**Table 1**. Selected studies examining the impact of adult health literacy level

on health behaviors and disease outcomes in children.

Note: AOR=adjusted odds ratio; CI=confidence interval; OR= odds ratio

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| **Outcome Measure** | **Study Design and Literacy Tool Used** | **Key Findings: How Adult Health Literacy Level Impacts Outcome** |
| **Anaphylaxis Management [51]** | Sample Size: N=100  Assessment Tool: Newest Vital Sign (NVS)  Literacy Level: Limited health literacy (score ≤1/6) VS  Possibly limited health literacy 1<score≤3/6) VS  Adequate health literacy group (score>4/6) | * Parents with high health literacy have a higher score of Epinephrine Auto-injection demonstration compared with parents with low health literacy; * Rate of child food allergic events increases when parents’ NVS score decreases; * Odds of reporting a child anaphylactic event was lower in parents with high health literacy *(OR=0.76; CI95%= 0.61-0.94).* |
| **Asthma [52]** | Sample Size: N=150  Assessment Tool: Rapid Assessment of Literacy in Medicine (REALM)  Literacy Level: Low health literacy (score ≤60/66) VS  High health literacy (score >60/66) | * 56% of children with parents having low health literacy had moderate or severe persistent asthma, compared to 35% of children with parents having high literacy (p=0.03); * Low literacy was associated with less parental asthma-related knowledge (assessed with a 20-item questionnaire). *(mean scorelow literacy=14/20 vs mean scoreadequate literacy=16/20; p<0.001)*; * Children of parents with low literacy reported more frequent use of albuterol *(mean days per week: 2.7 vs 1.5; p=0.01)* and greater total weekly use *(mean=6 vs 3 doses per week; p=0.03);* * Children with low literacy parents are 40% more likely to have emergency department visits; * Compared with children with high literacy parents *(IRR=1.4; CI=1.0-2.0; p<0.05);* * Children with low literacy parents are three times more likely to get hospitalized due to asthma compared with children with high health literacy parents. *(IRR=3.2; CI=1.5-6.6; p<0.05).* |
| **Dental Caries [53]** | Sample Size: n=300  Assessment Tool: Comprehensive Measure of Oral Health Knowledge (CMOHK) questionnaire (23 items)  Literacy Level: Poor oral health literacy (≤14/23) VS adequate oral health literacy (>14/23) | * The rate of untreated dental caries in children whose parents have poor health knowledge scores is nearly double that of children whose parents have adequate scores. (DTpoorOHL=3.3; DTadequateOHL=1.84; p<0.001); * When a parent scores poor on health knowledge, the child rates their lifetime dental caries (DMFT/deft) higher than when born to parent with adequate literacy. (DMFT/deftpoorOHL=5.7; DMFT/deftadequateOHL=4.7; p<0.05). |
| **Febrile Illness [54]** | Sample Size: N=299  Assessment Tool: Newest Vital Sign (NVS)  Literacy Level: Low health literacy group (score ≤4/6) VS adequate health literacy group (score >4/6) | * Parents with low health literacy were associated with a higher proportion of non-urgent emergency department visits for their child compared with parents with a high health literacy. *(44% vs 31%; OR=1.8; CI=1.1-2.9).* |
| **Epilepsy [55]** | Sample Size: N=146  Assessment Tool: 3 validated questions based on STOFHLA and REALM  Literacy Level: Inadequate health literacy (score 3-8) VS  Marginal health literacy (score 9-10) VS  Adequate health literacy (11-15) | * The mean number for missed treatment doses was significantly higher among children of parents with inadequate and marginal health literacy versus parents with adequate health literacy *(9.8* *and 8.6 vs 4.4; p=0.01)*; * The mean number of seizures was higher among children of parents with inadequate and marginal health literacy versus parents with adequate health literacy *(8.5 and 7.9 vs 3.3; p=0.03)*. |
| **Glaucoma [56]** | Sample Size: N=46  Assessment Tool: REALM  Literacy Level: Not described | * Adherence to eye drops for glaucoma treatment (proportion of prescribed doses administered to child) decreased significantly as the health literacy level of the parent decreased. |
| **Glycaemia Type 1 Diabetes [57]** | Sample Size: N=200  Assessment Tool: NVS  Literacy Level: Limited health literacy (score ≤1/6) VS  Possibly limited health literacy (1<score≤3/6) VS  Adequate health literacy group (score>4/6). | * HbA1c is lower in children with parents having an adequate health literacy compared with children of parents having a possibly limited and limited health literacy *(8.6% vs 9.5% vs 10.4%; p<0.0005)*. |
| **Nephrotic Syndrome [58]** | Sample Size: N=190  Assessment Tool: S-TOFHLA  Literacy Level: Inadequate (score 0-35) VS  Marginal (score 36-66) VS  Adequate (score 67-100) | * Adequate parent health literacy is associated with a 33% lower risk of first relapse in child compared to inadequate health literacy *(hazard ratio 0.67, 95% CI=0.48-0.94, P=0.02);* * The odds of complete remission for child after cyclophosphamide treatment is more than 5 times higher in adequate parent health literacy group compared to inadequate health literacy group (OR 5.97, 95% CI=2.42-14.7, P<0.001); * Having adequate parent health literacy doubles the odds of complete remission after the initial course of steroids for child compared with having an inadequate health literacy *(OR 2.07, 95% CI=1.36-3.16, P=0.003)*. |
| **Sleep [59]** | Sample Size: N=557  Assessment Tool: S-TOFHLA  Literacy Level: - Low health literacy group (score ≤22/36) VS adequate health literacy group (score >22) | * Parents with low health literacy are more likely to have a TV in the child room compared with parents with adequate health literacy *(66.7% vs 47.7%; p=0.01)*; * Children of parents with low literacy are associated with a lower nighttime sleep duration compared with children of parents with adequate health literacy (low - <7.5 hours - nighttime sleep duration: 37.0% vs 18.5%; p=0.002). |