

Nutritional Status Assessment Of Children In Salem District: An Empirical Study

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Abstract

As Part Of The Empirical Research Initiatives The Students Of Pg And Research Department Of Social Work In Collaboration With Don Bosco Anbuillam Salem Took Up A Nutritional Status Assessment Survey At Court Road Colony, Nanjampatty, Kichipalayalayyam Slums &Sathyanagar Village In Salem District, Tamilnadu, India Between The Period Of 1st February And 5th February 2021. The District Rural Development Agency Of Salem Under The Guidance Of The District Collector Had Suggested That A Survey Be Done On The Prevailing Nutritional Status Of Children Below The Age Of 18 Years In Sample Areas Of Salem, With A Focus On Planned Intervention To Be Delivered To The Target Population As Per The Result Of The Survey, The Scientific Nature Of The Survey Enabling It To Be Generalised To The Other Homogenous Areas Of Salem. The Objective Of The Study Was To Identify High-Risk Groups And To Assess The Role Of Different Socio-Demographic Factors In Nutritional Status. The Study Findings Would Facilitate Nutritional Recommendations And Interventions, Paving Way For Resource Mobilization To Design And Deliver Interventions To The Beneficiaries In The Surveyed Area. Stratified Simple Random Sampling Method Was Adopted For The Study. Interview Schedule Method (Google Forms) Was Used To Collect Quantitative Data. Focussed Group Discussion And Participatory Rural Appraisal (Pra) Techniques Were Used To Corroborate The Quantitative Findings. The Data Collected Was Analysed Using Statistical Package For Social Sciences, Descriptive And Inferential Statistics Were Computed. Findings Of The Study Would Be Presented In The Full Paper.

Keywords: Nutritional Status, Empirical Study, Qualitative Assessment, Bmi

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Introduction

Regardless Of Which Parts Of The World They Live In, Most Children Will Develop And Grow At A Similar Rate If Proper Nutrition Is Ensured. Children From Developing Countries Are At Risk For Primary Malnutrition. Children Undergoing Anticancer Therapy Are At Higher Risk For Secondary Malnutrition, Including Obesity And Growth Retardation. Periodic Nutritional Assessments Are Important For Planning Effective Dietary Interventions For Such Children. (Mosby, 2009)

As Part Of The Empirical Research Initiatives The Students Of Pg And Research Department Of Social Work In Collaboration With Don Bosco Anbuillam Salem Took Up A Nutritional Status Assessment Survey At Court Road Colony, Nanjampatty, Kichipalayalayyam Slums & Sathyanagar Village In Salem District, Tamilnadu, India Between The Period Of 1st February And 5th February 2021. The District Rural Development Agency Of Salem Under The Guidance Of The District Collector Had Suggested That A Survey Be Done On The Prevailing Nutritional Status Of Children Below The Age Of 18 Years In Sample Areas Of Salem, With A Focus On Planned Intervention To Be Delivered To The Target Population As Per The Result Of The Survey, The Scientific Nature Of The Survey Enabling It To Be Generalised To The Other Homogenous Areas Of Salem. The Nutritional Assessment Survey Was Done To Obtain Information About The Prevalence And Geographic Distribution Of Nutritional Status Within The Sampled Community Amongst The Mothers Of Children Below The Age Of 18 Years. One Of The Strongest Predictors Of Malnutrition In This Analysis Was Mother's Working Status. Children Of Nonworking Mothers Have Better Nutritional Status Than Children Of Working Mothers, Possibly Due To More Time For Caring Of Children (**Gopaldas (1998) & Shah (2003)**).

Objectives

The Objective Of The Study Was To Identify High-Risk Groups And To Assess The Role Of Different Socio-Demographic Factors In Nutritional Status. The Study Findings Would Facilitate Nutritional Recommendations And Interventions, Paving Way For Resource Mobilization To Design And Deliver Interventions To The Beneficiaries In The Surveyed Area. Realising The Scarcity Of Resources, In A Developing Country Like Ours, The Goal Was Not To Examine The Entire Population In The Community, But Limit The Survey To A Representative Group, Through A Scientific Research Process, So That The Results Can Be Generalised To The Entire Community.

Materials And Methods

Sampling Design:

Region	Number Of Streets(Strata)	Number Of Households In Each Street	Sampling Units	Sample Actually Surveyed
Court Road Colony	6	350 Houses	350	243
Nanjampatti	7	500 Houses	500	288
Sathya Nagar	7	500 Houses	500	35
Kitchipalyam	12	1000 Houses	1000	148

The Universe Of The Study Comprised Of Court Road Colony (350 Households), Nanjampatty (500 Households), Sathya Nagar (500 Households) And Kichipalayam (1000 Households). The Sample Studied Includes Court Road Colony (243 Households), Nanjampatty (288 Households), Sathya Nagar (35 Households) And Kichipalayam (148 Households). A Total Of 69social Work Students Were Involved In The Survey, They Were Divided Into Teams Of Two Member Each. Each Team Covered On An Average 6 / 7 Households, In Every Region Except In Sathyanagar (Local Festivity Limited The Scope For Data Collection) Totalling 716households. Thus**stratified Simple Random Sampling Method** Was Adopted For The Study Though It Was Envisioned To Do Adopt Census

Method. Non Availability Of Members In The Sampled Households Resulted In The Lower Number Of Actually Surveyed Households, Though Alternative Inclusive Strategy Was Adopted.

