

EED-Development Tables

WASH Benefits, Bangladesh

14 April 2021

```
bg_tables <- readRDS('tables/all_bangladesh_tables.RDS')
k_tables <- readRDS('tables/all_kenya_tables.RDS')

every_hyp <- bind_rows(
  bg_tables,
  k_tables
) %>%
  group_by(hyp) %>%
  mutate(`FDR Corrected P-value` = p.adjust(`Adjusted P-value`, "BH"))

every_hyp %>%
  arrange(hyp) %>%
  kable(booktabs = TRUE) %>%
  kable_styling(latex_options="scale_down")
```

Significant Hypotheses

```
sig_hyp <- every_hyp %>%
  filter(`Unadjusted P-value` <= 0.05 | `Adjusted P-value` <= 0.05 | `FDR Corrected P-value` <= 0.05 ) %>%
  mutate(significant_unadj = ifelse(`Unadjusted P-value` <= 0.05, "Unadj.", NA),
         significant_adj = ifelse(`Adjusted P-value` <= 0.05, 'Adj.', NA),
         significant_fdr = ifelse(`FDR Corrected P-value` <= 0.05, 'FDR', NA),
         dir = case_when(str_starts(`Adjusted Difference (95% CI)`,
                                     '-') ~ '-',
                          str_detect(`Adjusted Difference (95% CI)`,
                                     "0,0") ~ "",
                          TRUE ~ '+')) %>%
  unite("signif", significant_unadj, significant_adj, significant_fdr, sep = ', ', na.rm = TRUE) %>%
  select(`Outcome Domain`, Outcome, Exposure, n, t, `Adjusted Difference (95% CI)`, `Unadj. P-value` = `Unadjusted P-value`,
        `Adj. P-value` = `Adjusted P-value`, `FDR P-value` = `FDR Corrected P-value`, hyp, signif, dir)
```

