015, the prevalence of malnutrition would decreased to 17.6% globally, with 113.4 million children younger than 5 years being affected, as measured by low weight for age. It also predicted that overwhelming

majority of these children, 112.8 million, will live in developing countries with 70% of these children in Asia, particularly the south-central region, and 26% in Africa.

Child malnutrition in Sri Lanka has been very high. Nearly one in three children aged 3-59 months is underweight, and more than one in ten children in this age group suffers chronic or acute malnutrition. An international comparison of child malnutrition rates relative to the per capita national income, based on a cross-section of 113 low- and medium-human development countries (UNDP, 2012), shows that Sri Lanka has a significantly higher child underweight rate than would be expected on the basis of its per capita GDP. This is in sharp contrast to Sri Lanka's celebrated performance on other human development outcomes such as primary education enrollment, adult literacy, infant mortality and life expectancy, where the country performs well above the levels that could normally be expected at its level of per capita income. Table 4.1 indicates that Sri Lanka has a child underweight rate that may be three times as high as what would be expected of a country with Sri Lanka's level of infant mortality. There is thus a big disparity between Sri Lanka's

performance on child health and its performance on child malnutrition.

29.4% of the children between 3-59 months were moderately or severely underweight. A smaller, but still unacceptably high proportion (14%) of children in this age group suffers from stunting and wasting. These findings imply that children suffer from short-term acute food deficits, reflected in low weight for age, as well as longer-term chronic under-nutrition, manifested in high rates of stunting and wasting.

Though Sri Lanka has achieved a significant improvement in relation to health indicators and human development indexes compared to other Asian countries, there are disparities in the various sectors within the country. Moreover, the estate sector has a greater social poverty situation compared to the economic poverty status. The tea plantation industry is one of Sri Lanka's most important industries, significant for its contribution of almost 30% of all foreign exchange earnings to the country's economy.

Table 4.1: Malnutrition Rates (%) of Children Aged 3-59 Months in Sri Lanka

Classification	**WHO Classification *(%)* Global**			
	Low	Medium	High	Very High
Stunting	<20	20-29	30-39	≥40-49
Underweight	<10	10-19	20-29	>30
Wasting	<5	5-9	10-14	>15
	Sri Lanka (National Data %)			
Stunting	13'5			
Underweight			29'4	
Wasting			14'0	

Source: (World Bank Office (2005). *Attaining the Millennium Goals in Sri Lanka; How Likely and What It Takes to Reduce Poverty, Child Mortality and Malnutrition and to Increase School Enrollment and Completion.* Colombo: World Bank.

Over 900,000 of Tamils of Indian Origin (250,000 families) of the Sri Lanka's population of 20 million, reside in the plantations. The resent official poverty statistics record that a clear disparity exists particularly in the plantation sector (Department of Census & Statistics, 2012/13). According to Poverty Headcount Indicator, 2.0% of urban, 7.6% of rural and 10.9% of estate people live below the poverty line. Despite some improvements during the past few decades, the plantation sector still lag behind in almost every indicator of development in Sri Lanka. Estate sector remain bit behind in health and other development indicators compared to the other two sectors in Sri Lanka. Health indicators **(**Maternal and Childcare Services) by sector show that the estate sector lag behind in maternal and child care services (Tables 4.2 and 4.3).

Table 4.2: Health Indicators by Sector - Maternal Health Care (percentages)

Maternal health	Estate	Rural	Urban	Avg.
% who received tetanus toxoid immunization	91.3	96.3	92.8	93.2
% who received drugs to prevent malaria	31.8	26.0	12.4	34.9
% who gave birth in an Institution?	81.2	98.2	98.9	91.4
% who gave birth in a private hospital	0.5	2.6	17.6	0.2
% who received pre-natal visits by a midwife	41.3	89.0	76.8	75.6
% visited facility for pre-natal care	86.5	94.8	93.5	93.1
% advised on complicated pregnancy symptoms	36.8	83.4	78.7	65.3
% received post-natal visits by midwife or medical officer	52.2	76.3	67.2	69.0

