Patient Expectations for Health Supervision Advice in Continuity Clinic: Experience from a Teaching Hospital in Thailand

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Background and Objective: *To evaluate the ability of pediatric residents in a continuity clinic to meet patient expectations regarding health supervision advice.*
Material and Method: *This was a cross sectional prospective study conducted at the continuity clinic (COC) and outpatient well-child clinic (OPD-WCC) at the Department of Pediatrics Siriraj Hospital in 2008. The patients attending both clinics over a four-week period were asked to participate in a 2-part questionnaire. The first part, participants were asked to rank six health supervision topics in the order of their perceived importance. After the visit, the participants rated the advice quality given in each topic. The top three most-desired advices were termed 'Priority Topics' and the researchers categorized the visit quality as Interactive, Informative, or Missed Opportunity (MO) according to the participants' perceived level of interaction. The participants were not aware of the 'Priority Topic' grouping prior to their participation. Main outcome measures were the proportions of Interactive visits and MO visits in for each of the six focus topics in the COC vs. OPD-WCC setting.*
Results: *The COC setting reported more Interactive sessions when the topic is discipline (31.6%, 9.1%, p≤0.05) than the OPD-WCC group, as well as more Informative sessions when the topics were behavior and dental care. There were also more MO in dental (50%, 0%, p≤0.05) and discipline 50%, 15.8%, p≤0.05) among the OPD-WCC than the COC group.*
Conclusion: *Physicians are better able to meet their patient's expectation regarding health supervision in a continuity setting. They are also more likely to be interactive regarding their advice and are less likely to miss the opportunities to address issues desired by their patient.*

Keywords: *Continuity of care, Continuity clinic, Child health supervision, Patient satisfaction*

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Communicating information regarding basic preventive care services is an integral part of pediatric health supervision in resident's continuity clinic. Such Basic Preventive Services (BPS) should include age-appropriate discussion of the following topics: growth, development and behavior, accidents and injuries prevention, dental care, and discipline[1]. In the effort to promote good preventive health practices, the Royal College of Pediatricians of Thailand (RCPT), in 2003, has made continuity care clinic (COC) experience a mandatory part of all pediatric training programs in Thailand. Up to this time, health supervision training has been conducted in the well childcare clinic (OPD-WCC) on a case-by-case basis. BPS is often limited to the routine practice of assessing growth, development, and advising on vaccination status as a cross-sectional, one-time only experience for both patients and doctors.

The Department of Pediatrics, Siriraj Hospital has one of the largest pediatric training programs in Thailand, with up to 25 residents per year. COC is operating in its seventh year and is run by the Division of Ambulatory Pediatrics. Since it is established with the goal of education, patients are seen on an appointment-only basis. The existing OPD-WCC still services the bulk of walk-in patients who request health supervision services. Although they exist concurrently, COC differs from OPD-WCC in many aspects. COC

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clinic is staffed exclusively by attending physicians from the Division of Ambulatory Pediatrics, while the OPD-WCC is operated by pediatricians of various expertise levels ranging from residents to senior staff members. In addition, COC focuses on providing a well-rounded health supervision practice that encompasses not only the routine assessment of growth and development, but includes other anticipatory guidance such as dental care, behavior and discipline[2]. Such setting affords a unique opportunity for comparing the quality of BPS as perceived by the patients, and the impact continuity of care has on the physician's ability in fulfilling patient expectations.

Material and Method

The authors conducted the present study as a cross-sectional survey and obtained approval from the hospital's Ethics Committee prior to starting the project. The authors asked 160 parents/caretakers who came for well-child visit and were seen at the Pediatric Continuity Clinic (COC) and the General Pediatric Outpatient Department (OPD-WCC) to answer a 2-part questionnaire, part 1 prior to physician visit and part 2 at the conclusion of the visit. During part 1, the participants were asked to rate each of the six BPS-health supervision topics according to how relevant they think the topics are to their current visit. The ranking was from 1 to 6 with 1 given to the topic that the participant felt was most pertinent to the visit while 6 was the least. The topics given were nutrition, growth, development, dental hygiene, accident and injury prevention, behavior and discipline. 'Priority Topics' denoted the top three topics picked by each participant during part 1 of the present study. The physicians were unaware of the topic rating and Priority Topics for their patients.