Long Tables

```
sig_hyp %>%
  filter(hyp <= 3) %>%
```

Outcome Domain	Outcome	Exposure Source	Exposure	t	n	Q1 mean	Q3 mean	Unadjusted Difference (95% CI)	Unadjusted P-value	Adjusted Difference (95% CI)	Adjusted P-value	hyp	FDR Corrected P-value
WHO Motor Milestone	Sum Total	NA	NA	1	806	-1.48000	-0.23000	-0.01(-0.14,0.12)	0.91000	0.03(-0.18,0.24)	0.77000	1	0.8105263
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	NA	1	806	-1.48000	-0.23000	0(-0.12,0.11)	0.97000	-0.01(-0.21,0.18)	0.90000	1	0.9000000
WHO Motor Milestone	Sum Total	NA	NA	1	808	8.34000	9.86000	0.07(-0.07,0.21)	0.35000	0.08(-0.04,0.21)	0.20000	1	0.3333333
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	NA	1	808	8.34000	9.86000	0.08(-0.05,0.2)	0.23000	0.08(-0.03,0.18)	0.17000	1	0.3090909
WHO Motor Milestone	Sum Total	NA	NA	1	809	6.81000	7.75000	0.26(0.13,0.4)	0.00000	0.14(-0.1,0.37)	0.26000	1	0.4000000
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	NA	1	809	6.81000	7.75000	0.36(0.15,0.58)	0.00000	0.15(-0.05,0.35)	0.15000	1	0.3090909
WHO Motor Milestone	Sum Total	urine	lactulose concentration	1	984	-1.55000	-0.01000	-0.14(-0.3,0.02)	0.09000	-0.25(-0.49,-0.01)	0.04000	1	0.1333333
WHO Motor Milestone	Milestones 2, 4, 5, 6	urine	lactulose concentration	1	991	-1.56000	-0.02000	-0.08(-0.22,0.05)	0.24000	-0.11(-0.21,0)	0.04000	1	0.1333333
WHO Motor Milestone	Sum Total	urine	mannitol concentration	1	984	0.68000	1.12000	-0.17(-0.35,0)	0.05000	-0.23(-0.36,-0.09)	0.00000	1	0.0000000
WHO Motor Milestone	Milestones 2, 4, 5, 6	urine	mannitol concentration	1	991	0.68000	1.11000	-0.12(-0.28,0.04)	0.14000	-0.1(-0.2,0)	0.05000	1	0.1428571
Communicative Development Inventories	Understanding	NA	NA	1	797	-1.48000	-0.23000	0.02(-0.21,0.25)	0.87000	-0.04(-0.26,0.18)	0.71000	1	0.7888889
Communicative Development Inventories	Expressing	NA	NA	1	793	-1.48000	-0.22000	-0.02(-0.18,0.15)	0.86000	-0.06(-0.23,0.11)	0.49000	1	0.6875000
Communicative Development Inventories	Understanding	NA	NA	1	799	8.34000	9.86000	-0.04(-0.14,0.06)	0.45000	-0.03(-0.14,0.07)	0.52000	1	0.6875000
Communicative Development Inventories	Expressing	NA	NA	1	795	8.35000	9.88000	-0.01(-0.11,0.08)	0.77000	0.02(-0.08,0.12)	0.67000	1	0.7882533
Communicative Development Inventories	Understanding	NA	NA	1	800	6.80000	7.75000	0.27(0.1,0.44)	0.00000	0.23(0.07,0.39)	0.01000	1	0.1000000
Communicative Development Inventories	Expressing	NA	NA	1	796	6.80000	7.75000	0.09(-0.13,0.3)	0.45000	0.07(-0.16,0.3)	0.55000	1	0.6875000
Communicative Development Inventories	Understanding	urine	lactulose concentration	1	979	-1.56000	-0.01000	-0.14(-0.31,0.02)	0.08000	-0.16(-0.3,-0.01)	0.03000	1	0.1333333
Communicative Development Inventories	Expressing	urine	lactulose concentration	1	976	-1.56000	-0.01000	-0.13(-0.28,0.03)	0.10000	-0.17(-0.33,-0.01)	0.04000	1	0.1333333
Communicative Development Inventories	Understanding	urine	mannitol concentration	1	979	0.67000	1.11000	-0.08(-0.17,0.01)	0.10000	-0.12(-0.25,0.01)	0.07000	1	0.1750000
Communicative Development Inventories	Expressing	urine	mannitol concentration	1	976	0.67000	1.21000	-0.12(-0.26,0.03)	0.11000	-0.11(-0.27,0.04)	0.16000	1	0.3090909
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	1	697	-1.44937	-0.20725	0.04(-0.1,0.18)	0.57000	-0.0069(-0.1899,0.17619)	0.94627	2	0.9931017
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	1	693	-1.44658	-0.20725	-0.04(-0.25,0.18)	0.74000	-0.03826(-0.1373,0.06077)	0.45773	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	697	-1.44937	-0.20725	0(-0.16,0.16)	0.99000	-0.03126(-0.19437,0.13185)	0.72032	2	0.9552522
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	697	-1.44937	-0.20725	0.02(-0.07,0.11)	0.65000	-0.02257(-0.18243,0.1373)	0.79436	2	0.9726572
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	1	698	8.37754	9.90994	-0.11(-0.22,0)	0.05000	-0.06171(-0.18472,0.06131)	0.33055	2	0.8786571
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	1	694	8.40811	9.91404	0.06(-0.18,0.3)	0.65000	0.01076(-0.10432,0.12584)	0.86470	2	0.9931017