Table 4.3: Health Indicators by Sector-Child Health

Child health	Estate	Rural	Urban	Avg.
% of children with Child Health Development Record	90.5	99.2	99.3	96.0
Number of times weighed	6.1	6.4	5.9	5.7
% never weighed	9.9	1.2	1.8	4.9
% with low birth weight (less 2.5 kg)	30.0	17.3	13.7	24.7
% of children stunted	37.0	14.1	8.3	29.0
% of children wasted	12.5	16.	8.9	20.1
% children underweight	45.7	31.0	17.8	47.4%

<table>
<tr><td colspan="4">EFFECT: Malnutrition</td></tr>
<tr><td>IMMEDIATE COURSES</td><td colspan="2">Inadequate food intake</td><td>Diseases (child & mother)</td></tr>
<tr><td>BACKGROUND COURSES</td><td>Inadequate food security at home</td><td>Inadequate maternal and infant protection</td><td>Inadequate health services and unsafe environment</td></tr>
<tr><td>BASIC COURSES</td><td colspan="2">Formal and informal institutional and domestic factors</td><td>Economic structure</td></tr>
<tr><td colspan="4">RELIGIOUS BACKGROUND, BELIEVES AND ATTIDUDES</td></tr>
<tr><td colspan="4">CULTURAL & SOCIAL FACTORS</td></tr>
</table>

Source: UNICEF, 2005

In analyzing the malnutrition rate by district, Nuwara Eliya reported the highest stunting and underweight rates compared to other districts of the island. Therefore it is very important to find out the root causes of the high rate of child malnutrition prevailing in the plantation sector. Several studies have shown that root causes and factors affecting

child malnutrition are very likely to be based on health and economic factors. But there are some social, cultural and environmental factors that affect child malnutrition in the plantation sector. This study explores the social, cultural and environmental factors affect malnutrition among children in plantation sector.

2. Conceptual Framework

Though the study of the situation of plantation sector can be based on several sociological theories, the current study was based on the conceptual framework prepared by UNICEF.

3. Objectives of the Study

Following are the two objectives of the study.

1. To examine the food behavior and social cultural factors affecting the same in the plantation sector and how those factors affect child malnutrition and

2. To study the socio economic and cultural factors that affect poor health conditions and malnutrition in children in the plantation sector.

4. Methodology of the Study

Both quantitative and qualitative data were collected. A questionnaire was used to collect personal quantitative data of mothers of the children in the sample. 34 in depth interviews were conducted with the mothers who had malnourished children aged 0-5 years. 5 key informant interviews were conducted with the key persons including the Public Health Midwife, Estate Medical Assistant, Medical Officer of Health (MoH) of Nuwara Eliya, Crèche Attendant and Welfare Officer of the selected estate. Close observation was used as a qualitative data collection method. Secondary data were gathered through published and unpublished reports, published books, records of the Plantation Human Development Trust and from related web sites.

This study was carried out in an estate of in the Nuwara Eliya district where socio-economic and health indicators were very low compared with the other districts of the island.

5. Socio-Cultural Factors Affecting Child Malnutrition among the Plantation Community

Data shows that in addition to economic factors, in a broader context, social and cultural factors are also directly or indirectly associated with child malnutrition. In addition, environmental factors too affect malnutrition of children in the plantation sector. It is found that the specific social and cultural background of the plantation sector play a vital role in their food behavior. The food behavior negatively effects child malnutrition. Definition of food patterns includes how people choose their foods, how they consume their foods and what factors affect their food behavior. Findings of this research in relation to food behavior can be summarized into two themes.

i. Food behavior of the mother during the pregnancy and the first three months after the delivery and

ii. Food behavior of the child from birth to age 5.