During part 2, the authors asked the participants to evaluate the quality of the advice they received in the six BPS areas by answering the following questions:

1. Was the advice given?
2. Was the information comprehensible?
3. Was there any opportunity for questions or discussions?

Based on the participants' answers, they were sorted into three groups according to the advice quality rating; Missed Opportunity (MO) if they rated the advice in their Priority Topic as either not given or given without comprehension, Informative if the participants perceived the advice to be comprehensible, but had no opportunity for discussion, and Interactive if the patients rated that they understood the advice given and had the opportunity to ask questions or discuss their concerns with the physicians. The process of recruitment, questionnaire evaluation and participant group assignment were depicted in Fig. 1.

Data collection occurred over a period of four weeks. Subject recruitment occurred in the outpatient department for the OPD-WCC group and in the Continuity Clinic area for the COC group.

Statistical analysis

The authors used Chi-square and independent t-test when comparing the different attributes of the OPD-WCC and COC groups and used Pearson's correlation to demonstrate the association between patient satisfaction scores and the number of missed opportunity.

Results

There were 160 parents enrolled in the present study, 80 in the OPD-WCC group, and 80 in the COC group. There were no differences in the demographic characteristics, education, or financial status between the two groups. Most children were brought in by their parents. The majority of participants were self-pay. The OPD-WCC group had a greater proportion of children under 1-year of age. More than half (52%) of the patients in the COC group had seen the same physician four times or more. Table 1 shows the detail demographic data of enrolled patients.

Table 2 shows the proportion of Priority Topic chosen by the participants in each group. Cumulatively, parents of both COC and OPD-WCC groups gave nutritional advice (75% and 76.25%) top-ranking priority, followed by growth (65% and 66.25%) and development (43.75% and 37.5%). A greater proportion of the COC than the OPD-WCC group rated the quality of physician advice as Informative in the all topics except development, although statistical significance was demonstrated only for behavior and dental advices. A greater proportion of the COC than OPD-WCC group had Interactive sessions where Priority Topics were concerned, except vaccine where the proportion of interactive sessions for COC was 30.8% and OPD-WCC was 53.9% ($p \leq 0.05$). The details of rating are listed in Table 3.

Overall, OPD-WCC group had a higher proportion of MO sessions than COC, 52.5% vs. 23.8%. On average, physicians in COC had 0.33 missed opportunity compared to 0.75 in the OPD-WCC group. There were significantly higher numbers of MISSED in the OPD-WCC vs. COC group for topics such as