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	698	8.37754	9.90994	-0.08(-0.19,0.02)	0.13000	-0.0376(-0.15507,0.07987)	0.54144	2	0.9024000
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	698	8.37754	9.90994	-0.09(-0.19,0.02)	0.10000	-0.0546(-0.16712,0.05792)	0.34770	2	0.8786571
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	1	699	6.82549	7.76491	0.1(-0.01,0.2)	0.07000	0.08711(-0.03186,0.20608)	0.15172	2	0.8786571
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	1	695	6.82549	7.75919	0.07(-0.08,0.21)	0.39000	0.05838(-0.09022,0.20698)	0.44987	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	699	6.82549	7.76491	0.24(0.04,0.43)	0.02000	0.11337(-0.00682,0.23356)	0.06409	2	0.8056800
Extended Ages and Stages Questionnaire	Combined	NA	NA	1	699	6.82549	7.76491	0.21(0.01,0.41)	0.03000	0.10444(-0.0138,0.22268)	0.08305	2	0.8305000
Extended Ages and Stages Questionnaire	Personal Social Score	urine	lactulose concentration	1	867	-1.56556	-0.03308	0.09(-0.13,0.32)	0.42000	0.06013(-0.18181,0.30207)	0.63894	2	0.9552522
Extended Ages and Stages Questionnaire	Gross Motor Score	urine	lactulose concentration	1	862	-1.55941	-0.02612	0.01(-0.07,0.1)	0.80000	0.122(-0.0088,0.2528)	0.06714	2	0.8056800
Extended Ages and Stages Questionnaire	Combined	urine	lactulose concentration	1	867	-1.56556	-0.03308	-0.01(-0.11,0.08)	0.77000	0.04167(-0.05894,0.14227)	0.42480	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	urine	lactulose concentration	1	867	-1.56556	-0.03308	0.05(-0.11,0.2)	0.56000	0.03498(-0.06316,0.13312)	0.49464	2	0.8786571
Extended Ages and Stages Questionnaire	Personal Social Score	urine	mannitol concentration	1	867	0.68932	1.21063	-0.07(-0.16,0.03)	0.18000	-0.02242(-0.14262,0.09779)	0.72784	2	0.9552522
Extended Ages and Stages Questionnaire	Gross Motor Score	urine	mannitol concentration	1	862	0.69335	2.11783	0(-0.08,0.09)	0.92000	0.08103(-0.05002,0.21209)	0.22767	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	urine	mannitol concentration	1	867	0.68932	1.21063	-0.02(-0.11,0.07)	0.70000	0.04662(-0.07971,0.17296)	0.47888	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	urine	mannitol concentration	1	867	0.68932	1.21063	0(-0.09,0.09)	0.99000	0.04415(-0.06333,0.15163)	0.42870	2	0.8786571
Communicative Development Inventories	Understanding	NA	NA	1	701	-1.44937	-0.20725	-0.01(-0.1,0.07)	0.75000	-0.01436(-0.10524,0.07653)	0.76960	2	0.9620000
Communicative Development Inventories	Expressing	NA	NA	1	707	-1.45365	-0.20948	-0.01(-0.1,0.08)	0.80000	-0.00196(-0.10025,0.09632)	0.97171	2	0.9931017
Communicative Development Inventories	Understanding	NA	NA	1	702	8.37754	9.90994	0.1(-0.1,0.29)	0.33000	-0.00019(-0.11306,0.11268)	0.99758	2	0.9975800
Communicative Development Inventories	Expressing	NA	NA	1	708	8.36668	9.89798	0(-0.15,0.14)	0.95000	0.13891(-0.05937,0.33719)	0.17053	2	0.8786571
Communicative Development Inventories	Understanding	NA	NA	1	703	6.82440	7.75919	0.07(-0.03,0.16)	0.16000	0.05823(-0.04215,0.15861)	0.25844	2	0.8786571
Communicative Development Inventories	Expressing	NA	NA	1	709	6.82154	7.75469	0.08(-0.02,0.17)	0.10000	0.08848(-0.02224,0.19919)	0.11722	2	0.8786571
Communicative Development Inventories	Understanding	urine	lactulose concentration	1	870	-1.55941	-0.03308	0.11(-0.09,0.3)	0.29000	0.07368(-0.13952,0.28688)	0.50835	2	0.8786571
Communicative Development Inventories	Expressing	urine	lactulose concentration	1	878	-1.56402	-0.03375	0.13(-0.06,0.33)	0.18000	0.1162(-0.09917,0.33156)	0.29421	2	0.8786571
Communicative Development Inventories	Understanding	urine	mannitol concentration	1	870	0.69335	2.09881	-0.01(-0.19,0.16)	0.88000	0.034(-0.15139,0.21939)	0.73236	2	0.9552522
Communicative Development Inventories	Expressing	urine	mannitol concentration	1	878	0.69335	2.09881	0(-0.08,0.09)	0.92000	-0.01037(-0.20929,0.18856)	0.92536	2	0.9931017
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	2	862	-1.37516	-0.11899	0.06(-0.02,0.13)	0.14000	0.02261(-0.07294,0.11816)	0.65573	2	0.9552522
