This study aimed at assessing the effect of short duration skin to skin contact (SSC) (5 days) on preterm infants’ physiological and behavioural outcomes. A quasi-experimental control group design was utilized. 89 stable preterm infants were allocated to either an interventional or control group. Results showed that in comparison to the control group, newborns in the SSC group demonstrated higher weight gain (g/day) from day 3-5 of practicing SSC (53.7g Vs. 32.6 g; p<.05), experienced significantly fewer numbers of apneas (48% Vs. 33.3%; p=.001), and were less likely to use formula feeding (60% Vs. 90%) and more likely to use mixed feeding (formula and breastfeeding) at discharge (33.3% Vs. 10%). Significant differences were also found in the crying, and sleeping patterns of the infants; infants of mothers who practiced SSC were less likely to cry in a continuous pattern and more likely to experience good sleep than infants in the control group. The study highlights the importance of the early and short duration of SSC for preterm infants.