



Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka  
 การสนับสนุนทางสังคม สมรรถนะแห่งตน และการปฏิบัติกรดูแลในผู้ปกครองของเด็กที่เป็นโรคหัวใจพิการแต่กำเนิด สาธารณรัฐสังคมนิยมประชาธิปไตยศรีลังกา

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**Abstract**

Appropriate care practices from parents towards children with congenital heart disease (CHD) are important, as this reduce complications and facilitates surgical success. This descriptive correlational study aimed to explore care practices among parents of children with CHD and to study the relationship between social support, parental self-efficacy, and care practice. The sample was 88 parents of children aged 1-5 with acyanotic CHD. Data were collected at cardiology and cardiothoracic clinics at tertiary-level hospitals in Sri Lanka during March-April 2019. Research instruments were the Care Practices Questionnaire; the Social Support Questionnaire; and the Parental Self-Efficacy Questionnaire. Content validity was approved with values of 0.96, 0.98, and 0.97, respectively. For the Care Practices Questionnaire, test-retest reliability was measured, and the correlation coefficient was  $r = 0.74$  ( $p < 0.01$ ). The reliability of Social Support Questionnaire and Parental Self-Efficacy Questionnaire, using Cronbach's alpha coefficient, showed equal values of 0.80. Data were analyzed with descriptive statistics and Pearson's correlation coefficient.

Findings showed that:

1. Participants (94.40%) had high overall mean scores for care practices ( $\bar{X} = 112.18$ ,  $SD = 8.19$ ). High mean scores were found in nine of the ten dimensions, whereas dental care had a moderate mean score.
2. Social support has a moderate, statistically significant, positive correlation with care practices ( $r = .47$ ,  $p < 0.05$ ). Parental self-efficacy showed a high, positive, statistically significant correlation with care practices ( $r = .56$ ,  $p < 0.05$ ).

The findings serve as baseline data for nurses and related professionals in pediatric cardiology to better understand and enhance care practices, social support, and parental self-efficacy among parents of children with CHD.

**Keywords:** Care practices, Children, Congenital heart disease, Parental self-efficacy, Social support

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## บทคัดย่อ

การปฏิบัติการดูแลของผู้ปกครองเด็กที่เป็นโรคหัวใจพิการแต่กำเนิดที่เหมาะสมเป็นสิ่งสำคัญเพราะช่วยลดการเกิดภาวะแทรกซ้อนจากโรคในเด็ก และช่วยให้เด็กได้รับการผ่าตัดตามแผนการรักษา การวิจัยเชิงพรรณนาหาความสัมพันธ์ครั้งนี้ มีวัตถุประสงค์เพื่อศึกษาการปฏิบัติการดูแลของผู้ปกครองเด็กที่เป็นโรคหัวใจพิการแต่กำเนิดและศึกษาความสัมพันธ์ระหว่างการสนับสนุนทางสังคม สมรรถนะแห่งตนของผู้ปกครองในการปฏิบัติการดูแลของผู้ปกครองสำหรับเด็กที่เป็นโรคหัวใจพิการแต่กำเนิด กลุ่มตัวอย่างเป็นผู้ปกครองเด็กโรคหัวใจพิการแต่กำเนิดชนิดไม่เขียว อายุ 1 ถึง 5 ปี จำนวน 88 ราย เลือกตามเกณฑ์การคัดเลือกกลุ่มตัวอย่าง รวบรวมข้อมูล ณ คลินิกโรคหัวใจ และคลินิกโรคหัวใจและทรวงอก โรงพยาบาลระดับตติยภูมิ ประเทศสาธารณรัฐสังคมนิยมประชาธิปไตยศรีลังกา ระหว่างเดือนมีนาคม ถึง เดือนเมษายน 2562 เครื่องมือที่ใช้ในการวิจัยประกอบด้วย แบบสอบถามเรื่องการปฏิบัติการดูแลของผู้ปกครอง การสนับสนุนทางสังคม และสมรรถนะแห่งตนของผู้ปกครอง ซึ่งเครื่องมือวิจัยผ่านการทดสอบหาความเที่ยงตรงของเนื้อหาและความเชื่อมั่น ได้ค่าความเที่ยงตรงของแบบสอบถามเท่ากับ 0.96, 0.98, and 0.97 ตามลำดับ ได้ค่าความเชื่อมั่นของแบบสอบถามเรื่องการปฏิบัติการดูแลของผู้ปกครองด้วยวิธีการทดสอบซ้ำได้เท่ากับ 0.74 ความเชื่อมั่นของแบบสอบถามการสนับสนุนทางสังคม และสมรรถนะแห่งตนของผู้ปกครอง ได้ค่าสัมประสิทธิ์อัลฟาของครอนบาคเท่ากันคือ 0.80 วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนาและสถิติ Pearson's correlation coefficient