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	2	857	-1.38040	-0.11647	-0.01(-0.18,0.17)	0.95000	-0.01781(-0.1095,0.07387)	0.71652	2	0.9552522
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	-1.37516	-0.11899	0.13(-0.05,0.3)	0.15000	0.01735(-0.07303,0.10773)	0.71989	2	0.9552522
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	-1.37516	-0.11899	0.13(-0.03,0.29)	0.11000	0.03628(-0.04962,0.12217)	0.41538	2	0.8786571
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	2	862	7.93369	9.25159	-0.01(-0.09,0.07)	0.83000	-0.01562(-0.10819,0.07694)	0.75371	2	0.9620000
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	2	857	7.93272	9.24637	-0.03(-0.1,0.04)	0.37000	-0.05789(-0.14684,0.03106)	0.20361	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	7.93369	9.25159	-0.02(-0.09,0.05)	0.59000	-0.03013(-0.11815,0.05789)	0.51255	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	7.93369	9.25159	-0.01(-0.08,0.06)	0.77000	-0.00283(-0.08702,0.08136)	0.95215	2	0.9931017
Extended Ages and Stages Questionnaire	Personal Social Score	NA	NA	2	862	6.46301	7.61475	-0.03(-0.13,0.08)	0.64000	0.00388(-0.11992,0.12768)	0.95542	2	0.9931017
Extended Ages and Stages Questionnaire	Gross Motor Score	NA	NA	2	857	6.46119	7.61520	0.01(-0.05,0.08)	0.67000	-0.03072(-0.11825,0.05681)	0.50157	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	6.46301	7.61475	0.01(-0.09,0.11)	0.87000	0.04539(-0.03667,0.12746)	0.28188	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	NA	NA	2	862	6.46301	7.61475	0.04(-0.04,0.13)	0.29000	0.07408(-0.00308,0.15124)	0.05947	2	0.8056800
Extended Ages and Stages Questionnaire	Personal Social Score	urine	lactulose concentration	2	846	-1.86829	-0.49407	NA(NA,NA)	NA	-0.10778(-0.29907,0.08352)	0.27280	2	0.8786571
Extended Ages and Stages Questionnaire	Gross Motor Score	urine	lactulose concentration	2	841	-1.86916	-0.49195	NA(NA,NA)	NA	-0.08429(-0.1647,-0.00387)	0.03961	2	0.8056800
Extended Ages and Stages Questionnaire	Combined	urine	lactulose concentration	2	846	-1.86829	-0.49407	NA(NA,NA)	NA	-0.12585(-0.30234,0.05065)	0.16292	2	0.8786571
Extended Ages and Stages Questionnaire	Combined	urine	lactulose concentration	2	846	-1.86829	-0.49407	NA(NA,NA)	NA	-0.02181(-0.13487,0.09125)	0.71850	2	0.9552522
Extended Ages and Stages Questionnaire	Personal Social Score	urine	mannitol concentration	2	846	0.06043	1.57921	NA(NA,NA)	NA	0.0038(-0.09393,0.10153)	0.94448	2	0.9931017
Extended Ages and Stages Questionnaire	Gross Motor Score	urine	mannitol concentration	2	841	0.05813	1.58064	NA(NA,NA)	NA	-0.19961(-0.36879,-0.03043)	0.02059	2	0.8056800
Extended Ages and Stages Questionnaire	Combined	urine	mannitol concentration	2	846	0.06043	1.57921	NA(NA,NA)	NA	-0.00152(-0.09311,0.09008)	0.97655	2	0.9931017
Extended Ages and Stages Questionnaire	Combined	urine	mannitol concentration	2	846	0.06043	1.57921	NA(NA,NA)	NA	0.04206(-0.04649,0.1306)	0.35775	2	0.8786571
Communicative Development Inventories	Understanding	NA	NA	2	865	-1.37481	-0.11815	0.23(0.06,0.39)	0.01000	0.03487(-0.06434,0.13408)	0.50089	2	0.8786571
Communicative Development Inventories	Expressing	NA	NA	2	874	-1.36205	-0.11899	0.2(0.03,0.37)	0.02000	0.04477(-0.04252,0.13206)	0.31947	2	0.8786571
Communicative Development Inventories	Understanding	NA	NA	2	865	7.92472	9.25333	-0.01(-0.07,0.06)	0.84000	0.00744(-0.07393,0.0888)	0.86781	2	0.9931017
Communicative Development Inventories	Expressing	NA	NA	2	874	7.93369	9.25159	-0.04(-0.11,0.02)	0.20000	-0.04775(-0.13426,0.03876)	0.28290	2	0.8786571
Communicative Development Inventories	Understanding	NA	NA	2	865	6.47507	7.61520	0.04(-0.02,0.1)	0.22000	0.04771(-0.02587,0.12128)	0.20532	2	0.8786571
Communicative Development Inventories	Expressing	NA	NA	2	874	6.47592	7.61475	0.06(-0.01,0.12)	0.08000	-0.10994(-0.27581,0.05593)	0.19523	2	0.8786571

```
kable(booktabs = TRUE, longtable = TRUE,
      caption = 'Any Significant p-value (Bangladesh)') %>%
kable_styling(latex_options=c("hold_position", "repeat_header"), font_size = 7)
```

