

Multilingual EMPATHIC-30 score as a tool for parental satisfaction in a Family Centered Care PICU: a pilot study



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Introduction

Family Centered Care (FCC) is an integral part of PICU Liberation project and is a concept not widely accepted nor practiced in a critical care area. The idea of having a family member or caretaker 24hours with the patient in PICU setting creates a lot of anxiety among healthcare workers. Parents or family members are perceived as a distinct source of information for clinical management but often doubtful coping mechanisms when facing difficult severe illness of their loved ones or dealing with bad news. The encounter between the clinical managing team is often limited to within family visiting rights during visiting hours. This has created a social and knowledge gap between the critical care healthcare professional and family members or caretakers. During these difficult times, confusion or miscommunication between the managing team and family members are bound to happen which creates disharmony environment and unnecessary Furthermore, the background of illness in a child with co morbidities often poorly understood. With the help and availability of family members or care takers, the acceptable clinical state of the child can be discussed and agreed upon real time. By using EMPATHIC-30 questionnaire, we were able to assess the relationship between family members and healthcare professionals as well as the working environment within the critical care unit from the family members' point of view.

Objective

To determine the parental satisfaction of family centred care in PICU Sunway Medical Centre by using validated Multilingual Empathic -30 questionnaire.

Methods

This is a cross-sectional, descriptive correlational study, involving all children admitted to PICU Sunway Medical Centre for more than 1 day from December 2023 to June 2024. A total of 125 samples received out of 257 admissions (48.6%). EMPATHIC - 30 score questionnaire in multilingual format (English, Malay, Tamil, Mandarin) either via hardcopy or QR code online form were distributed at the end of PICU stay.

Results

Table	L: Socio-demographic charac	teristic for sample par	rticipants (N = 125)
Chai	cteristic		

Table 1: Socio-demographic characteristic for sample participants (N = 125) Characteristic					
Gender (child)	Male	n 66	% 52.8		
Genaer (ema)	Female	59	47.2		
Race	Malay Chinese Indian Indonesians	49 63 6	39.2 50.4 4.8 5.6		
Age (child)	Infant (0-12M) Toddler (1-4Y) Child (5-12Y) Teenagers (>12Y)	33 43 41 8	26.4 34.4 32.8 6.4		
Relation to child	Mother Father Mother and Father Others	84 28 8 5	67.2 22.4 6.4 4.0		
Length of stay in PICU	1-5 days 6-14 days >14 days	104 12 9	83 10 7		
Income (monthly household) N = 83	<rm5000 RM5000 - RM11000 > RM11000 Other: International patient</rm5000 	13 37 28 5	16 45 33 6		
Educational level N = 109	Primary (PMR) Secondary level (SPM) Diploma Bachelor (Degree) Master	3 15 26 58 6	3 14 24 53 5		

PhD

Results

Cronbach's alpha (total)	Cronbach's alpha based on Standardized items	N of items	
0.975	0.979	30	

Table 2: The Cronbach's alpha of multilingual EMPHATIC-30

DOMAIN	Cronbach's alpha (INFORMATION)	Cronbach's alpha based on Standardized items	N of items			
INFORMATION	0.904	0.905	5			
CARE AND TREATMENT	0.940	0.943	8			
ORGANIZATION	0.882	0.904	5			
PARENTAL PARTICIPATION	0.884	0.906	6			
PROFESSIONAL ATTITUDE	0.849	0.873	6			

Table 3: Relationship between patient's characteristic with domain of multilingual EMPHATIC-30

Patient characteristic / Domain (p-value)	Patient with or without co-morbidities	Surgery	Type of admission	Ventilation & sedation	Length of Stay LOS
Information	0.227	0.172	0.400	0.269	0.425
Care and treatment	0.782	0.027	0.442	0.533	0.226
Organization	0.393	0.388	0.692	0.648	0.453
Parental participation	0.947	0.492	0.215	0.379	0.871
Professional	0.292	0.086	0.656	0.976	0.751

Table 4: Correlation between family perception with domain of multilingual EMPHATIC-30

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Domain	Recurrent admission	PICU recommendation	Rating of the doctors	Rating of the nurses		
Information	0.581**	0.623**	0.669**	0.581**		
Care and Treatment	0.633**	0.642**	0.766**	0.686**		
Organization	0.553**	0.551**	0.571**	0.532**		
Parental participation	0.486**	0.503**	0.536**	0.552**		
Professional attitude	0.623**	0.629**	0.680**	0.616**		

