

## Effects of hospitalization in children of parents working in foreign countries

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### Abstract:

**Introduction:** Increasing number of females in Sri Lanka leave their families to work in the Middle East. This leads to disruption in the family structure and the attachment process. Effects of this can be long lasting and is likely to be seen at events that can be considered stressful in a child's life. Admission to hospital has been shown to be a stressful experience for children.

**Methodology:** Behavioural problems in hospitalized children who have one or more parent working in the Middle East were compared with hospitalized children who are not separated from their parents. The prevalence of deteriorating school performance and failure to gain weight were also compared in the two groups.

**Results:** Behaviours such as irritability, aggression, poor sleep and low mood were seen more in children who had one or more parent working in the Middle East. Deteriorating school performance and weight loss were also seen more in this group.

**Conclusion:** Long term separation from a parent results in acute behavioural problems seen at times of stress as well as more long-term effects.

### Introduction

Employment in the Middle East is a popular form of employment among Sri Lankans and an important source of foreign currency to the country. Migrants' remittances have been reported as the second highest source of foreign earnings in Sri Lanka. As shown in the Annual Statistical Report of Foreign Employment – 2010, the number leaving the country for foreign employment has increased over the past 25 years. More females than males leave the country for employment in the Middle East (Tidball, 2011, Sri Lanka Bureau of Foreign Employment, 2010).

When a parent leaves for employment in another country the family structure is disrupted. This results in long term separation from one or both parents. Most arrange for their children to be looked after by the extended family or the

remaining parent takes care of the children by themselves. This has been called transnational families and transnational mothering (Ukwatte, 2010). This at times results in a change in roles played by different family members and may also give rise to changes and inconsistencies in the styles of discipline. The children go through a period of adjustment. Studies have shown that long term separation from parents has negative effects on the psychological wellbeing of the child (Rutter, 1971). Children who have experienced long term separation from parents have shown to be more vulnerable to developing emotional and behavioural problems later in life (Bretherton, 1992, Rutter, 1971, Bowlby, 1951a, Bowlby, 1951b). Hennessy (1997) and Hennessy et al (2011) described separation from attachment figures as a potent stressor that stimulates the HPA axis in children.

Prugh et al (1953) and Coyne (2006) have reported that hospital admission is a stressful event in a child's life. Hospitalized children have reported pain, mutilation, immobility, separation from significant others, loss of control and disruption as factors that make hospitalization stressful (Coyne, 2006). Behaviours such as regression and withdrawal are seen commonly in children during hospital admissions (Gelder et al., 2009). Bowlby (1958a and 1958b) described three stages that children go through following hospital admission: protest, despair and detachment. Repeated hospital admissions have been shown to be associated with high rates of later emotional and behavioural problems (Quinton and Rutter, 1976, Douglas, 1975, Bowlby, 1951a, Bowlby, 1951b). Separation from the family is described as the main reason for these long term consequences. The presence and the support of parents during hospitalization are considered a protective factor (Rutter et al., 2008).

According to Bowlby children seek proximity to the attachment figure when the external environment is seen as stressful. The anxiety is reduced once they receive the reassurance and the comfort from the attachment figure. This has been described as emotional refueling (Brent and Resch, 1987). However in children who are separated from their parents, the primary attachment figure is not available to comfort them and reduce their anxieties.

It can be assumed that the stress related to hospital admission will be greater in children who are already vulnerable due to long term separation from the parents and who do not have the opportunity to reduce their distress by seeking reassurance from their primary attachment figures.

Disruption of the attachment process in childhood can also lead to physiological consequences such as poor weight gain and growth retardation in children. Deprivation or loss of the usual pattern of parenting, during infancy has been suggested to affect specific components of infant behavior and give rise to disturbances in circadian rhythm, growth and hormone levels. Patton and Gardner (1962) termed this concept deprivation dwarfism. Failure to gain weight is an objective measure and can be detected easily as all children are weighed regularly by the community

health professionals during the first 5 years of their life.

School performance is an indicator of the level of functioning in a child. Deterioration in school performance is a well-known indicator of psychological distress in children. Bowlby (1958) has described an association between early separation from the family and lower school achievement in later life.

The objectives of this study was to determine the prevalence of behavioural problems during hospitalization in children whose parents are employed in the Middle East compared to children who are not separated from their parents. We also compared longer term indicators of distress in these children, like reduced weight gain and poor academic performance.

## **Methodology**

The study was carried out in the University Paediatric Unit of the North Colombo Teaching Hospital, Ragama, Sri Lanka. All consecutive children admitted for treatment over a period of 15 months, whose parent/s were employed in the Middle East were included in the study. Those who had an illness related to the central nervous system and those who presented with behavioural problems were excluded. Children whose parents were legally separated prior to the parent leaving for Middle East employment were also excluded from the study. An age and sex matched control sample was recruited from admissions to the University Paediatric Unit during the same period and only included children who were not separated from one or both their parents.

