

Supporting Early Childhood Literacy in a Primary Care Setting – Family Intervention

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INTRODUCTION



Literacy is:

- A social determinant of health.¹
- Related to higher rates of unemployment, inadequate access/misuse of medical services and lower socioeconomic status.^{2,3}
- An extension of poor childhood literacy.³

Thus, the purpose of this study was to evaluate a physician-led literacy promotion strategy modelled after the American “Reach Out and Read (ROR) program, a primary care program developed to promote early childhood literacy.⁴

Our study assessed two interventions:

Physician intervention: Aimed to improve the knowledge, attitudes, and practices of physicians related to early childhood literacy

Family intervention: Aimed to improve literacy practices among parents with children aged six months to five years

OBJECTIVES

There were two major objectives to this portion of the study:

1. To determine the literacy practices of primary caregivers with children aged six months to five years.
2. To evaluate a physician-led early literacy promotion program in a primary care setting

METHODS

- This pilot study aimed to include a minimum of 30 individuals completing both the pre-intervention survey (paper survey prior to Well Child visit) and post-intervention survey (telephone follow-up 4 to 6 months post-visit).
- Intervention included a physician discussing book sharing with primary caregivers during their child’s Well Child visit; provision of a free, age-appropriate book; a library card “prescription”; and modification of the waiting room for increased literacy focus (e.g., books, posters, story time).
- Approved by the University of Saskatchewan’s Behavioural Research Ethics Board.

RESULTS

Participants:

- A total of 34 participants took part.
- Twenty-three completed both the pre-and post-surveys. Characteristics are presented in Table 1.

Findings:

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 • Book-sharing frequency increased in the post survey with 91.3% selecting they were reading to their children more than five days a week as compared to 78.3% (p=0.38) pre-survey.
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 • Reading with their child as one of their top three favourite activities was reported 65.2 % of the time in both the pre- and post-surveys.
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 • The proportion who felt booksharing should start before 6 months of age was lower at follow-up (26.1% pre-survey; 8.7% post-survey, p=0.22)
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 • 21.7% (95% CI 7.5%, 43.7%) reported that the physician speaking to them about reading and providing a book had changed the way they read or shared books with their children. Seven did not recall receiving the intervention.

“I began to think about the importance of making sure the baby got enough reading as well even though she is only a baby.” – a participant

Table 1. Demographic characteristics of participants with both baseline and follow-up surveys (n =23)

Respondent		
Relationship to child, n (%)	Mother	20 (87%)
	Father	3 (13%)
Primary caregiver, n (%)	Yes	21 (93%)
	No	2 (8.7%)
Mean age, months (SD)		31.9 (3.3)
Highest education level completed, n (%)*	High school	3 (13%)
	College/university	20 (87%)
Ethnicity, n (%)	Caucasian	20 (87%)
	First Nations	1 (4.3%)
	Metis	1 (4.3%)
	African	1 (4.3%)
Language spoken at home, n (%)	English	23 (100%)
Child		
Age, mean (SD)		1.6 (1.4)
Gender, n (%)	Male	11 (47.8%)
	Female	12 (52.2%)
Number of other children in the home, n (%)	None	10 (43.5%)
	One	9 (39.1%)
	Two	3 (13%)
	Three	1 (4.3%)
Age, other children, mean (SD)		4.9 (2.5)
Older siblings, n (%)	Yes	12 (52.2%)
	No	11 (47.8%)

*Among primary caregivers who were not respondents, one had completed high school and one had completed college/university; SD = standard deviation

DISCUSSION

Inconsistencies with expected findings

- The proportion indicating that booksharing should start soon after birth was reduced at the follow-up interview. This suggests that emphasis on early literacy importance needs to be ongoing
- The proportion who listed reading as a favourite activity after the intervention also did not increase. This highlights the need to advocate for reading in the face of competing, more enjoyable activities.

Limitations

- Assessing the intervention, we found that 7/23 who answered both surveys may not have received the intervention, potentially diluting its effect. This also suggests that it may have been more difficult to implement than anticipated.
- Impact may have been limited by the sample being relatively well-educated, English-speaking, and already practicing remarkable booksharing habits. A more diverse sample with greater literacy needs may have shown greater benefit in closer alignment with previous literature.^{2,4,8} The pre-survey’s written format may have limited participation.
- Additional limitations include 1) a small, potentially underpowered sample size, as impacted by Covid-19 restrictions. 2) potential selection bias as 11 of the original 34 participants did not complete the post-survey.

CONCLUSION

- Our study suggests that a physician-led early literacy promotion program in a primary care setting has potential to improve the literacy practices of parents with children aged six months to five years.
- We believe our data could be readily extrapolated in a larger trial in the future. We have members of the research team in Regina and are hopeful the study will continue at their academic facility.
- We strongly encourage additional evaluation of literacy programs in primary care appointments with children, with a view to their possible inclusion as a standard of care.



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