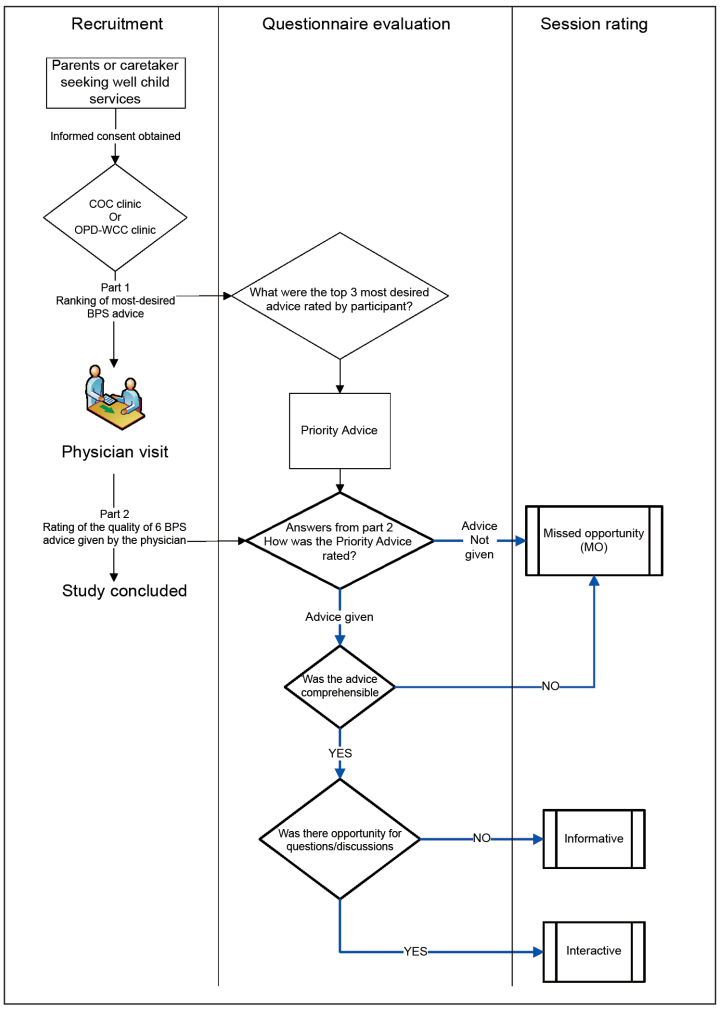

Fig. 1 Processes of recruitment of participants, evaluation of questionnaire parts 1 and 2, and the group assignment based on the answers to both parts of the questionnaire.

discipline (50% vs. 15.8%) and dental (50% vs. 0%) advice. Table 3 shows details of comparisons between the two groups. Table 4 shows that when physicians were stratified into two groups, those with zero MOs vs. those with one or more MOs, the zero MO group received higher scores in both caring quality (4.51±0.59 vs. 4.15±0.77) and appropriate demeanor (4.59±0.55 vs. 4.31±0.67). There was also an inverse correlation between the number of MOs and perceived caring quality ($r = -0.22$) and appropriate demeanor ($r = -0.204$) of physicians by their patients by Pearson Correlation at $\alpha = 0.05$.

Discussion

The present study reports that physicians in the continuity clinic setting are more able to fulfill their patient's expectations regarding basic preventive health services when compared to those in regular outpatient, walk-in setting. Moreover, they are better at providing informative and interactive sessions where patients have the opportunities to ask questions and discuss their concerns. Consequently, they also receive higher satisfaction rating for personal attributes such as caring quality and demeanor. On the other hand, patients who experienced missed opportunities to receive health supervision advice that they deemed important are often less satisfied with their physician's personal attributes. Since the present study is conducted in a real healthcare setting, there are several limitations. There is no randomization of patients and, as such, variability regarding the level of training of physicians and time limitation for walk-ins vs. by-appointment

Table 1. Demographic data

Settings	COC		OPD	
	n	%	n	%
Person giving the information				
Parents	75	93.75	78	97.50
Other	5	6.25	2	2.50
Occupation of main income-earner				
Civil services	16	20.00	17	21.25
Independent companies	4	5.00	9	11.25
Independent worker	27	33.75	30	37.50
Vendors	12	15.00	8	10.00
Personal business	12	15.00	8	10.00
Other	9	11.25	8	10.00
Highest education				
<6 grade	9	11.25	12	15.00
6-12 grade	34	42.50	25	31.25
Bachelors degree	33	41.25	37	46.25
More than bachelor's degree	4	5.00	5	6.25
Health insurance status				
Self-pay	58	72.50	60	75.00
PCU	5	6.25	1	1.25
Reimburse government or company	17	21.25	19	23.75
Age group of child*				
<1 year	18	22.50	48	60.00
1-5 year	53	66.25	28	35.00
>5 year	7	8.75	4	5.00
Number of visits (excluding the present) to the same MD				
1-3 visits	37	47.40	NA	
4-6 visits	30	38.50	NA	
≥7 visits	11	14.10	NA	

* Statistical significance at p≤0.05

Table 2. The proportion of parents who pick each basic health supervision topic as their 'Priority Topic'

	Number who picked as priority topic	
	COC, n (%)	OPD, n (%)
Nutrition	60 (75)	61 (76)
Growth	52 (65)	53 (66)
Development	35 (44)	30 (38)
Behavior	18 (23)	21 (26)
Discipline	19 (24)	22 (28)
Dental	12 (15)	12 (15)

visits may potentially confound patient satisfaction results. In addition, patient satisfaction may also be influenced by the perceived friendliness of COC, stemming from the fact that everything about it is designed to encourage continuity of care and enhance resident education.