Table 1: Any Significant p-value (Bangladesh)

Outcome Domain	Outcome	Exposure	n	t	Adjusted Difference (95% CI)	Unadj. P-value	Adj. P-value	FDR P-value	hyp	signif
WHO Motor Milestone	Sum Total	NA	809	1	0.14(-0.1,0.37)	0.00	0.26000	0.4000000	1	Unadj.
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	809	1	0.15(-0.05,0.35)	0.00	0.15000	0.3090909	1	Unadj.
WHO Motor Milestone	Sum Total	lactulose concentration	984	1	-0.25(-0.49,-0.01)	0.09	0.04000	0.1333333	1	Adj.
WHO Motor Milestone	Milestones 2, 4, 5, 6	lactulose concentration	991	1	-0.11(-0.21,0)	0.24	0.04000	0.1333333	1	Adj.
WHO Motor Milestone	Sum Total	mannitol concentration	984	1	-0.23(-0.36,-0.09)	0.05	0.00000	0.0000000	1	Unadj., Adj., FD
WHO Motor Milestone	Milestones 2, 4, 5, 6	mannitol concentration	991	1	-0.1(-0.2,0)	0.14	0.05000	0.1428571	1	Adj.
Communicative Development Inventories	Understanding	NA	800	1	0.23(0.07,0.39)	0.00	0.01000	0.1000000	1	Unadj., Adj.
Communicative Development Inventories	Understanding	lactulose concentration	979	1	-0.16(-0.3,-0.01)	0.08	0.03000	0.1333333	1	Adj.
Communicative Development Inventories	Expressing	lactulose concentration	976	1	-0.17(-0.33,-0.01)	0.10	0.04000	0.1333333	1	Adj.
Extended Ages and Stages Questionnaire	Personal Social Score	NA	698	1	-0.06171(-0.18472,0.06131)	0.05	0.33055	0.8786571	2	Unadj.
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.11337(-0.00682,0.23356)	0.02	0.06409	0.8056800	2	Unadj.
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.10444(-0.0138,0.22268)	0.03	0.08305	0.8305000	2	Unadj.
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	841	2	-0.08429(-0.1647,-0.00387)	NA	0.03961	0.8056800	2	Adj.
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	841	2	-0.19961(-0.36879,-0.03043)	NA	0.02059	0.8056800	2	Adj.
Communicative Development Inventories	Understanding	NA	865	2	0.03487(-0.06434,0.13408)	0.01	0.50089	0.8786571	2	Unadj.
Communicative Development Inventories	Expressing	NA	874	2	0.04477(-0.04252,0.13206)	0.02	0.31947	0.8786571	2	Unadj.

```
sig_hyp %>%
  filter(hyp > 3) %>%
  kable(booktabs = TRUE, longtable = TRUE,
        caption = 'Any Significant p-value (Kenya)') %>%
  kable_styling(latex_options=c("hold_position", "repeat_header"), font_size = 7)
```

Table 2: Any Significant p-value (Kenya)

Outcome Domain	Outcome	Exposure	n	t	Adjusted Difference (95% CI)	Unadj. P-value	Adj. P-value	FDR P-value	hyp	signif
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	1003	1	0.06(-0.03,0.16)	0.01000	0.1600	0.9000000	4	Unadj.
WHO Motor Milestone	Sum Total	NA	1003	1	0.07(-0.03,0.17)	0.01000	0.1800	0.9000000	4	Unadj.
WHO Motor Milestone	Sum Total	lactulose concentration	1083	1	0(-0.07,0.08)	0.03000	0.9400	0.9400000	4	Unadj.
WHO Motor Milestone	Sum Total	mannitol concentration	1083	1	0.02(-0.06,0.09)	0.04000	0.6600	0.9111111	4	Unadj.
Extended Ages and Stages Questionnaire	Communication Score	NA	796	1	0.099(0.0088,0.1892)	0.10971	0.0312	0.6240000	5	Adj.
Extended Ages and Stages Questionnaire	Communication Score	lactulose concentration	861	1	0.1051(-0.0707,0.281)	0.01234	0.2438	0.8170286	5	Unadj.
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	862	1	-0.0438(-0.1217,0.0341)	0.01233	0.2737	0.8170286	5	Unadj.
Extended Ages and Stages Questionnaire	Personal Social Score	lactulose concentration	865	1	0.0753(-0.0097,0.1602)	0.00415	0.0820	0.8170286	5	Unadj.
Extended Ages and Stages Questionnaire	Combined	lactulose concentration	861	1	0.0502(-0.1011,0.2015)	0.00150	0.5265	0.8170286	5	Unadj.
Extended Ages and Stages Questionnaire	Communication Score	mannitol concentration	861	1	0.0591(-0.0211,0.1392)	0.00034	0.1494	0.8170286	5	Unadj.
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	862	1	0.0039(-0.0739,0.0817)	0.00210	0.9289	0.9426000	5	Unadj.
Extended Ages and Stages Questionnaire	Personal Social Score	mannitol concentration	865	1	0.1434(0.0386,0.2483)	0.00022	0.0073	0.2920000	5	Unadj., Adj.
Extended Ages and Stages Questionnaire	Combined	mannitol concentration	861	1	0.0522(-0.0284,0.1328)	0.00005	0.2059	0.8170286	5	Unadj.