ผลการวิจัยพบว่า

1. กลุ่มตัวอย่างร้อยละ 94.40 มีค่าคะแนนเฉลี่ยรวมของการปฏิบัติการดูแลของผู้ปกครองอยู่ในระดับสูง ( $\bar{X} = 112.18$ ,  $SD = 8.19$ ) พิจารณารายด้านทั้ง 10 ด้านของการปฏิบัติการดูแลพบว่า 9 ด้าน มีค่าคะแนนเฉลี่ยรวมอยู่ในระดับสูง ยกเว้นด้านการดูแลสุขภาพฟันมีค่าคะแนนเฉลี่ยรวมอยู่ในระดับปานกลาง
2. การสนับสนุนทางสังคมมีความสัมพันธ์เชิงบวกกับการปฏิบัติการดูแลของผู้ปกครองระดับปานกลาง ( $r = .47$ ,  $p < 0.05$ ) และสมรรถนะแห่งตนของผู้ปกครองมีความสัมพันธ์เชิงบวกกับการปฏิบัติการดูแลของผู้ปกครองระดับสูง ( $r = .56$ ,  $p < 0.05$ )

ผลการศึกษานี้เป็นข้อมูลพื้นฐานสำหรับพยาบาลและบุคลากรสุขภาพที่เกี่ยวข้องกับหน่วยโรคหัวใจเด็กเพื่อความเข้าใจและส่งเสริมการปฏิบัติการดูแล การสนับสนุนทางสังคม และสมรรถนะแห่งตนของผู้ปกครองของเด็กโรคหัวใจพิการแต่กำเนิด

**คำสำคัญ:** การปฏิบัติการดูแล เด็ก โรคหัวใจพิการแต่กำเนิด สมรรถนะแห่งตนในผู้ปกครอง การสนับสนุนทางสังคม

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## Background and Significance

Congenital heart disease (CHD) is a common major problem in the pediatric age group (Rohith & Shrivastava, 2018), and it causes morbidity and mortality during early childhood. The highest birth prevalence of CHD is 9.3 per 1000 live births reported in Asia (van der Linde et al., 2011), while the most common subtype is acyanotic CHD (Vijayalakshmi, 2015). The prevalence of CHD in early childhood is also high in Sri Lanka as well (Gamage, Sithamparapillai, Perera, Ranawaka, & Jayatissa, 2019), as is the prevalence of acyanotic CHD (Iruthayanathan, Jones, Adwani, & Gnanapragasam 2018). The nature of this defect and the incomplete developmental stage of children aged one to five years are the causes for frequent preoperative complications, such as recurrent respiratory tract infections, including the common cold; pneumonia; congestive heart failure; infective endocarditis; and failure to thrive (Rohit & Shrivastava, 2018; Suklertrakul, Picheansathian, Jintrawet, & Chotibang, 2018). Consequently, these complications lead to postponement of planned cardiac surgery, as well as increasing child mortality.