The RCPT's requirement for continuity clinic in all pediatric training programs has been the pivotal point in shifting the focus of pediatric education from in-patient, tertiary care to outpatient primary care. Its main objective is to encourage pediatricians-in-training to practice higher quality of primary and preventive healthcare[3]. Whether the assumption that continuity of care equates higher quality care for patients and higher quality of education for residents or not has been much debated. Many studies have shown that continuity setting allows greater doctor-patient interaction that should ultimately result in physicians learning to individualize and tailor their care for particular patients while patients also feel that physicians resonate their needs. Factors related to the continuity system, which are associated with increased patient satisfaction, include the level of continuity provided and the community versus hospital-based clinic setting[4-6]. While those related to the physicians

Table 3. A comparison of the quality of health supervision session, INFORMED vs INTERACT, among parents of COC and OPD-WCC groups

	Categories of health supervision advice category					
	Informative session (INFORMED)		Interactive session (INTERACTIVE)		Missed opportunity session (MISSED)	
	COC, n (%)	OPD-WCC, n (%)	COC, n (%)	OPD-WCC, n (%)	COC, n (%)	OPD-WCC, n (%)
Nutrition	55 (91.7)	56 (91.8)	35 (58.3)	34 (55.7)	5 (8.3)	5 (8.2)
Growth	50 (96.1)	48 (90.8)	29 (55.8)	23 (43.4)	2 (3.8)	6 (11.1)
Development	27 (77.1)	24 (80.0)	9 (25.7)	6 (20.0)	8 (22.9)	6 (20.0)
Behavior*	11 (61.1)	8 (38.1)	8 (44.4)	2 (9.5)	0 (0.0)	6 (50.0)
Discipline#+	16 (84.2)	11 (50.0)	6 (31.6)	2 (9.1)	3 (15.8)	11 (50.0)
Dental*+	12 (100)	6 (50.0)	4 (33.3)	4 (33.3)	7 (38.9)	13 (61.9)

***** Statistical significance of $p \leq 0.05$ in the INFORMED category
\# Statistical significance of $p \leq 0.05$ in the INTERACTIVE category
\+ Statistical significance of $p \leq 0.05$ in the MISSED category

Table 4. Comparison of patients' satisfaction with physician as a function of missed opportunity

	Satisfaction rating of physicians (on a scale 1-5, 5 being the most satisfied)	
	No missed opportunity	Missed opportunity
Caring quality*	4.51±0.59	4.15±0.77
Appropriate demeanor*	4.59±0.55	4.31±0.67

* Statistical significance at $p \leq 0.05$

are time spent in the clinic[7] and the resident's patient load[8]. However, few studies have addressed the issue of the residents' abilities to meet patient expectations in the area of basic primary preventive care, and the relationship with patient satisfaction. Olson et al survey of 2,068 parents in Continuity Clinics across the United States found that, as in our study, discussions on traditional topics in preventive care such as growth, nutrition, and vaccines are desired by the parents and are often discussed by physicians. Additionally, the need for discussions on less traditional topics such as development and disciplines remain unmet[9,10]. Zuckerman et al studied the delivery of Basic Primary Care Service (BPS) by using a questionnaire administered to parents. The questionnaire ascertains, among other things, the prevalence of missed opportunity for health supervision such as breast-feeding, toilet training and other behavioral issues which are desired by parents but not discussed by the physicians[1]. The present study shows that 55% of the parents reported no missed opportunity, while 26% of parents reported two or more topics not discussed by the physician but would have been helpful to them.

The setting of COC itself can help physicians concentrate on providing tailored care that result in greater patient satisfaction. The pediatric residents who have the opportunity to interact with patients on a personal and continual basis can better gauge and focus on the priority of their patients. As a result, they are able to deliver meaningful health supervision advice to patients who desire them the most[3,4,11-16]. Christakis et al conducted a study that probed into why patients should be more satisfied when care is provider-specific. Factors such as feeling that the physician listens to them, show interest in their child, spends adequate time explaining issues in the way the parents can understand and showing respect to what the parents have to say are all found to be associated with excellent rating by patients in a continuity setting[17].

Conclusion

Provision of continuity setting in pediatric training programs ensures that pediatricians can give more focused preventive healthcare that is individualized, interactive and meeting the patient's needs.

Potential conflicts of interest

None.