A pretested checklist was used to determine the presence of behavioural problems in the cases and the controls during the hospital admission. The checklist included the presence of the following behavioural symptoms: social withdrawal, quietness, not playing with others, anorexia, weight loss, irritability, aggression and/or temper tantrums, sleep disturbance, poor school performance, over activity and symptoms of depression and/or phobias. Symptoms of conduct disorder such as lying, stealing and truancy were also included in this checklist. The Medical Officers attending to the children were

given a special training and requested to fill the checklist based on their observations during the hospital stay. The Child Health Developmental Record of all cases and controls who were less than 5 years old were examined for weight loss and failure to gain weight. Cases and controls over the age of 5 years were assessed for weight loss by direct questioning of the carers. Poor school performance was determined by the position in the class room and an observed drop in the performance. All children were also assessed by a consultant Psychiatrist to look for depressive features.

Information about substance abuse among the care taker parents was also obtained. The use of more than 750 ml of alcohol for a week was considered as alcohol abuse in the study. Those who smoked more than 5 cigarettes for a day were considered as smokers.

The data was analyzed using Epi Info version 6.

## Results

The age of the sample population varied from 5 months to 13 years. A majority (67%) was between 5 years and 13 years. Children under the age of 1, constituted 5.7% of the sample. 55.7% of the sample population was males.

Mothers were employed in the Middle East in 45.5% of the sample and fathers were employed in the Middle East in 44.3%. Both parents were employed in the Middle East in 10.2%.

The duration of separation from the parent was less than 6 months in 18.8%, 6 to 12 months in 27.1%, one to two years in 34.1% and more than 2 years in 20%. From the total population who had a parent working in the Middle East, 44.8% lived with their mothers with or without

grandparents, 36.6% with their father with or without grandparents and 18.6% lived without either of their parents and were looked after by relatives.

Avoidance of meeting people ( $p=0.02$ ) and symptoms of phobic anxiety disorders ( $p<0.01$ ) were seen more frequently in the children whose parent/s were working in the Middle East than in the control sample. Among the children whose parent/s was working abroad features of social phobia were elicited in 4 children at the clinical interview and one child had an unusual fear of the dark. None of the control sample had clinically significant symptoms.

Irritability, aggressive behaviours, poor sleep, anorexia and hyperactivity were also seen more in children who were separated from their parent/s (Table 1). Social withdrawal, quietness, not playing with others and features related to conduct disorder such as truancy, lying and stealing were not seen more commonly in children whose parent/s were working in the Middle East.

Poor school performance was seen in 13 children who had a parent working in the Middle East, whereas only 5 children who had not experienced separation from parents showed poor school performance. Weight loss too was seen more in children who were separated from their parents (Table 2).

As shown in tables 3 a significant number of fathers whose partners were working in the Middle East showed substance abuse when compared with the control sample. Three fathers of children who had a parent living abroad revealed that they had started consuming Heroin after their partners went to work in the Middle East. None of the control group showed similar findings.

**Table 1 - Behavioural symptoms**

	Cases	Controls	Odds Ratio with 95% confidence interval
<b>Irritability</b>	27	6	11.0 ( 4.1 – 31.4)
<b>Aggressive behaviours</b>	14	4	7.1 ( 2.1 – 26.7)
<b>Sleep disturbances</b>	10	4	4.8 ( 1.3 – 19.0)
<b>Hyperactivity</b>	11	3	7.2 ( 1.8 – 41.2)
<b>Anorexia</b>	20	5	8.8 ( 3.0 – 28.1)
<b>Depressed mood</b>	10	1	19.7 ( 2.7 – 86.2)

**Table 2 - Other indicators of long term distress**

	Cases	Controls	Odds Ratio with 95% confidence interval
Weight loss	9	3	5.8 ( 1.4 – 27.7)
Poor school performance	13	5	5.2 ( 1.5 – 19.2)

**Table 3 - Substance abuse in the father at the time of hospitalization of the child**

	Cases	Controls	Odds Ratio, 95% confidence interval
Alcohol Abuse	23	17	4.2 (1.7 - 10.6)
Cigarette smoking	31	9	5.2 ( 2.0 - 13.8)

## Discussion

The study shows a higher prevalence of behavioural problems in children whose parents are employed in the Middle East than in the control population.

Admission to hospital involves adjustment to a new environment which may be perceived as threatening by the children. Presence of an acute illness which may have warranted the hospital admission too is likely to be a stressor. As described by Bowlby, children show attachment behaviours when they perceive a threat from the external environment. There is a reduction in the exploratory behaviours and signs of behavioural inhibitions. When there is a threat to their wellbeing they seek the proximity of the main care giver. The sense of security and comfort that a child gets from being close to the main attachment figure reduces the stress they experience (Bretherton, 1992). They show signs of distress when they cannot find the security of their attachment figures. Acute distress in children manifests mainly as behavioural problems. This could explain the higher incidence of behavioural problems in children separated from their parents.

Children whose parents are working in the Middle East showed a reluctance to meet new people than the children in the control sample. This is in keeping with what is described by Bowlby. The exploratory behavior of children is inhibited at times of perceived stress until they receive comfort and reassurance from their primary attachment figures.