In Sri Lanka, 60%-70% of children with acyanotic CHD require medical treatment and care (Samarasingha, 2018). Children with CHD are generally treated by medication, cardiac catheterization and/or surgery. Corrective surgery is claimed as the permanent treatment for defects (Kyle & Carman, 2017), especially single malformation of acyanotic CHD. However, some children with acyanotic CHD may not have surgery as planned, due to complications.

The main goal of care for children with CHD is to promote the health status of children who are provided with care by parents, who must follow treatment regimens and prevent complications. However, every so often, the parents are unable to perform most of the care activities by themselves, as children aged one to five years totally depend on their parents, since their developmental stages have not been fully completed. A care practice refers to activities that either parent (mother or father) performs to promote the health of her or his one-to-five-year-old children with congenital heart disease. A review of literature has indicated that factors related to care practices are demographic factors, including parent ages; education (Abdel-Salam, Mahmoud, & Author, 2018); family income (Chaisom, Yenbut, Chontawan, Soivong, & Patumanond, 2010); social support (Chaisom et al., 2010; Ernawati, Sudargo, & Lusmilasari, 2016); and parental self-efficacy (Srikotr, Jintrawet, & Mesukko, 2018; Soiphet, Jintrawet, & Mesukko, 2019). The most important factors are social support and parental self-efficacy, as these two factors are “modifiable” or “changeable” factors and have the ability to modify parental care behaviors. It is significant that little is known about these two factors.

House (1981) conceptualized that social support has functional and structural aspects. Receiving good social support for parents of children with CHD involves having someone to listen to; giving feedback about the care; receiving knowledge and information; and assisting in the provision of equipment, as well as services which improve care practices (House, 1981; Suklertrakul et al., 2018). It directly strengthens the health and well-being of people, since it



## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

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fulfills important needs for emotional concerns; instrumental aid; and informational and appraisal requirements (House, 1981).

Parental self-efficacy (PSE) of parents of children with CHD is defined as a perception of a mother or father regarding her or his capabilities to perform care practices for a child with CHD, which is defined based on Bandura's (1997) self-efficacy theory. A strong sense of efficacy enhances human accomplishments and personal well-being in many ways. People with strong confidence in their capabilities tend to see difficult tasks as challenges to be mastered, rather than as threats to be avoided. Such efficacious outlooks foster intrinsic interest and enormous engagement in activities. People set challenging goals by themselves, and they maintain strong commitments to reaching them (Bandura, 1997). Thus, parents with high levels of parental self-efficacy are more likely to successfully provide better care for their children with CHD, as they believe that they have knowledge and ability (confidence) to perform care activities. There are few studies that have been concerned with the care practices of parents of children with CHD aged one to five years, and the relationship of social support and parental self-efficacy to care practice, and these have been from other countries, not Sri Lanka.

### Objectives

The objectives of this study were:

1. To describe care practices among parents of children with CHD.
2. To describe the relationship between social support and parental self-efficacy to care practices among parents of children with congenital heart disease.

### Conceptual Framework

The conceptual framework of this study was based on House's concept of social support; on Bandura's self-efficacy theory; and on the review of the literature. Care practices refer to the care activities that the mother or father performs to promote the health of her or his one to five-year-old child with CHD. These include daily living care, improving growth, providing nutrition, promoting development, taking the child for timely immunization, prevention of illness, giving medication, dental care, taking the child to follow up medical appointments, and providing infective endocarditis prophylaxis. Two factors which are related to care practices are social support and self-efficacy. Social support includes emotional, appraisal, informational, and instrumental support. Receiving good social support includes having someone willing to listen to the parent; giving feedback on care; receiving knowledge; and provision of assistance in learning about the apparatus to enhance proper care practices. Parental self-efficacy in this study is based on Bandura's (1997) concept of self-efficacy as the parent's perception of their capability to perform the ten dimensions of care practices for their child with acyanotic CHD. Parents of children with CHD who have higher self-efficacy and social support are more likely to perform care practice at a high level and vice-versa. In this study, the relationship of social support, parental self-efficacy and care practice of children with CHD was explored.