Food behavior of the mother during the pregnancy and the first three months after the delivery: Food behavior of the mother can be introduced as a root

cause of child malnutrition since the growth of a child from the day of conceiving is connected with the foods of the mother. Therefore food behavior of the mother and social and cultural factors affecting mother's food behavior during her pregnancy and in the first three months after the delivery was studied. Following are the behavioral aspects and characteristics found.

i. Food taboos during the pregnancy,

ii. Gender based food behavior in the plantation sector,

iii. Lack of knowledge on food and nutrition among the adults,

iv. Lack of mechanism to access the information on food behavior and malnutrition,

v. Globalization and popular fast food culture,

vi. Hot and cold food concept among the plantation community and

vii. Non usage of available nutritious foods in the estates.

One of the main reasons for malnutrition among children in the plantation sector is the food taboos adhered to during the pregnancy of the mother. They believe that the intake of some food items has a negative effect on pregnant mothers and they avoided those food items. As a result, pregnant and lactating women loose some important vitamins, minerals and proteins. Especially ?the meats, dry fish, fish, leaves, some fruits are not given to these mothers as it is believed that such food varieties have negative effects on the mother. Soon after the delivery mothers are given double toasted bread and a plain tea believing that there would be wounds in the stomach after the delivery and that therefore other food varieties should not be given.

Plantation sector still remains as a patriarchal society where male dominance is very high. Gender based food behavior is another factor that affects child malnutrition. According to Public Health Midwife (PHM), gender based food behavior is not changed even in the pregnancy period. The traditional practice is for all the male members of the family to consume food first and the females to eat what is left, thereafter. Therefore this

directly results in women consuming a lower amount of food.

Experts have pointed out that a woman should take 500-600 extra calories during pregnancy and have a good knowledge of vitamins, minerals, proteins and other nutrients. But it is found that 80% of the women did not have a clear idea about nutritious food items. Further, the food diversity is very low in the plantation sector and wheat floor and food items prepared from wheat flour are the common food items in the plantation sector. It was found that there is a positive correlation between the level of knowledge of the mother and child malnutrition and it is proved by the following statement. PHM says,

> “Even though we try to improve their knowledge on nutritious foods, they are not willing to attend those programs. They do not have a good knowledge of what foods need to be taken during the pregnant period. They do not know about what vitamins, minerals or proteins are found in each food item”.

The lack of information and access to information on malnutrition and food behavior by the development workers is found to be the root cause of the problem of child malnutrition according to the current study.

According to the Estate Medical Assistant, women's participation in the awareness programs is very low and these women do not understand the seriousness of the issue. As women are the main bread winners of most of the families and as they work as tea pluckers in estates earning daily wages, they do not like to spend their time in such training programs. This directly affects the continuation of child malnutrition in the community.

Fast foods, canned foods and packeted foods available in the market play a vital role in child malnutrition. Plantation community is very much addicted to the television and they believe that the food items shown in commercials are the best and the most nutritious foods in the world. They sell the fresh vegetables they produce at the nearby market and purchase instant noodles, biscuits, soft drinks and other food items available in the market that are not healthy or nutritious. A mother stated,

> "I want to give the best things to my children. Therefore I give all the food in TV adds to my children. They are the foods mothers in town areas give their children and they are the best foods".

Above statement shows the way of thinking of the estate people and how it shapes their food behavior. There is a high tendency for part taking of fast foods and food items of the popular culture that prevent children from consuming foods high in vitamins, minerals, proteins and other necessary nutrients.

The concept of ‘hot and cold’ foods is one of the main factors which affect child malnutrition in the plantation sector. They believe that foods they consider to be either ‘hot’ or ‘cold’ should not be given to pregnant women and that the intake of these foods have a negative effect on the pregnancy. With that attitude, pregnant women are compelled not to take ‘hot’ foods such as pineapple, meats and some fish varieties and cold foods such as milk, yogurt, avocado, gram and fruits. Given the nutrition they stand to lose by the rejection of such foods, this attitude affects both the health of mother and the growth of the child.

Another important factor found by the study that affect child malnutrition is the non use of available nutritious foods found around them in the estate. It was studied whether the available food items were used by the community. Nuwara Eliya district has the highest

production of vegetables and it also has other agro based products. Animal husbandry is a popular secondary income generating avenue of the plantation community. Even though these nutritious products are available they sell these products to middlemen who come to the estate to buy their products and spend the money on floor, bread, biscuits, noodles, soft drinks etc. Non part taking of such nutritious foods and the full dependence on food items bought from the market directly affect child malnutrition.