Referenxces

1. Zuckerman B, Stevens GD, Inkelas M, Halfon N. Prevalence and correlates of high-quality basic pediatric preventive care. Pediatrics 2004; 114: 1522-9.
2. Zenni EA, Robinson TN. Effects of structured encounter forms on pediatric house staff knowledge, parent satisfaction, and quality of care. A randomized, controlled trial. Arch Pediatr Adolesc Med 1996; 150: 975-80.
3. Dumont-Driscoll MC, Barbian LT, Pollock BH. Pediatric residents' continuity clinics: how are we really doing? Pediatrics 1995; 96: 616-21.
4. Fan VS, Burman M, McDonell MB, Fihn SD. Continuity of care and other determinants of patient satisfaction with primary care. J Gen Intern Med 2005; 20: 226-33.
5. Rice TD, Holmes SE, Drutz JE. Comparison of continuity clinic experience by practice setting and postgraduate level. Arch Pediatr Adolesc Med 1996; 150: 1299-304.
6. Krugman SD, Garfunkel LC, Olsson JM, Ferrell CL, Serwint JR. Does quality of primary care vary by level of training in pediatric resident continuity practices? Acad Pediatr 2009; 9: 228-33.
7. McBurney PG, Moran CM, Ector WL, Quattlebaum TG, Darden PM. Time in continuity clinic as a predictor of continuity of care for pediatric residents. Pediatrics 2004; 114: 1023-7.
8. Feddock CA, Hoellein AR, Griffith CH, Wilson JF, Becker NS, Bowerman JL, et al. Are continuity clinic patients less satisfied when residents have a heavy inpatient workload? Eval Health Prof 2005; 28: 390-9.
9. Olson LM, Inkelas M, Halfon N, Schuster MA, O'Connor KG, Mistry R. Overview of the content of health supervision for young children: reports from parents and pediatricians. Pediatrics 2004; 113: 1907-16.
10. Schuster MA, Duan N, Regalado M, Klein DJ. Anticipatory guidance: what information do parents receive? What information do they want? Arch Pediatr Adolesc Med 2000; 154: 1191-8.
11. Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics 2004; 113: 1973-83.
12. Halfon N, Inkelas M, Mistry R, Olson LM. Satisfaction with health care for young children. Pediatrics 2004; 113: 1965-72.
13. Krugman SD, Racine A, Dabrow S, Sanguino S, Meyer W, Seid M, et al. Measuring primary care of children in pediatric resident continuity practices: a Continuity Research Network study. Pediatrics 2007; 120: e262-71.
14. Morgan ED, Pasquarella M, Holman JR. Continuity of care and patient satisfaction in a family practice clinic. J Am Board Fam Pract 2004; 17: 341-6.
15. O'Malley AS. Current evidence on the impact of continuity of care. Curr Opin Pediatr 2004; 16: 693-9.
16. Stahl CE, Necheles JW, Mayefsky JH, Wright LK, Rankin KM. 5-4-3-2-1 go! Coordinating pediatric resident education and community health promotion to address the obesity epidemic in children and youth. Clin Pediatr (Phila) 2011; 50: 215-24.
17. Christakis DA, Wright JA, Zimmerman FJ, Bassett AL, Connell FA. Continuity of care is associated with high-quality careby parental report. Pediatrics 2002; 109: e54.

ความคาดหวังของผู้ป่วยเกี่ยวกับการกำกับดูแลสุขภาพในคลินิกดูแลสุขภาพเด็กต่อเนื่อง: ประสบการณ์จากโรงเรียนแพทย์ในประเทศไทย

จุฬธิดา โฉมฉาย, สุประพัฒน์ สนใจพาณิชย์, สุธิดา ชีวะอิสระกุล

ภูมิหลังและวัตถุประสงค์: *บริการการตรวจและให้คำแนะนำสุขภาพเด็กในด้านต่าง ๆเป็นการดูแลรักษาผู้ป่วยเด็กแบบองค์รวม นอกเหนือไปจากการให้บริการการฉีดวัคซีนที่ทำเป็นประจำทั่วไป ราชวิทยาลัยกุมารแพทย์แห่งประเทศไทยได้มีข้อบังคับให้สถาบันฝึกอบรมมีการจัดตั้งคลินิกดูแลสุขภาพเด็กต่อเนื่องเพื่อให้แพทย์ประจำบ้านได้มีประสบการณ์ในการดูแลผู้ป่วยอย่างต่อเนื่องและให้คำแนะนำในการดูแลส่งเสริมสุขภาพเด็กในด้านต่าง ๆ ของแต่ละช่วงอายุอย่างเหมาะสม ดังนั้น ภาควิชากุมารเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาลจึงได้มีการเปิดบริการคลินิกดูแลผู้ป่วยต่อเนื่องของแพทย์ประจำบ้านกุมารเวชศาสตร์ เพื่อให้เป็นส่วนหนึ่งของการเรียนการสอน จากเดิมที่มีเพียงที่คลินิกเด็กดีแผนกผู้ป่วยนอกที่เน้นการบริการเป็นหลัก การศึกษานี้จึงมีวัตถุประสงค์เพื่อประเมินความสามารถของแพทย์ประจำบ้านในการให้คำแนะนำเกี่ยวกับการกำกับดูแลสุขภาพเด็กให้เหมาะสมกับความคาดหวังของผู้ปกครอง*