## Methodology

### Population and Sample

This descriptive correlational study was carried out among parents of children aged one to five years with one of the following conditions: ventricular septal defect (VSD); atrial septal defect (ASD); atrioventricular septal defect (AVSD); or patent ductus arteriosus (PDA); patients had visited cardiology clinics or cardiothoracic clinics at tertiary level hospitals in Colombo and Kurunegala.

The sample size was determined based on power analysis, with a minimal significance ( $\alpha$ ) of 0.05; a level of power ( $1 - \beta$ ) of 0.80; and a population medium effect size of 0.3, as most nursing studies use the range of 0.2 to 0.4 if there is no prior relevant research findings from which to calculate effect size (Polit & Beck, 2008). A total of 88 samples were selected using the purposive sampling method. The inclusion criteria were: 1) aged between 18-55 years; 2) had experience caring for a child with CHD for at least three months; 3) able to communicate in Sinhala language (speaking, listening, reading and writing); and 4) willing to participate in the study. The exclusion criteria were being the parent of a child having both acyanotic CHD and other comorbidities.

### Research Instruments

The data was collected using several interviewer-administered questionnaires developed by the research team which consisted of instrument. The Demographic Data Form was used to collect information about the characteristics of the parent and of the child.

The Care Practices Questionnaire was developed based on the relevant literature, and covered 10 sub-dimensions of care practices for children with congenital heart disease. The care practice questions were asked about care practices in the past three months. There were 32 items with a 4-level, Likert scale ranging from 1 to 4 (1 = never perform to 4 = always perform). The care practice scores were divided into three levels: Low (32.00-64.00), Moderate (64.01-96.00), and High (96.01-128.00).

The Social Support Questionnaire was developed based on House's (1981) concept of social support and the related literature. It has 10 items with a 5-level Likert scale ranging from 0 to 4 (0 = strongly disagree to 4 = strongly agree). The scores were divided into 3 levels: Low (0-13.33), Moderate (13.34-26.66), and High (26.67-40.00).

The Parental Self-Efficacy Questionnaire was developed based on Bandura's (1997) self-efficacy theory and the related literature. It consists of 32 items under 10 dimensions using a 5-level Likert scale of 0 to 4 (0 = no confidence at all, to 4 = strongly confident) with scores having 3 levels: Low (0-42.67), Moderate (42.68-89.34), and High (89.35-128.00).

The content validity of these questionnaires was approved with the values of 0.96, 0.98 and 0.97, respectively. For the Care Practice Questionnaire, the test-retest reliability was measured, and the correlation coefficient was ( $r = 0.74, p < 0.01$ ). The reliability of the Social





## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

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Support Questionnaire and of the Parental Self-efficacy Questionnaire was calculated using Cronbach's alpha coefficient with equal values of 0.80.

### Ethical Considerations

Approval for this study was obtained from the Research Ethics Committee of the Faculty of Nursing of Chiang Mai University and from the Research Ethics Committee of the Lady Ridgeway Hospital for Children in Sri Lanka. Administrative approval was obtained from the Ministry of Health of Sri Lanka. All of the participants were informed about the objectives of the study and the methods of data collection. They were informed that their participation was completely voluntary and that they had the right to withdraw from the study at any time, without losing any opportunity for the treatment regimen. Those parents who were willing to participate in the study were asked to sign the Informed Consent Form. All of the parents were treated in a friendly and equitable manner before, during, and after the study.

### Data Collection

Data were collected by the researcher at two tertiary care level hospitals with the help of a trained research assistant using pretested interviewer-administered questionnaires.

### Data Analysis

Descriptive statistics were used to describe the demographic characteristics of the samples. Also obtained were a score for care practices; a score for social support; and a score for parental self-efficacy. Data were tested for the assumption of normal distribution to determine which parametric test would be chosen. Data was normally distributed and Pearson's correlation was used to find the relationship between the variables of social support, parental self-efficacy, and care practices.