6. Food Behavior of Children1-5 years Age

Food behavior of the children from the birth to age 5 and social cultural and environmental factors that affects child malnutrition was studied from the child's point of view. Mothers's milk is the main food given to a newly born child. He/She is introduced to soft and hard foods in stages gradually. Infant feeding practices are an important determinant of child nutrition. The health and nutrition benefits to the child of exclusive breast-feeding during the first four months of a child's life and continued breast-feeding thereafter are well known. It is also important that the child receives *colostrum* which contains important antibodies and provides the child's

first form of immunization. This information is communicated to mothers in Sri Lanka verbally by the public health workers (midwives) and through literature distributed to the mothers to be by the public health system. Table 4.4 indicates a higher incidence of malnutrition among children who did not receive *colostrum* than among those who did. Children who were exclusively breast-fed for 4 months had a lower incidence of malnutrition than those to whom supplementary feeding was introduced before the completion of 4 months.

Table 4.4: Children Aged 0-59 Months by Infant Feeding of Colostrum

Given colostrum	No.	%
Mothers who did not give colostrum	26	76
Mothers who gave colostrum	08	24

Most of the females in the plantations work as tea pluckers and they work very hard during day time. After two or three months from the delivery, they start working in the estate and the children are usually kept in crèches (*pullemaduwa)* with its attendant or with an older person

in the home until they finish their work. The child is fed by someone else during this period. This has a negative effect on the child's growth.

A Crèche Attendant says,

> "When these women go to work someone else in the house feeds the child with a feeding bottle. Many of them neglect even to wash their hands before feeding the child. Also milk could go bad when it is kept in a bottle for a long time. The price of milk powder is very high and the estate community is not in a position to purchase adequate milk powder due to their low income level. What they do therefore is either feed the child with tea or give him/her watery milk made with a little bit of milk powder. This leads to "Marasmus".

Selection of a suitable milk powder is very important and should be done according to the health condition of the child. But the selection of a suitable milk powder is done by consulting neighbors. They believe that the milk with the highest price is the best. They do not have the knowledge to select a suitable milk powder by themselves.

According to the health personnel, it is very important to introduce supplementary foods at the end of the third month from birth since it directly affects the physical growth of the child. But at this age the estate children are kept in Crèches since their mothers have to go to work. The crèche attendant takes care of the children until their mothers return. It was noted in the study that the children in Crèches were not treated well.

A Crèche Attendant says,

> "We have introduced a chart with 5 different food items for the five days that they should send to the crèche with the child. But they follow it only for two or three days, thereafter they send what they think is good for the children. They often send some "*thriposha*" or a roti made by wheat floor. They do not even send some vegetables with the roti. The children are tired of eating that and they refuse to eat. Then children do not get nutritious food and it affects them negatively"

The morbidity pattern of children was examined and it was found that children suffer from diseases that lead to malnutrition. Table 4.5 shows that all children of the sample have suffered from at least one disease and 32% of them suffered from the common cold and flu, 17%of them suffered from fever and 15% of them

suffered from diarrhea. A further 12% of them have suffered from vomiting and 9%of them from headache. Children who suffered from asthma was 9% and 6%of children have suffered from other infections. The diseases mentioned above are the most common among the children of the plantation sector. When the children suffer from such diseases, parents show reluctance to feed them with some food items. This is because of their adherence of myths regarding some foods and sicknesses.

> “Fever, cough, asthma, flu and diarrhea are the most common among children here. Reason for that is the cold weather. We know that children in this age need more food, since they grow very fast. But sometimes we intentionally stop giving some food to the children. Especially, we do not give foods such as egg, yogurts, banana, avocado, milk, leaves, grams and fish since they are very cold foods. Therefore we never give them to children” (A mother).