วัสดุและวิธีการ: *เป็นการศึกษาเปรียบเทียบความคาดหวังและความสามารถของแพทย์ในการตอบสนองความคาดหวัง ระหว่างกลุ่มผู้ใช้บริการคลินิกดูแลสุขภาพเด็กต่อเนื่อง (COC) จำนวน 80 ราย และผู้ป่วยนอกคลินิกเด็กดี (OPD-WCC) จำนวน 80 รายที่ภาควิชากุมารเวชศาสตร์โรงพยาบาลศิริราช โดยใช้แบบสอบถาม 2 ช่วง ในช่วงแรกผู้เข้าร่วมการศึกษาจะถูกขอให้จัดอันดับความสำคัญของหัวข้อการกำกับดูแลสุขภาพเด็ก ทั้งหกหัวข้อตามความคาดหวังของตนเองในการมาพบแพทย์ในวันนั้น ๆ คำแนะนำ 3 อันดับต้นที่แต่ละคนเลือก จะถูกจัดให้เป็น "คำแนะนำสำคัญ" และในช่วงที่ 2 หลังจากพบแพทย์แล้ว ผู้ร่วมการศึกษาจะประเมินคุณภาพของคำแนะนำเกี่ยวกับการกำกับดูแลสุขภาพเด็กที่ได้รับจากแพทย์ โดยจำแนกคุณภาพการปฏิสัมพันธ์ระหว่างผู้ปกครองและแพทย์ออกเป็น 3 ระดับ จากการสื่อสารแบบทางเดียว คือ การได้รับข้อมูลหรือไม่ได้รับ (Missed Opportunity, MO) และข้อมูลเข้าใจได้ง่ายหรือไม่ (Informative) ไปจนถึงการสื่อสารแบบสองทาง คือ การมีโอกาสได้ซักถามหรือแลกเปลี่ยนความคิดเห็น (Interactive) ผู้ร่วมการศึกษาจะไม่ทราบข้อมูลเกี่ยวกับการจัดอันดับความสำคัญของหัวข้อ การกำกับดูแลสุขภาพเด็กตลอดการทำการศึกษา*

ผลการศึกษา: *กลุ่ม COC มีลักษณะการสื่อสารที่เป็นแบบสองทาง (Interactive) มากกว่ากลุ่ม OPD อย่างมีนัยสำคัญทางสถิติ (31.6%, 9.1%, $p \leq 0.05$) และแม้แต่ในกรณีที่การสื่อสารเป็นแบบการให้ข้อมูลเท่านั้น (Informative) ก็ยังพบว่ากลุ่ม COC มีการให้ข้อมูลที่ผู้ฟังเข้าใจมากกว่ากลุ่ม OPD ในหัวข้อวินัยและการดูแลสุขภาพฟัน และสองกลุ่มนี้ยังมีสัดส่วนของการพลาดโอกาสในการได้รับคำแนะนำ (Missed Opportunity) มากกว่าอีกด้วย โดยในหัวข้อวินัยและการดูแลสุขภาพฟัน มีอัตราการพลาดโอกาสของกลุ่ม OPD เมื่อเทียบกับ COC ตามลำดับดังนี้ 50%, 15.8%, $p \leq 0.05$ และ 50%, 0%, $p \leq 0.05$*

สรุป: *แพทย์ที่ให้บริการการดูแลรักษาที่คลินิกดูแลผู้ป่วยต่อเนื่องสามารถเข้าถึงความคาดหวังต่อบริการคำแนะนำสุขภาพเด็กจากผู้ดูแลเด็กได้ดีกว่า และสามารถให้คำแนะนำที่ interactive และพลาดโอกาสในการสื่อสารกับผู้ป่วยน้อยกว่ากลุ่มที่ไม่มีการดูแลต่อเนื่อง*