### Results

An analysis of the demographic characteristics of the 88 parents revealed that the majority of the sample (95.45%) were mothers, whose ages ranged from 18 to 50 years old (mean = 31.88, SD = 6.21). Half of the participants' ages (48.86%) ranged between 29 and 39 years. Furthermore, 94.32% of the participants were married, and more than three-fourths of the participants were Buddhist. Concerning their education levels, 44.32% had education levels between grades 6 and 10, while 40.91% had education levels of between grades 11 and 12. Moreover, 61.36% of the participants were housewives. Approximately one-third of the participants had a monthly income ranging from USD \$141.66 to \$226.64. Half of the families were nuclear families, while 77.27% of the participants lived in a rural area.

Investigation showed that 39.77% of the participants had two children, while 45.45% of them mentioned that a sick child was the first child in their family. Among the children in the study population, 39.78% had ages ranging from 1 to 2 years. Children with ASD accounted for the biggest proportion (55.68%) of the sample. The majority of the participants (76.14%) had detected their child's heart disease during birth to the age of six months. A high proportion (87.50%) of the children with CHD had suffered from illness during the last three months.



## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

The descriptive data of the variables showed that the majority of participants (94.4%) had high scores ( $\bar{X} = 112.18$ ,  $SD = 8.19$ ) for care practice. In terms of the determination of domains of care practice, out of ten dimensions, nine of them had a high-level mean score for care practices.

Moreover, findings show that the total mean scores for social support ( $\bar{X} = 29.31$ ,  $SD = 7.68$ ) and parental self – efficacy ( $\bar{X} = 104.49$ ,  $SD = 14.64$ ) were at a high level. (Table 1)

**Table 1** Descriptive data for care practice, social support and parental self-efficacy of samples (n = 88)

Variable	Range	Mean	SD	Level
Total score for care practice	82.58 – 128.00	112.18	8.19	High
Dimensions of care practice				
Daily living care	9.00 - 16.00	15.15	1.24	High
Improving growth	2.00 – 8.00	7.51	1.17	High
Providing nutrition	7.00 – 16.00	13.31	2.27	High
Promoting development	7.00 -16. 00	13.80	2.76	High
Timely immunization	3.00 – 4.00	3.97	0.18	High
Prevention of illnesses	12.00 – 24.00	20.17	3.29	High
Giving medication	11.00 – 20.00	19.17	2.64	High
Dental care	4.00 – 16.00	11.43	2.96	Moderate
Bringing child on follow-up medical appointments	1.00 – 4.00	3.95	0.34	High
Preventing IE	0.00 – 4.00	3.17	1.3	High
Total score for social support	9.00 – 40.00	29.31	7.68	High
Total score for parental self-efficacy	57.00 -128.00	104.49	14.64	High

The study findings show a moderate level positive correlation between social support and care practice ( $r = .47$ ,  $p < .05$ ) and a high level of positive correlation between parental self-efficacy and care practice ( $r = .56$ ,  $p < .05$ ). (Table 2)



## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

**Table 2** Relationship between social support and parental self-efficacy with care practices among parents of children with CHD (n = 88)

	Social support	Parental self-efficacy	P Value
Care Practice	.47*	.56*	.01

\*P < .05

### Discussion

This study revealed high levels of care practice among parents of children with CHD in Sri Lanka. It is concurrent with the results of previous studies (Phromreungrit, Jintrawet, & Chotibang, 2015; Srikotr et al., 2018; Soiphet et al., 2019). There are many factors that could contribute to a high level of care practice in this study, including demographic factors of parents and child, social support, self-efficacy and the health care delivery system in Sri Lanka.

