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## Preventive Child Healthcare in Singapore: A Parents' Well-Being Perspective

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### Introduction

Singapore has made remarkable achievements in child and maternal healthcare through significant reduction made in childhood and perinatal mortality rates. A number of “new morbidities” however, present emerging child healthcare challenges.<sup>1,2</sup> Indeed, the Child Development Programme (CDP) under the Ministry of Health has observed about a 2-fold increase of new referrals from 2004 to 2011.<sup>3</sup> Primary child healthcare prevention is crucial to address these problems early. Healthcare providers however, need to be cognisant that children’s development and health-promoting behaviours are contingent on primary caregivers’ responsiveness to their needs. Caregivers’ health and well-being constitute a “capacity” that affects the production of future capacities of their children.<sup>4</sup>

This editorial aims to contribute further to this understanding by highlighting findings of a needs analysis study<sup>5</sup> undertaken by the KK Women’s and Children’s Hospital (KKWCH) on vulnerable families and young children to inform the development of the Kids Integrated Development Service 0-3 programme (KIDS 0-3). KIDS 0-3 targets economically disadvantaged families to minimise poor outcomes of young children associated with disadvantages of growing up in impoverished homes. The editorial describes the psychosocial profile of caregivers used to inform the programme design in supporting children’s healthy development (Table 1).

Using surveys and focus group discussions with primary caregivers and social workers serving these families, the study explored issues pertaining to the physical and psychological well-being of the target population: family financial state, perceived needs, and service gaps. The families were living on a per capita income of \$450 or less, have a child of 3 years in age and below, and were receiving services from a major social service provider in the housing estate under study.

We evaluated parenting capacity with the following measures: Parenting Daily Hassles Scale,<sup>6</sup> Brief COPE<sup>7</sup> and Depression, Anxiety and Stress Scale (DASS).<sup>8</sup> Economic hardships notwithstanding, the caregivers were generally positive about their parenting capability with various routine caregiving tasks. They perceived themselves to be engaging in more adaptive coping strategies when dealing with challenging situations. Positive reframing, acceptance, planning and active coping were identified as the most commonly used adaptive strategies. Self-distraction, venting, self-blame and denial were reported as commonly used maladaptive coping strategies (Table 2).

Self-reported mental health condition of the caregivers, however, appeared poorer than that of the typical population. Between 14% and 31% reported ‘severe’ to ‘extremely severe’ DASS scores, above the reported national statistics of 10% for depressive and anxiety disorders,<sup>9</sup> indicating the necessity for close attention and monitoring, and preventive support. Significant relationships between maladaptive coping and depression, anxiety and stress reiterated that systematic assistance with the caregivers’ mental health issues should be a pertinent aspect of programme planning to strengthen their caregiving capabilities (Table 3).

No major health concerns relating to their ante-, neo- and post-natal care of the children was reported. Eighty-four percent reported compliance to the immunisation schedule for the first year of the child’s life, dropping to 62% at 15 and 18 months of the child’s age. Forty-nine percent reported missing at least 1 vaccination at the given child’s age. Medical attention was given most frequently to common illnesses but not injuries. Hospital emergency was cited as the most frequently utilised community service. Early dental healthcare was not readily accessible because of the families’ ill affordability. Many reported to not having the money to attend to contingencies deemed less immediately urgent.

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Table 1. Demographic Characteristics of Respondents (n = 35)

Characteristics			
Mean age in years (SD)	33.9 (8.39)		
Gender			
Female	91.9		
Male	8.1		
Relationship with the child (%)			
Mother	83.8		
Father	8.1		
Grandmother	8.1		
Marital status (%)			
Single	10.8		
Married	54.1		
Divorced/separated	27.0		
Widowed	8.1		
Family structure (% of respondents)			
Both parents (nuclear)	34.3		
Single parent	31.4		
Three-generation family (extended)	34.3		
Housing type (% of respondents)			
1-room HDB	16.3		
2-room HDB	37.8		
3-room HDB	18.9		
4-room HDB	8.1		
Interim rental	16.2		
Living with others	2.7		
	Mother (n = 34)*	Father (n = 24)*	Grandmother (n = 3)
Highest education (%)			
Primary	33.3	36.0	-
Secondary	51.5	44.0	100.0
Postsecondary	9.1	16.0	-
Institute of Technical Education (ITE)	6.1	4.0	-
Employment status (%)			
Full time	23.5	45.8	-
Part time	17.6	29.2	-
Odd jobs	2.9	4.2	-
Unemployed	55.9	20.8	100.0
Weekly working hours (SD)	41.3 (17.99)	46.3 (23.25)	-

HDB: Housing Development Board; SD: Standard deviation

\*Not all respondents reported their status.