Table 3: By Outcome

Outcome Domain	Outcome	Exposure	n	t	Adjusted Difference (95% CI)	Unadj. P-value	Adj. P-value	FDR P-value	hyp	signif	dir
Communicative Development Inventories	Expressing	lactulose concentration	976	1	-0.17(-0.33,-0.01)	0.10000	0.04000	0.1333333	1	Adj.	-
Communicative Development Inventories	Expressing	NA	874	2	0.04477(-0.04252,0.13206)	0.02000	0.31947	0.8786571	2	Unadj.	+
Communicative Development Inventories	Understanding	NA	800	1	0.23(0.07,0.39)	0.00000	0.01000	0.1000000	1	Unadj., Adj.	+
Communicative Development Inventories	Understanding	lactulose concentration	979	1	-0.16(-0.3,-0.01)	0.08000	0.03000	0.1333333	1	Adj.	-
Communicative Development Inventories	Understanding	NA	865	2	0.03487(-0.06434,0.13408)	0.01000	0.50089	0.8786571	2	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.11337(-0.00682,0.23356)	0.02000	0.06409	0.8056800	2	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.10444(-0.0138,0.22268)	0.03000	0.08305	0.8305000	2	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	lactulose concentration	861	1	0.0502(-0.1011,0.2015)	0.00150	0.52650	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	mannitol concentration	861	1	0.0522(-0.0284,0.1328)	0.00005	0.20590	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Communication Score	NA	796	1	0.099(0.0088,0.1892)	0.10971	0.03120	0.6240000	5	Adj.	+
Extended Ages and Stages Questionnaire	Communication Score	lactulose concentration	861	1	0.1051(-0.0707,0.281)	0.01234	0.24380	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Communication Score	mannitol concentration	861	1	0.0591(-0.0211,0.1392)	0.00034	0.14940	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	841	2	-0.08429(-0.1647,-0.00387)	NA	0.03961	0.8056800	2	Adj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	841	2	-0.19961(-0.36879,-0.03043)	NA	0.02059	0.8056800	2	Adj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	862	1	-0.0438(-0.1217,0.0341)	0.01233	0.27370	0.8170286	5	Unadj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	862	1	0.0039(-0.0739,0.0817)	0.00210	0.92890	0.9426000	5	Unadj.	+
Extended Ages and Stages Questionnaire	Personal Social Score	NA	698	1	-0.06171(-0.18472,0.06131)	0.05000	0.33055	0.8786571	2	Unadj.	-
Extended Ages and Stages Questionnaire	Personal Social Score	lactulose concentration	865	1	0.0753(-0.0097,0.1602)	0.00415	0.08200	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Personal Social Score	mannitol concentration	865	1	0.1434(0.0386,0.2483)	0.00022	0.00730	0.2920000	5	Unadj., Adj.	+
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	809	1	0.15(-0.05,0.35)	0.00000	0.15000	0.3090909	1	Unadj.	+
WHO Motor Milestone	Milestones 2, 4, 5, 6	lactulose concentration	991	1	-0.11(-0.21,0)	0.24000	0.04000	0.1333333	1	Adj.	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	mannitol concentration	991	1	-0.1(-0.2,0)	0.14000	0.05000	0.1428571	1	Adj.	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	1003	1	0.06(-0.03,0.16)	0.01000	0.16000	0.9000000	4	Unadj.	+
WHO Motor Milestone	Sum Total	NA	809	1	0.14(-0.1,0.37)	0.00000	0.26000	0.4000000	1	Unadj.	+
WHO Motor Milestone	Sum Total	lactulose concentration	984	1	-0.25(-0.49,-0.01)	0.09000	0.04000	0.1333333	1	Adj.	-
WHO Motor Milestone	Sum Total	mannitol concentration	984	1	-0.23(-0.36,-0.09)	0.05000	0.00000	0.0000000	1	Unadj., Adj., FDR	-
WHO Motor Milestone	Sum Total	NA	1003	1	0.07(-0.03,0.17)	0.01000	0.18000	0.9000000	4	Unadj.	+
WHO Motor Milestone	Sum Total	lactulose concentration	1083	1	0(-0.07,0.08)	0.03000	0.94000	0.9400000	4	Unadj.	+
WHO Motor Milestone	Sum Total	mannitol concentration	1083	1	0.02(-0.06,0.09)	0.04000	0.66000	0.9111111	4	Unadj.	+

```
sig_hyp %>%
  arrange(`Outcome Domain`, Outcome) %>%
  kable(booktabs = TRUE,
        caption = "By Outcome") %>%
  kable_styling(latex_options="scale_down")
```

```
sig_hyp %>%
  arrange(Exposure) %>%
  kable(booktabs = TRUE,
        caption = 'By Exposure') %>%
  kable_styling(latex_options="scale_down")
```

```
sig_hyp %>%
  filter(signif != "Unadj.") %>%
  arrange(hyp, Exposure) %>%
  kable(booktabs = TRUE,
```