The findings were that 48.86% of the participants ranged in age from 29 to 39 years, and 95.86% of them were mothers. As they were in the active reproductive and child-bearing age range, they were physically strong enough to provide the best care to their sick child. Moreover, in this study, 61.36% of the participants were housewives, which means that they have had enough time to provide care activities. Parents who have flexible working hours can utilize their time freely for childcare (Barigozzi, Cremer & Roeder, 2018).

Concerning CHD among the participants, 76.14% of the children had been diagnosed with heart disease, either at birth or during the first six months. Thus, the parents had gained sufficient experience in child care to learn to incorporate it into their day-to-day activities. Most child-care tasks are mastered over a long period, and they can be performed effectively by overcoming obstacles and by acquiring the necessary skills (Bandura, 1997).

Furthermore, the majority of the parents, who had attained education levels beyond primary, could easily understand the information provided by their health-care professionals. A previous study also supported that there is a relationship between maternal education and maternal care behavior (Abdel – Salam et al., 2018).

A moderate level of dental care practice has been shown in this study ( $\bar{X}$  = 17.43, SD = 2.96). One possible reason could be that the parents of children with CHD are more conscious about the symptoms of CHD than about those of dental care, because they may have little or no knowledge regarding the relationship between oral hygiene and heart disease. Moreover, in this study, 43.18% of the children were in the age range of one to two years, thus, their eruption of deciduous teeth had not yet been completed. This may be why the parents did not pay as much attention to dental care. This finding is concurrent with that of a study done in Iran in which it was found that 50% of the children with cardiac problems had never visited a dentist, while the healthy children had had regular dental visits (Ghajari et al., 2014).





## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

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The advanced health-care delivery system and social welfare services in Sri Lanka could be another important reason for the high-level care practices in some areas. The current study findings show that the domain of timely immunization among the participants was at a high level (Table 1). In Sri Lanka, maternal and child health care services are at a high level. For instance, the Expanded Program on Immunization (EPI) provides an opportunity for every child to receive free immunizations, according to the proper schedule.

In the present study, the findings were that social support was at a high level ( $\bar{X} = 29.31$ ,  $SD = 7.68$ ). The majority of participants (94.32%) were married and lived together with their spouse. The spouse and family are the principal sources for providing functional support, because they are actively and personally involved in the care during any difficult situation (Mathew, Zhai, & Gao 2017), such as the illness of children. The most important point regarding perceived social support is that parents trust that they have someone who accepted and loved them when they needed it.

This study showed that there was a statistically significant moderate relationship between social support and care practice ( $r = .47$ ,  $p < .05$ ). These findings are concurrent with House's (1981) concept of social support. Emotional support helps the parents to reduce their anxiety and stress and to improve their coping ability. It also prepares parents psychologically to provide effective care. In addition, appraisal support helps the parents to make sense of themselves as valuable persons; it makes a parent more enthusiastic about their care activities. Moreover, the informal and formal information that parents receive can help them to reduce their fears and doubts related to the care, and this could help them to provide effective care. Also, social support has a direct impact on the enhancement of care behavior, by facilitating direct connections with others (one's social network), and by enhancing one's self-esteem and self-control during difficult circumstances. Instrumental support, such as having someone to assist parents with money, equipment, or transportation, is also necessary for child care, which helps to deal with constraints related to children's care and daily life. Therefore, when conducting a health education program, nurses and health professionals need to involve other family members, in addition to parents. Moreover, the provision of relevant information to the parents and children regarding disease conditions and care practices need to be appropriately provided for.

The findings of the current study are concurrent with a study on the predictive factors of dependent care behavior among mothers of toddlers with CHD ( $r = .33$ ,  $p < .01$ ) (Chaisom, et al., 2010). These findings are also concurrent with those from studies conducted on other populations in areas such as preterm infant development (Thawitha, 2014) and parents feeding behavior for toddlers (Ernawati, et al., 2016). Therefore, it can be implied that the perception of high social support increases the care practices of parents of children with CHD.