Although caregivers expressed less concerns about their children's physical health, it is notable that there were concerns with the latter's emotional, behavioural, and communication problems. Between 41% and 63% perceived their children as showing "abnormal" levels of emotional symptoms, conduct problems and peer problems on the Strengths and

Difficulties Questionnaire.<sup>10</sup> Scores on the Ages and Stages Questionnaire (ASQ)<sup>11</sup> indicated that between 44% and 53% of the children assessed presented serious delays in problem solving, communication and personal-social domains of functioning—skills that can be fostered through sustained parent-child interactions.<sup>12</sup> The focus group discussion noted

Table 2. Mean Scores on the Brief COPE (n = 37)\*

Example of Items		Mean (SD)
<b>Adaptive coping</b>		
Active coping	I've been taking action to try to make the situation better.	3.00 (0.86)
Planning	I've been trying to come up with a strategy about what to do.	3.09 (0.87)
Use of emotional support	I've been getting emotional support from others.	2.60 (0.95)
Use of instrumental support	I've been getting help and advice from other people.	2.60 (1.04)
Positive reframing	I've been looking for something good in what is happening.	3.19 (0.71)
Acceptance	I've been learning to live with it.	3.16 (0.74)
Religion	I've been praying or meditating.	2.91 (1.09)
Humour	I've been making jokes about it.	1.90 (0.97)
<b>Maladaptive coping</b>		
Denial	I've been telling myself that "this isn't real".	1.89 (1.04)
Substance use	I've been using alcohol or drugs to make myself feel better.	1.23 (0.68)
Behavioural disengagement	I've been giving up trying to deal with it.	1.84 (1.01)
Self-distraction	I've been turning to work or other activities to take my mind off things.	2.45 (0.85)
Self-blame	I've been criticising myself.	1.91 (0.99)
Venting	I've been expressing my negative feelings.	2.14 (0.82)

SD: Standard deviation

\*There were 2 sets of twins and their caregivers completed 2 questionnaires, 1 for each child.

that although caregivers recognised the need for educational and social opportunities for their children, many did not know how they can actively foster these developments (Table 4).

The focus group discussion highlighted that pressing problems faced by these families arose largely from the lack of money in the home, associated with issues in employability, parents' relationship difficulties and deep personal struggles. Other pervasive themes—maternal poor health, inaccessibility of childcare and infant care, big number of young children, thin social support networks—highlighted typical challenges that reduce caregivers' capacity and capability to provide adequate care.

## Conclusion

Methodological limitations notwithstanding, the needs analysis provided a concrete picture of challenges and strengths pertinent to the health status of caregivers and their young children from extreme economically disadvantaged families. In particular, it highlighted that the caregivers' capacity to cope adaptively may be compromised by their state of mental health as these relate to the management of stress, depression and anxiety. This can be expected to have repercussions on the physical and mental well-being of the children as inferred from the caregivers' attention to the children's general medical and

Table 3. Scores Obtained on the Depression, Anxiety and Stress Scale (DASS) (n = 37)\*

Range	Depression		Anxiety		Stress	
	Range of Scores	No. of Respondents	Range of Scores	No. of Respondents	Range of Scores	No. of Respondents
Normal	0 – 9	19	0 – 7	21	0 – 14	22
Mild	10 – 13	5	8 – 9	2	15 – 18	1
Moderate	14 – 20	4	10 – 14	3	19 – 25	9
Severe	21 – 27	6	15 – 19	3	26 – 33	2
Extremely severe	28+	3	20+	8	34+	3

\*There were 2 sets of twins and their caregivers completed 2 questionnaires, 1 for each child.