Table 4.5: Diseases Suffered by the Children in the Previous Week

Disease	Number of children	Percentage
Fever	06	17
Vomiting	04	12
Diarrhea	05	15
Cold and Influenza	11	32
Headache	03	09
Asthma	03	09
Other Infections	02	06
Total	34	100

Children miss considerable nutrition due to these sicknesses and the myths related to illnesses and foods. This directly results in child malnutrition. Apart from the above causes socio-economic and cultural factors are also associated with child malnutrition.

7. Socio-Economic Factors Affecting Child Malnutrition

Eleven socio-economic factors affecting malnutrition among children in the plantation sector were found in the study.

1. Low level of education and health education of the mother.
2. The daily routine of the women in estates.
3. Income and expenditure pattern.
4. Family back ground and living standards.
5. Number of family members and space of the house.
6. Level of access to health services.
7. Health seeking behavior.
8. Anemia in pregnant mothers.
9. Health condition of the mother.
10. Lack of clean drinking water and safe sanitation and

11. Birth intervals between children.

Low level of education and health education of the mother: There is a strong association between mother's schooling and childrens' underweight rates. The underweight rate among children whose mothers have no formal schooling is as high as 48%, while the corresponding rate among children whose mothers have completed their GCE (AL) is merely 10%. The differences in severe malnutrition rates are even more striking; with unschooled mothers showing severe underweight rates among their children, rates that are more than 10 times as higher as those observed among children whose mothers have completed GCE (AL). The favorable association between maternal schooling and child malnutrition can be attributed to such factors as superior knowledge and practices concerning childcare, feeding practices, environmental health, and household hygiene. Mother's schooling also proxy for higher socio-economic well-being of households. Overall, the findings confirm results documented in the development literature across a large number of countries that investment in female education is one of the best long-term,

intergenerational interventions to combat child malnutrition.

Mother's Age at Birth: The literature on child malnutrition identifies the age of a mother as a significant risk factor in her children's nutritional status. Delivery complications resulting in low birth weight are more likely among babies born to women in their teens or their late 30s and 40s. Mothers in their teens and their 30s, especially the late 30s, are significantly more likely to have children suffering from malnutrition.

Daily Routine of Estate Women: An underlying cause for child malnutrition among children in the plantation sector is due to the very busy daily routine of the women. Estate women perform dual roles - as a house wife and as an income earner of the family as well. Heavy work load even during the pregnancy and engagement in risky work affects the health condition of both the mother and the child. Though they engage in hard work during pregnancy and hence need greater intake of nutritious food, they do not take additional nutritious food or calories.

> "Most of the estate women start their day at 4 o'clock in early morning. They have to collect

> water and start to cook for the family members, prepare breakfast and lunch for all in the house hold. Then they have to clean their houses. After that they take their children to school or the Crèche and then go to work. They have to pluck tea leaves until they reach their daily target. They eat only a roti with sugar or rice with *sambol.* Some times they do not take their meals and work without food." (Grama Niladari)

This statement clearly indicates how the heavy work load and the busy schedule of women in plantations affects child malnutrition.

Living Standards: Recent studies of child malnutrition in developing countries have awarded importance to the analysis of the relationship between malnutrition and income growth (Haddad et. al., 2003) and interventions (Stifel and Alderman 2003). Data from the DHS 2000 show an association between rates of child malnutrition and household living standards, when predicted household consumption expenditure per capita is used as a proxy for household living standards. While the data show an inverse association between underweight rates and consumption quintiles, the gradient in the relationship is not steep until one gets to the richest

quintile of children aged 0-59 months. Between the fourth and fifth quintiles, the underweight rate falls from 28% to 15%. There are two important things to note from these results. First, child malnutrition is pervasive in Sri Lanka, with a third of the children in the bottom four quintiles being underweight. At the same time, the fact that as many as 15% of children in the top quintile – a group that is likely to have very good economic access to food– are malnourished suggests that cultural and social factors have an important role to play in determining child malnutrition.