In the present study, the level of self-efficacy was also at a high level ( $\bar{X} = 104.49$ ,  $SD = 14.64$ ), and there was a strong statistically significant positive relationship between Parental



## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

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Self-Efficacy (PSE) and Care Practice ( $r = .558, p < .05$ ). This is concurrent with Bandura's self-efficacy theory (1997). High PSE means that the parents in this study feel that they are confident in their ability to provide effective care for their children with CHD, in order to achieve and maintain desired behavior patterns. This efficacy motivates parents to take it as a challenge and master it, and to try to provide effective care successfully. Similarly, when parents are able to do so, then parents will try to maintain their capabilities, thereby increasing their level of care activities. Moreover, Bandura (1997) conceptualized that these efficacy beliefs come from four sources: mastery experience, vicarious experience, verbal persuasion and physiological and affective states. The parents in the current study had the opportunity to master the required care activities, because 76.14% of the parents had had their child's heart disease diagnosed either at birth or before the age of six months. Enhanced mastery of experience creates a strong sense of efficacy in relation to care behavior (Bandura, 1997). The parents in the current study had been repeatedly educated about proper care practices and verbally persuaded to perform the practices by health-care professionals during every clinic visit with most of them visiting clinics at least once every three months. People who have been persuaded verbally that they are able to process the capabilities to master given tasks are likely to mobilize greater effort, and to sustain these efforts if they do not harbor self-doubts or dwell on personal deficiencies when difficulties arise (Bandura, 1997).

The findings of the present study are concurrent with those of two studies conducted in Thailand relating to the care of children with CHD: Chaisom, et al. (2010) ( $r = .66, p < .01$ ) and Soiphet (2014) ( $r = .658, p < .001$ ). Likewise, the findings of this current study are concurrent with those of studies conducted on different populations, such as one study on care behavior toward children aged three to five years (Murdock, 2013), and another on parental feeding behavior among toddlers (Ernawati et al., 2016). The findings of the current study and previous studies support the idea that increased parental self-efficacy helps parents to provide better care practices, and that parents with high levels of parental self-efficacy are more likely to provide better care practices. Thus, nurses and other health-care professionals need to plan strategic actions which will enhance the self-efficacy of parents, such as providing strong verbal encouragement.

### Conclusions and Recommendations

The findings of this study were that the majority of the parents of children with CHD practice a high level of care behavior. It was found that there was a moderate relationship between Social Support and Care Practices and a strong relationship between Parental Self-Efficacy and Care Practices. The results of this study can serve as preliminary data for nurses and other health-care personnel in Sri Lanka to plan effective strategies and programs to assist parents of children with CHD in caring for them. It is especially hoped that, in the development of effective health education programs and specific guidelines, this will serve parents to prevent the



recurrence of complications and to promote the health of their children.

It is also recommended that future research be carried out which aims to predict the factors related to care practices among the parents of children with congenital heart disease.

