

LIST OF FIGURES

| FIGURE NO | FIGURE TITLE | PAGE NO |
|------------------------------|---|---------|
| INTRODUCTION | | |
| 1.1 | Global Nutrition Targets 2025 | 2 |
| 1.2 | Sustainable Development Goals (SDG's) 2030 | 2 |
| 1.3 | Changes in Nutritional Indicators of Children Under 5 Years (%) | 5 |
| 1.4 | Prevalence of Undernutrition in Children Under 5 Years | 6 |
| 1.5 | Map of Prevalence of Stunting in Indian Districts (2015-16) | 7 |
| REVIEW OF LITERATURE | | |
| 2.1 | Global Nutrition Targets 2025 | 12 |
| 2.2 | Sustainable Development Goals (SDG's) 2030 | 12 |
| 2.3 | Global Malnutrition trends | 16 |
| 2.4 | Global prevalence of stunting | 17 |
| 2.5 | Global prevalence of wasting | 17 |
| 2.6 | Changes in Nutritional Indicators of Children Under 5 Years (%) | 19 |
| 2.7 | Undernutrition status in different states of India | 20 |
| METHODS AND MATERIALS | | |
| 3.1 | Stakeholders Involved in the Study | 28 |
| 3.2 | Location of Gujarat | 29 |
| 3.3 | Location of Surat City | 29 |
| 3.4 | An Overview of the Study | 30 |
| 3.5 | Experimental Design of Phase I | 32 |
| 3.6 | Sample Selection – Process Flow | 33 |
| 3.7 | Experimental Design of Phase II | 36 |
| 3.8 | Organization for the Public-Private Partnership Model | 39 |
| 3.9 | Process Flow for Implementation of Public-Private Partnership | 40 |

| | | |
|---|--|----|
| 3.10 | Experimental Design of Phase III | 49 |
| PHASE I RESULTS AND DISCUSSION | | |
| 4.1.1 | Score for knowledge of Anganwadi Workers (AWWs) on objectives and beneficiaries of ICDS | 53 |
| 4.1.2 | Practices of anganwadi workers regarding NHE and its delivery to pregnant woman | 54 |
| 4.1.3 | Knowledge among AWWs regarding importance of NHE | 54 |
| 4.1.4 | Knowledge and Practices of AWWs related to Growth Monitoring | 55 |
| 4.1.5 | Perceptions and Practices of AWWs related to other ICDS services | 56 |
| 4.1.6 | Frequency of home visits conducted for SAM children by AWWs | 57 |
| 4.1.7 | Knowledge and Perceptions among AWWs related to Early Registration of Preganancy | 57 |
| 4.1.8 | Operational challenges related to infrastructure faced by AWWs | 59 |
| 4.1.9 | Problems faced by Anganwadi Workers in service delivery | 60 |
| PHASE II RESULTS AND DISCUSSION | | |
| 4.2.1 | Percentage (Number of cases) of children missing information on variables used in analysis (N= 974) | 62 |
| 4.2.2 | Distribution by standard age and gender grouping | 63 |
| 4.2.3 | Distribution of sample by age in months | 64 |
| 4.2.4 | Scatter Plot Distribution of sample by age in months according to the geographical location | 64 |
| 4.2.5 | Z score distribution of study sample by age groups | 69 |
| 4.2.6 | Weight for Age Z Score comparison with WHO Standard | 71 |
| 4.2.7 | Height for Age Z Score comparison with WHO | 73 |
| 4.2.8 | Weight for height Z score comparison with WHO Standard | 75 |
| 4.2.9 | Cluster wise distribution of Undernutrition | 76 |
| 4.2.10 | Mean Z Score Distribution Across Experimental Group | 76 |
| 4.2.11 | Mean Z Score Distribution Across Control Group | 77 |
| PHASE III RESULTS AND DISCUSSION | | |
| 4.3.1 | Current practices, gaps in ICDS functioning and immediate plan of action as reported by Medical Officials, ICDS, Surat | 80 |
| 4.3.2 | Issues and Concern of Medical Officials, ICDS, Surat City | 82 |