Clean Drinking Water and Safe Sanitation: Clean drinking water and safe sanitation reduce the risk of diarrheal diseases that diminish nutrient absorption and increase the risk of malnutrition among the children. The information on estates shows higher levels of malnutrition among children who live in homes with unsafe sanitation such as houses with no toilets or merely bucket latrines, or inferior sanitation facilities such as pit latrines. Child malnutrition rates are noticeably lower in houses with access to safe forms of sanitation, such as water seal toilets. Similarly, children from households that consume drinking water from

unsafe sources, such as rivers, tanks, streams or unprotected wells, have higher malnutrition rates than children from households consuming drinking water from safe sources, such as pipe bourn water from a main line, and protected wells and tube wells. Boiling water prior to consumption is also positively associated with lower levels of child malnutrition. Households that boil their drinking water show sharply lower child malnutrition rates than households that consume drinking water that is not boiled.

Income and Expenditure Pattern: The resent official poverty statistics record that clear disparities exist between the different sectors in this regard. The statistics for the plantation sector is significant. (the poverty head count indicator, according to the department of senses and statistics 2012/13 report, stands at urban 2%the , rural 7.6%, estate 10.9% and the national 6.7%). Despite some improvements during the past few decades the plantation sector still lag behind in almost every indicator of development in Sri Lanka.

The low level of economic poverty in the plantations is due to several factors: (i) Wage increases are eaten up by inflation, (ii) Limited access to secondary income sources, (iii) Limited or no access to land, capital, technology, information and markets for secondary income ventures, (iv) High number of dependents per household, and (v) Wasteful expenditure e.g. drinking (substance abuse). As for the household expenditure pattern, most of the family income of plantation families is wasted on alcohol and ?unwanted consumer items. This wasteful expenditure habit is a serious issue affecting the plantation people. Due to limited investment opportunities in the estates, often the people spend their hard earned money on unnecessary consumables. Data show low investment on education, health and long term investments. Therefore, estate families often face financial problems and get trapped in indebtedness. See table 4.6.

Table 4.6: Percentage Distribution of Average Monthly Household Expenditure on Major Non-Food Expenditure by Sector– 2012/13

Factor	Sri Lanka	Urban	Rural	Estate
Housing	18.1	25.8	15.5	10.0
Fuel & light	6.8	8.1	6.3	8.1
Personal care & Health expenses	8.5	7.8	8.8	7.0
Transport	13.3	13.1	13.4	11.2
Communication	3.5	3.9	3.3	3.4
Education	5.6	6.9	5.2	3.6
Cultural Activities & Entertainments	2.0	2.0	2.0	1.9
Household Non-Durable Goods	2.0	2.3	1.8	2.1
Clothing Textiles & Foot Wear	4.6	3.6	5.0	6.0
Household Durable Goods	3.9	2.1	4.6	4.6
Other Expenses	17.5	13.6	18.9	20.0
Other Adhoc Expenses	11.5	9.4	12.3	11.3
Liquor, Drugs & Tobacco	2.7	1.4	3.0	10.7

Source: Household Income Expenditure Survey 2012/13

Birth Interval: It is well documented that birth interval has a J shaped relationship with birth weight. However, in this context, it is important to examine the trends of this variable over time. Although the percentage of women with a birth interval of less than 2 years has decreased over time, so has the percentage of women

with a birth interval of 24-35 months, during which the risk of LBW is lowest. There is also a marked increase in long birth intervals of over 48 months, during which the risk of LBW is high. These changes are likely to influence the prevalence of LBW. Above data suggests that attention to spacing births may be an important point of intervention.

8. Cultural Factors that Affects Child Malnutrition in the Plantation Sector

Some cultural factors which are common only to the plantation community were identified by the present study as root causes of malnutrition. It was found that some traditional myths, believes, values, attitudes and customs followed by the plantation community have a negative impact on child nutrition and health status of the children and mothers of the community. Harmful habits and believes in relation to the food habits followed by the estate community were identified in this study. It was found that colostrum is not given to children thinking that it is expired milk which should not be given to children. They do not feed milk to new born children in the first three days but give only water and *juggery*. They

believe that dairy products and eggs are not suitable for children. At the same time there is a belief among the plantation people that rice should not be given to children in their first 12 months. As discussed earlier, supplementary foods should be introduced together with breast milk from the fourth month since this highly affects a child's growth. But the plantation people do not introduce supplementary foods till after the twelfth month and it is one of the root causes of child malnutrition among the plantation community.