^{**}Correlation is significant at the 0.01 level; (2-tailed)

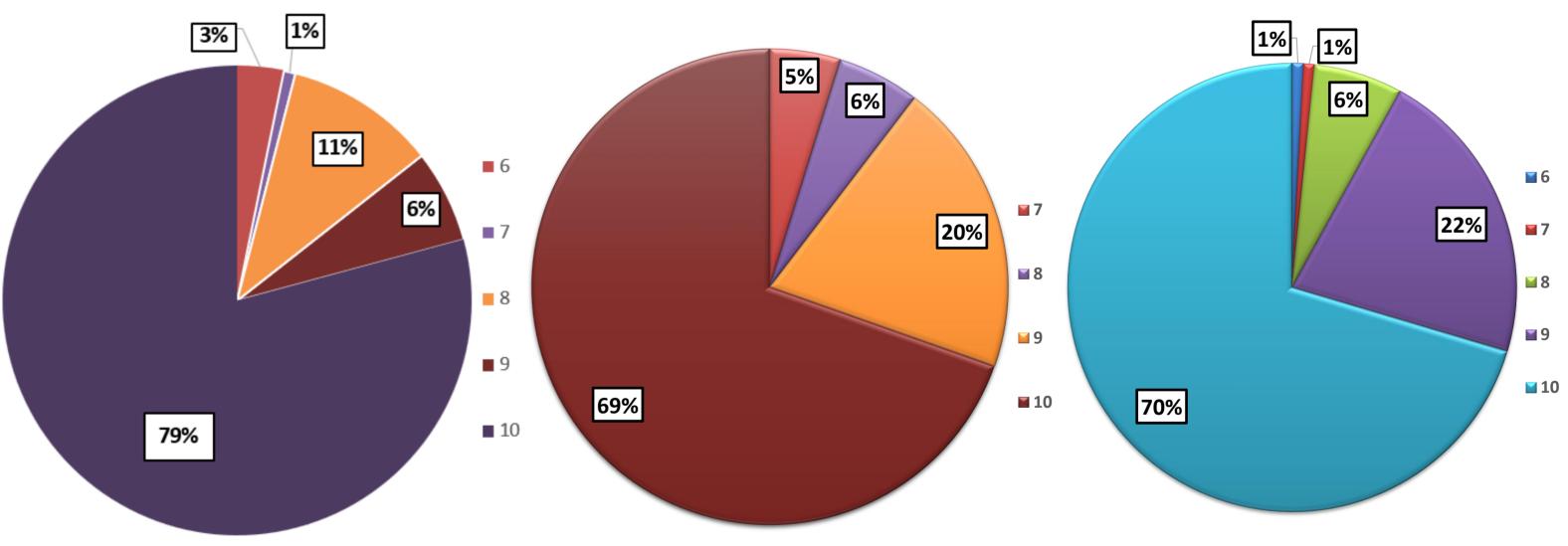


Figure 1: PICU Recommendation Rate

Figure 2: Rating of Doctors' Performance

Figure 3: Rating of Nurses' Performance

Discussion

A total of 257 admissions with 125 respondents (48.6%). Five domains tested were on information, care and treatment, organization, parental participation and professional attitude. The internal consistency reliability was beyond satisfactory at Cronbach Alpha 0.97. There was no significant difference between sedated/non-sedated patients, planned/unplanned or medical/surgery admission, background chronic illness, patients' age or length of stay. Almost all (90%) will come back to this PICU if in a similar situation and almost 100% would recommend this PICU to anyone facing a similar situation.

Research has demonstrated that family-centered care can lead to improved clinical outcomes, such as reduced length of hospital stays, decreased rates of hospital-acquired infections, and better emotional well-being for both patients and their families (King & Chiarello, 2014) (Williams, 2016) (Kuhlthau et al., 2011).

Incorporating FCC into the medical home model in our PICU is a challenge but not a deterrent in order to strive for overall best clinical practice and best patient experiences.

Conclusion

EMPATHIC-30 questionnaire in multilingual format is a useful tool to measure parental satisfaction in our diverse multicultural/ethnicity Malaysian PICU. By embracing the empathic score as a key component of family-centered PICU care in Malaysia, healthcare professionals can demonstrate their commitment to a holistic, patient-andfamily-focused approach. This not only can improve patient outcomes but also strengthen the therapeutic relationship between families and the PICU team, ultimately leading to a more positive and supportive healthcare experience for all.

References

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