Children who were separated from their parents also showed some phobic anxiety symptoms. Anxiety symptoms are seen in children whose parents are overprotective thus depriving them of opportunities to engage in exploratory behaviours. In this case it can be argued that the exploratory behaviours are prevented by the absence of the reassurance that can be obtained from the primary attachment figure. Therefore this may increase the presence of phobic anxiety symptoms. Although disruptive behaviours are described to be caused by child parent separation Rutter (1971) suggests the possibility that neurotic disorders maybe more strongly associated with child parent separation.

The study only looked at behaviours during the hospital admission and it is therefore difficult to determine whether these anxiety symptoms have been present even before the hospital admission. It can be assumed that even pre-existing symptoms may have got exacerbated during this stressful experience.

Most children who have experienced long term separation from their parents due to any reason have been found to be more vulnerable to developing emotional and behavioural problems (Bretherton, 1992). The stress of hospitalization can precipitate these behaviours in children who have these pre-existing vulnerabilities.

Children have an inherent ability to form attachments and generally exhibit a hierarchy of attachment figures. In the absence of the primary attachment figure they are more likely to seek reassurance from the next in line and form secure relationship with that attachment figure.

Accordingly in our study we did not see behavioural disturbances in all children whose parents are employed in the Middle East. It is likely that these children have formed secure attachments to other members of the family. The distress experienced by children as a result of separation from parents and at the time of hospitalization will also depend on several other factors like the temperament of the child, family environment, amount of contact with the separated parent etc. Therefore not all children who have been separated from parents will show similar behaviours.

As described by Hennessy et al (2011) maternal deprivation is associated with vulnerability to developing depression later in life. In our study a larger number of children whose parents are working abroad showed irritability, aggressive behaviours, sleep disturbance and depressed mood. These symptoms could be manifestations of an underlying depressive disorder. It could also indicate an adjustment disorder in these children.

In study population 5-7% were less than 1 year and their attachment process has been disrupted at a very young age. Our study did not look at a possible correlation between severity of behavioural problems and the time of separation from the primary attachment figure. Rutter (1971) suggested that the age of separation will influence the long term effects of separation. It is unclear whether separation at a younger age enables the child to form stronger substitute attachments. It is likely that effects of separation from attachment figures will be affected by the presence of object permanency (Solnit and Neubauer, 1986, Rutter, 1971) also describes that young children seek less attention from the mother following hospitalization. However it has been suggested that children who have been separated from their parents at a younger age are at a higher risk of weaker parental attachment later on in life. They also had more negative perception about maternal and paternal care and protection (Woodward et al., 2000). It is likely that this will cause trans-generational effects on parenting patterns. According to Erikson (1963) children at this age are in the stage of developing trust vs mistrust . Unless they are provided with adequate care by the

substitute carers there may be longstanding effects on social relationships and their ability to trust others later in life.

Our study also did not look at the duration of separation at the time of hospitalization. Bowlby (1958) described three stages children go through after being separated from parents and has described this separation as a grieving process. It is unclear whether children experience greater distress during the early stages of this process.

Woodward et al (2000) suggest that boys show more behavioural problems as a result of separation and girls show more anxiety symptoms. However we did not look at a gender difference in our study.

In our study sample more internalizing behavioural problems were seen than externalizing problems like aggression, lying and stealing. While this could be influenced by cultural factors, studies suggest that it is the nature of separation that gives rise to delinquent behaviours in children rather than the separation itself (Rutter, 1971). Children who have been separated from their parents following marital discord have been shown to develop delinquent behaviours (Rutter, 1971).

Children whose parents are working in the Middle East may have experienced several adversities prior to separation from parents as well as after. Childhood adversities are additive and more behavioural problems may be seen in children who experienced more adversities. However our study did not look at psychosocial factors in the families other than the separation.

As described by Paton and Gardner (1962) more children in our study who were separated from their parents showed a loss of weight or failure to gain weight. However a definite conclusion about the association with long term separation from a parent cannot be made without studying other confounding factors.

Poor school performance seen more in the study population could have resulted from the psychological effects of separation from a parent, but it could also be secondary to social factors such as unavailability of a family member to help them with their studies or lack of time to attend to studies because of other responsibilities they have had to take on with the change in family structure.

Substance abuse in parents is also associated with behavioural problems in children. It is also likely that in the presence of substance abuse the parents' ability to care for the child is reduced. This may lead to manifestation of further behavioural problems in these children. Substance abuse in parents is also strongly associated with maltreatment of children which is likely to compound the problems further (Wolock and Magura, 1996).

## Conclusion

Separation from the care givers can give rise to behavioural problems particularly at time of stress. It is important to raise awareness about the need to consider the social context when caring for a child during hospitalization.

While the study only looked at behavioural problems in these children at a time of acute stress such as hospitalization, several other studies have suggested that the effects of separation from care givers are multiple and pervasive. Although parents leave their children to work overseas with the belief that the economic gains will outweigh the adverse social consequences, it is likely that parents are not fully aware of the magnitude of the problems. Childhood adversities are a recognized cause of significant mental health issues during adulthood. Parents leaving for foreign employment should be encouraged to make suitable arrangements to care for the children in their absence and to maintain contact and emotional ties with their children as much as possible when they are separated physically.

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