Table 4: By Exposure

Outcome Domain	Outcome	Exposure	n	t	Adjusted Difference (95% CI)	Unadj. P-value	Adj. P-value	FDR P-value	hyp	signif	dir
WHO Motor Milestone	Sum Total	lactulose concentration	984	1	-0.25(-0.49,-0.01)	0.09000	0.04000	0.1333333	1	Adj.	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	lactulose concentration	991	1	-0.11(-0.21,0)	0.24000	0.04000	0.1333333	1	Adj.	-
Communicative Development Inventories	Understanding	lactulose concentration	979	1	-0.16(-0.3,-0.01)	0.08000	0.03000	0.1333333	1	Adj.	-
Communicative Development Inventories	Expressing	lactulose concentration	976	1	-0.17(-0.33,-0.01)	0.10000	0.04000	0.1333333	1	Adj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	841	2	-0.08429(-0.1647,-0.00387)	NA	0.03961	0.8056800	2	Adj.	-
WHO Motor Milestone	Sum Total	lactulose concentration	1083	1	0(-0.07,0.08)	0.03000	0.94000	0.9400000	4	Unadj.	+
Extended Ages and Stages Questionnaire	Communication Score	lactulose concentration	861	1	0.1051(-0.0707,0.281)	0.01234	0.24380	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	862	1	-0.0438(-0.1217,0.0341)	0.01233	0.27370	0.8170286	5	Unadj.	-
Extended Ages and Stages Questionnaire	Personal Social Score	lactulose concentration	865	1	0.0753(-0.0097,0.1602)	0.00415	0.08200	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	lactulose concentration	861	1	0.0502(-0.1011,0.2015)	0.00150	0.52650	0.8170286	5	Unadj.	+
WHO Motor Milestone	Sum Total	mannitol concentration	984	1	-0.23(-0.36,-0.09)	0.05000	0.00000	0.0000000	1	Unadj., Adj., FDR	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	mannitol concentration	991	1	-0.1(-0.2,0)	0.14000	0.05000	0.1428571	1	Adj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	841	2	-0.19961(-0.36879,-0.03043)	NA	0.02059	0.8056800	2	Adj.	-
WHO Motor Milestone	Sum Total	mannitol concentration	1083	1	0.02(-0.06,0.09)	0.04000	0.66000	0.9111111	4	Unadj.	+
Extended Ages and Stages Questionnaire	Communication Score	mannitol concentration	861	1	0.0591(-0.0211,0.1392)	0.00034	0.14940	0.8170286	5	Unadj.	+
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	862	1	0.0039(-0.0739,0.0817)	0.00210	0.92890	0.9426000	5	Unadj.	+
Extended Ages and Stages Questionnaire	Personal Social Score	mannitol concentration	865	1	0.1434(0.0386,0.2483)	0.00022	0.00730	0.2920000	5	Unadj., Adj.	+
Extended Ages and Stages Questionnaire	Combined	mannitol concentration	861	1	0.0522(-0.0284,0.1328)	0.00005	0.20590	0.8170286	5	Unadj.	+
WHO Motor Milestone	Sum Total	NA	809	1	0.14(-0.1,0.37)	0.00000	0.26000	0.4000000	1	Unadj.	+
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	809	1	0.15(-0.05,0.35)	0.00000	0.15000	0.3090909	1	Unadj.	+
Communicative Development Inventories	Understanding	NA	800	1	0.23(0.07,0.39)	0.00000	0.01000	0.1000000	1	Unadj., Adj.	+
Extended Ages and Stages Questionnaire	Personal Social Score	NA	698	1	-0.06171(-0.18472,0.06131)	0.05000	0.33055	0.8786571	2	Unadj.	-
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.11337(-0.00682,0.23356)	0.02000	0.06409	0.8056800	2	Unadj.	+
Extended Ages and Stages Questionnaire	Combined	NA	699	1	0.10444(-0.0138,0.22268)	0.03000	0.08305	0.8305000	2	Unadj.	+
Communicative Development Inventories	Understanding	NA	865	2	0.03487(-0.06434,0.13408)	0.01000	0.50089	0.8786571	2	Unadj.	+
Communicative Development Inventories	Expressing	NA	874	2	0.04477(-0.04252,0.13206)	0.02000	0.31947	0.8786571	2	Unadj.	+
WHO Motor Milestone	Milestones 2, 4, 5, 6	NA	1003	1	0.06(-0.03,0.16)	0.01000	0.16000	0.9000000	4	Unadj.	+
WHO Motor Milestone	Sum Total	NA	1003	1	0.07(-0.03,0.17)	0.01000	0.18000	0.9000000	4	Unadj.	+
Extended Ages and Stages Questionnaire	Communication Score	NA	796	1	0.099(0.0088,0.1892)	0.10971	0.03120	0.6240000	5	Adj.	+