Table 4. Percentage of Children Delayed in Development as Assessed with the Ages and Stages Questionnaire (ASQ) (n = 23)

Domains of Functioning	Children <36 Months (n = 17) Mean Age = 23 Months Delay by		Children >36 Months (n = 16) Mean Age = 50 Months Delay by	
	1 SD	2 SD	1 SD	2 SD
	Communication	24%	29%	6%
Gross motor	18%	6%	12.5%	0
Fine motor	24%	35%	0	0
Problem solving	24%	53%	19%	19%
Personal social	35%	24%	12.5%	12.5%

SD: Standard deviation

dental care. Certainly, their capacity to enact is severely constrained by their poor financial state which in turn restricts resource accessibility. More importantly, the children's delayed developmental outcomes raise urgent concerns with their school readiness in a couple of years' time. The findings suggest that interventions designed to support health-promoting behaviours and development of children should aim at strengthening the capability and capacity of their immediate support network that comprises primary caregivers who are themselves at risk and with the potentiality of impaired cognitive and decision-making ability.<sup>12</sup> Preventive programmes need to move beyond hospital-based approaches to interventions that are socially situated and delivered in the "least restrictive, more natural and more inclusive environment".<sup>1,2</sup> Such models offer surveillance to ensure that essential child healthcare is provided early and foster greater caregiver collaboration. To be effective, the enabling force should emanate from a transdisciplinary framework in which medical and allied health professionals work to support caregivers hands-on with just-in-time knowledge and skills at critical junctures of the children's development.<sup>2,12-14</sup>

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#### REFERENCES

1. Ho LY. Child development programme in Singapore 1988 to 2007. *Ann Acad Med Singapore* 2007;36:898-910.
2. Ho LY. Raising children in Singapore: a paediatrician's perspective. *Ann Acad Med Singapore* 2009;38:158-62.
3. SingHealth, Singapore. More children diagnosed with special needs. Available at: <http://www.healthxchange.com.sg/News/Pages/More-Children-Diagnosed-With-Special-Needs.aspx>. Accessed 2 January 2015.
4. Currie J. Healthy, wealthy, and wise: socioeconomic status, poor health in childhood, and human capital development. *J Econ Lit* 2009;47:87-122.
5. Chong WH, Choo HK, Goh ECL, M Zambri N. KIDS 0-3 Needs Analysis Report. Report commissioned by Temasek Cares and KK Women and Children Hospital, Singapore; 2014.
6. Crnic KA, Booth CL. Mothers' and fathers' perceptions of daily hassles of parenting across early childhood. *J Marriage Fam* 1991;53:1043-50.
7. Carver CS. You want to measure coping but your protocol's too long: consider the brief COPE. *Int J Behav Med* 1997;4:92-100.
8. Lovibond SH, Lovibond PF. Manual for the depression anxiety stress scales. Sydney: Psychology Foundation; 1995. p. 1-42.
9. SingHealth, Singapore. Depression and anxiety statistics in Singapore. Available at: <http://www.healthxchange.com.sg/healthyliving/SpecialFocus/Pages/Anxiety-When-Fretting-Gets-Out-of-Control.aspx>. Accessed on 29 May 2015.
10. Goodman R. The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *J Child Psychol Psychiatry* 1999;40:791-9.
11. Kerstjens JM, Bos AF, ten Vergert EM, De Meer G, Butcher PR, Reijneveld S. Support for the global feasibility of the Ages and Stages Questionnaire as developmental screener. *Early Hum Dev* 2009;85:443-7.
12. Banerjee A, Duflo E. Poor economics: a radical rethinking of the way to fight global poverty. London: Penguin Books; 2011. p. 267-73.
13. National Scientific Council on the Developing Child. Early experiences can alter gene expression and affect long-term development: working paper no. 10. Available at: <http://www.developingchild.net>. Accessed on 17 December 2015.
14. Scherrer J. The role of the intellectual in eliminating the effects of poverty: A response to Tierney. *Educational Researcher* 2014;43:201-7.