## References

- Abdel-Salam, A., Mahmoud, F., & Author, C. (2018). Effect of educational program on the self-efficacy and quality of life for mothers caring children with congenital heart disease. *IOSR Journal of Nursing and Health Science* 7 (4), 68–78.
- Bandura, A. (1997). *Self-efficacy: Exercise of control*. New York: Cambridge University.
- Barigozzi, F., Cremer, H., & Roeder, K. (2018). Women's career choices, social norms and childcare policies. *Journal of Public Economics*, 168, 162-173.
- Chaisom, P., Yenbut, J., Chontawan, R., Soivong, P., & Patumanond, J. (2010). Predicting factors of dependent care behaviors among mothers of toddlers with congenital heart disease. *Chiang Mai University Journal of Natural Sciences*, 9(2), 193-200.
- Ernawati, Y., Sudargo, T., & Lusmilasari, L. (2016). Self-efficacy related to parental feeding behaviour in toddler besides social support and dependent-care agency. *International Journal of Community Medicine and Public Health*, 3(5), 1247–1254.
- Gamage, M. P., Sithamparapillai, K., Perera, S. N., Ranawaka, R., & Jayatissa, R. (2019). Prevalence of malnutrition in children with congenital heart disease awaiting cardiac intervention at a tertiary care setting Sri Lanka. *Sri Lankan Journal of Cardiology*, 1(2), 39-43.
- Ghajari, M., Mojtahedzadeh, S., Kharazifard, M. J., Mahdavi, B., Mohtavipour, S., & Dentistry, P. (2014). Evaluation of knowledge, attitude and practice of parents of children with cardiac disease about oral health. *Journal of Islamic Dental Association of Iran*, 25(4), 256-260.
- House, J. S. (1981). *Work, stress, and social support*. Reading, MA: Addison-Wesley Series.
- Iruthayanathan, R. R., Jones, A., Adwani, S., & Gnanapragasam, J. P. (2018). 34 The profile of congenital cardiac services in Northern Sri Lanka: A single centre study. *Heart*, 104 (A12). Retrieved from <http://dx.doi.org/10.1136/heartjnl-2017-BCCA.34>
- Kyle, T., & Carman, S. (2017). *Essentials of pediatric nursing* (3<sup>rd</sup> ed.). Philadelphia: Wolters Kluwer Health/Lippincott.
- Mathew, S., Zhai, F., & Gao, Q. (2017). Social support and parental nurturance among Asian Indian families in the US: Mediating role of parenting self-efficacy. *Journal of Family and Economic Issues*, 38(3), 354-369.
- Murdock, K. W. (2013). An examination of parental self-efficacy among mothers and fathers. *Psychology of Men & Masculinity*, 14(3), 314-323.



## Social Support, Self-efficacy, and Care Practices Among Parents of Children with Congenital Heart Disease, the Democratic Socialist Republic of Sri Lanka

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- Phromreungrit, K., Jintrawet, U., & Chotibang, J. (2015). Caregiving and related factors among caregivers of children with congenital heart disease. *Nursing Journal*, 42 (supplement), 35-45. (in Thai).
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia: Lippincott.
- Rohit, M., & Shrivastava, S. (2018). Acyanotic and Cyanotic Congenital Heart Diseases. *The Indian Journal of Pediatrics*, 85(6), 454-460.
- Samarasingha, D. (2018). A project by the community to save the children of Sri Lanka. *Sri Lankan Journal of Cardiology*, 1(1), 112-116.
- Soiphet, S., Jintrawet, U., & Mesukko, J. (2019). Parental care behaviors and related factors of preventing respiratory tract infections in children with congenital heart disease. *Nursing Journal* 46(1), 99 -108. (in Thai).
- Srikotr, A., Jintrawet, U., & Mesukko, J. (2018). Factors predicting care behavior of caregivers to preventing respiratory tract infections in children with congenital heart disease. *Nursing Journal* 45(4) 15-25. (in Thai).
- Suklertrakul, T., Picheansathian, W., Jintrawet, U., & Chotibang, J. (2018). Support program for Thai mothers of toddlers with congenital heart disease: A randomized control trial. *Pacific Rim International Journal of Nursing Research*, 22(2), 106-120.
- Thawitha, L. (2014). *Preterm infant's development promoting behaviors among primary care givers and related factors* (Unpublished master's thesis). Chiang Mai University, Thailand.
- Van der Linde, D., Konings, E. E. M., Slager, M. A., Witsenburg, M., Helbing, W. A., Takkenberg, J. J. M., & Roos-Hesselink, J. W. (2011). Birth prevalence of congenital heart disease worldwide: A systematic review and meta-analysis. *Journal of the American College of Cardiology*, 58(21), 2241-2247.
- Vijayalakshmi, I. B. (2015). Evaluation of left to right shunts by the pediatrician: How to follow, when to refer for intervention? *The Indian Journal of Pediatrics*, 82(11), 1027-1032.