Another of their beliefs is that constipation is caused by gods' displeasure and that gods have a power over its control. Therefore they do not visit the doctor to take medications. Instead, they conduct *poojaas* (Hindu religious activity) to convince the gods and make them happy. During such periods all members in the household stop eating meats, fish, eggs and dry fish. This directly affects lactating mothers and children's nutritional levels. They spend huge amounts of money and time on practicing religious rituals defined by Hinduism. They also practice some cultural rituals and customs from the day of conception and when performing those customs, they avoid taking some food

items. Further, fasting is a part of the practice of their rituals. Since they are strongly bound by traditional beliefs they do not believe much in modern scientific medications.

> “My mother told me that this baby belongs to the god for three months. Therefore, it not good to feed the child meat, fish or any other such food. So I do not add any of them to my meals.”

This clearly shows how much faith they have in their god. They believe that the baby they got is a “child of god” and hence do not add meats, fish, dry fish, eggs or other such items to their meals in first three months after the delivery. Plantation women do not get food high in protein and other required nutrients because of the belief in these traditional myths. One of the myths they thoroughly follow is the belief in ‘hot’ and ‘cold’ concept of foods. Following table shows the nutrients they lose due to the belief in this concept. See table 4.7.

Table 4.7: Nutrients Estate People Lose Due to Hot and Cold Concept of Food

Cold Foods	Nutrients	Hot Foods	Nutrients
Banana	Potassium and Vitamin	Yellow Fin Tuna	Protein/ Minerals
Avocado	Fat, Vit. A, D & Protein	Trenched Sardinell	Protein/ Minerals
Milk	Protein, Fat and B	Bread, Fruit	Carbohydrate
Yogurt	Protein, Fat & Vitamin B	Cabbage	Vitamin C
Ladies Fingers	Vitamin & Mineral	Yellow Fruits	Vitamin A, D, C
Spinach	Iron & Minerals	Curd	Vitamin B
Kohila	Minerals	Giblets	Vitamin B
Gotukola	Vitamin K, Minerals	Peanuts	Vitamin E, Fat
Green gram	Vitamin, protein		
Black Gram/ Gram	Vitamin & Protein		

9. Conclusion

Compared to other communities in Sri Lanka the estate community faces many problems with women and children in the estate sector being the most vulnerable. According to the available statistics, 53% of the estate children were malnourished in 1987 and did not show any change for the better until 1993. In 2000 the rate decreased to 44%, but seven years later in 2007 the rate

remained the same indicating that the level of malnutrition is still high among the estate children. Many researchers have shown that the existence of severe malnutrition among the estate children is a major health related problem in Sri Lanka. But those studies were basically conducted at macro level and focused solely on the medical, the biological and the economic factors. Many factors contribute to the level of malnutrition among estate children. They cannot be understood only in terms of medical and economic grounds. In addition, cultural factors, environmental factors, food habits, healing methods and access to health facilities influence the level of malnutrition in the estate sector. This paper focused on the influence of such factors in the increase of malnutrition among the estate children and the continuation of the problem. There are several factors that affect the high rate of malnutrition among the estate children. Some are connected to parental properties such as the height of the mother, her age, her socio-economic and nutritional status, and the environment in which she lives. One of the major factors that affects nutritional status of the child is the level of education of parents and the mother's knowledge of the primary health care and nutrition. The correlation between the

level of education of the parents and the nutritional status of their children is one of the major findings of this study. In addition there are many socio-cultural and environment factors causing malnutrition in children in the study area. The age gap between children, inadequate household food security, inadequate maternal and child care, insufficient health services, unhealthy physical and social environment, lack of access to sanitary facilities, religious practices of the estate community, attitudes, customs, mores defined by their culture, food habits and food patterns, heavy work load of the women and low monthly income are among the other factors that affect malnutrition among the estate children.

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