Table 5: Only Significant Adj/FDR Corrected

Outcome Domain	Outcome	Exposure	n	t	Adjusted Difference (95% CI)	Unadj. P-value	Adj. P-value	FDR P-value	hyp	signif	dir
WHO Motor Milestone	Sum Total	lactulose concentration	984	1	-0.25(-0.49,-0.01)	0.09000	0.04000	0.1333333	1	Adj.	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	lactulose concentration	991	1	-0.11(-0.21,0)	0.24000	0.04000	0.1333333	1	Adj.	-
Communicative Development Inventories	Understanding	lactulose concentration	979	1	-0.16(-0.3,-0.01)	0.08000	0.03000	0.1333333	1	Adj.	-
Communicative Development Inventories	Expressing	lactulose concentration	976	1	-0.17(-0.33,-0.01)	0.10000	0.04000	0.1333333	1	Adj.	-
WHO Motor Milestone	Sum Total	mannitol concentration	984	1	-0.23(-0.36,-0.09)	0.05000	0.00000	0.0000000	1	Unadj., Adj., FDR	-
WHO Motor Milestone	Milestones 2, 4, 5, 6	mannitol concentration	991	1	-0.1(-0.2,0)	0.14000	0.05000	0.1428571	1	Adj.	-
Communicative Development Inventories	Understanding	NA	800	1	0.23(0.07,0.39)	0.00000	0.01000	0.1000000	1	Unadj., Adj.	+
Extended Ages and Stages Questionnaire	Gross Motor Score	lactulose concentration	841	2	-0.08429(-0.1647,-0.00387)	NA	0.03961	0.8056800	2	Adj.	-
Extended Ages and Stages Questionnaire	Gross Motor Score	mannitol concentration	841	2	-0.19961(-0.36879,-0.03043)	NA	0.02059	0.8056800	2	Adj.	-
Extended Ages and Stages Questionnaire	Personal Social Score	mannitol concentration	865	1	0.1434(0.0386,0.2483)	0.00022	0.00730	0.2920000	5	Unadj., Adj.	+
Extended Ages and Stages Questionnaire	Communication Score	NA	796	1	0.099(0.0088,0.1892)	0.10971	0.03120	0.6240000	5	Adj.	+

```
caption = 'Only Significant Adj/FDR Corrected' ) %>%
kable_styling(latex_options="scale_down")
```