| | | |
|--------|--|-----|
| 4.3.3 | Impact of BCC and PPP Intervention on IYCN Practices | 87 |
| 4.3.4 | Changes in AWWs perception about benefits of timely initiation of Complementary Feeding post intervention | 88 |
| 4.3.5 | Impact of PPP Intervention on Accreditation scores of Experimental AWCs | 94 |
| 4.3.6 | Impact of PPP Intervention on Accreditation scores of Control AWCs | 95 |
| 4.3.7 | Attendance of children beneficiaries in EG AWCs | 95 |
| 4.3.8 | Service Utilization in EG AWCs | 96 |
| 4.3.9 | Impact of Intervention on Initiation of Breast Feeding within 1 hour | 98 |
| 4.3.10 | Impact of Intervention on Pre-lacteal Feeding | 99 |
| 4.3.11 | Impact of Intervention on Colostrum Feeding | 99 |
| 4.3.12 | Changes in attitude for continuation of breast feeding | 101 |
| 4.3.13 | Impact of intervention on water feeding practices in infants (< 6 months of age) | 102 |
| 4.3.14 | Impact of intervention on initiation of complementary feeding | 106 |
| 4.3.15 | Proportion of mother child compliance to intervention in experimental group – Anganwadi center wise | 114 |
| 4.3.16 | Ranking of the Anganwadi centers based on percentage reduction in WAZ, WHZ and HAZ scores | 114 |
| 4.3.17 | Underweight Status of Experimental and Control Children Pre and Post Intervention | 116 |
| 4.3.18 | Shift in the Underweight Curve Post Intervention Compared to Standard Curve of Experimental Group Children (0-60 Months) | 116 |
| 4.3.19 | Underweight Status of Experimental and Control Children Pre and Post Intervention (0 – 23 months Boys) | 118 |
| 4.3.20 | Underweight Status of Experimental and Control Children Pre and Post Intervention (0 – 23 months Girls) | 118 |

| | | |
|--------|---|-----|
| 4.3.21 | Underweight Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Boys) | 119 |
| 4.3.22 | Underweight Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Girls) | 119 |
| 4.3.23 | Stunting Status of Experimental and Control Children Pre and Post Intervention | 121 |
| 4.3.24 | Shift in the Stunting Curve Post Intervention Compared to Standard Curve of Experimental Group Children (0-60 Months) | 121 |
| 4.3.25 | Stunting Status of Experimental and Control Children Pre and Post Intervention (0 - 23 months Boys) | 123 |
| 4.3.26 | Stunting Status of Experimental and Control Children Pre and Post Intervention (0 - 23 months Girls) | 123 |
| 4.3.27 | Stunting Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Boys) | 124 |
| 4.3.28 | Stunting Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Girls) | 124 |
| 4.3.29 | Wasting Status of Experimental and Control Children Pre and Post Intervention | 126 |
| 4.3.30 | Shift in the Wasting Curve Post Intervention Compared to Standard Curve of Experimental Group Children (0-60 Months) | 127 |
| 4.3.31 | Wasting Status of Experimental and Control Children Pre and Post Intervention (0 - 23 months Boys) | 128 |
| 4.3.32 | Wasting Status of Experimental and Control Children Pre and Post Intervention (0 - 23 months Girls) | 129 |
| 4.3.33 | Wasting Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Boys) | 129 |
| 4.3.34 | Wasting Status of Experimental and Control Children Pre and Post Intervention (24 - 60 months Girls) | 130 |
| 4.3.35 | Nutritional Status of Experimental and Control Group Children 0-60 months Pre and Post Intervention | 132 |

| | | |
|--------|---|-----|
| 4.3.36 | Change in level of underweight (WAZ score) gender wise among children 0 – 60 months of age after intervention | 132 |
| 4.3.37 | Change in level of Wasting (WHZ score) gender wise among children 0 – 60 months of age after intervention | 133 |
| 4.3.38 | Change in level of Stunting (HAZ score) gender wise among children 0 – 60 months of age after intervention | 133 |
| 4.3.39 | Impact of PPP Intervention on Mean Z-Score Shift of Nutritional Status Indicator's in Experimental Group | 134 |
| 4.3.40 | Mean Z-Score Shift of Nutritional Status Indicator's in Control Group | 134 |
| 4.3.41 | Impact of PPP Intervention on % Shift in Undernutrition (<-2 SD) in Children 0 – 60 Months of Age | 135 |
| 4.3.42 | Impact of intervention on immunization status | 137 |
| 4.3.43 | Impact of intervention on morbidity profile and treatment acquired | 138 |