Interview Schedule Method (Google Forms) Was Used To Collect Quantitative Data On The Nutritional Status Of Children Below The Age Of 18 Years (From The Mothers On The Youngest Child In The Family).

Focussed Group Discussion and Participatory Rural Appraisal (Pra) Techniques were Used To Corroborate The Quantitative Findings. Qualitative Inputs Were Collected From The Children In The Surveyed Households And From The General Public.

Descriptive And Inferential Findings

The Data Collected Was Analysed Using Statistical Package For Social Sciences, Descriptive And Inferential Statistics Were Computed And The Salient Findings Are Presented Below:

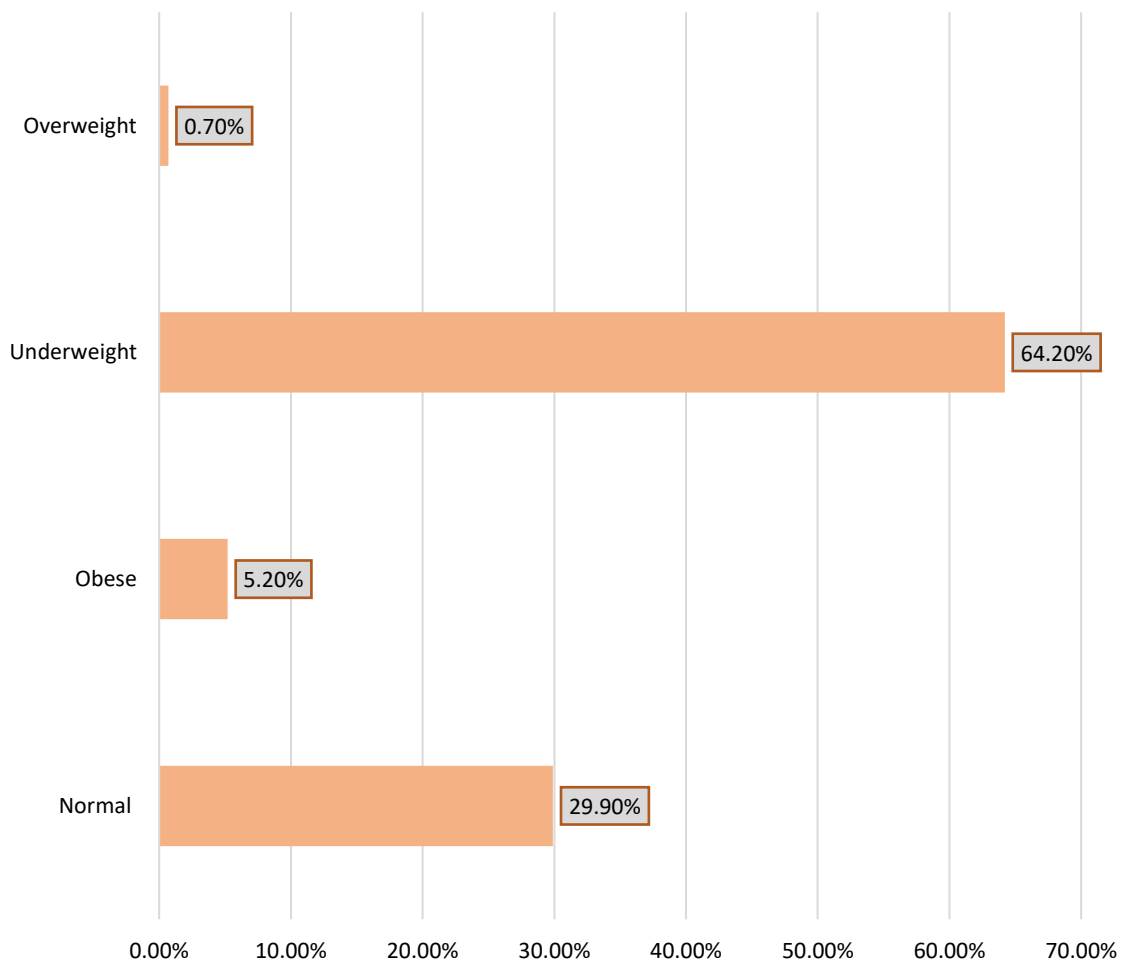


Fig.: 1 distribution Of Respondents By Their Bmi

Survey Findings As Evident From The Above Graph Reveal That Majority Of The Respondents (64.20%) Were Found To Be Underweight. A Further Analysis Of The Data Highlights The Scope For Intervention For This Group, Narrowing Down The Target Group Further, Thereby Facilitating The Way Forward To Be Chalked Out In A More Scientific Manner.

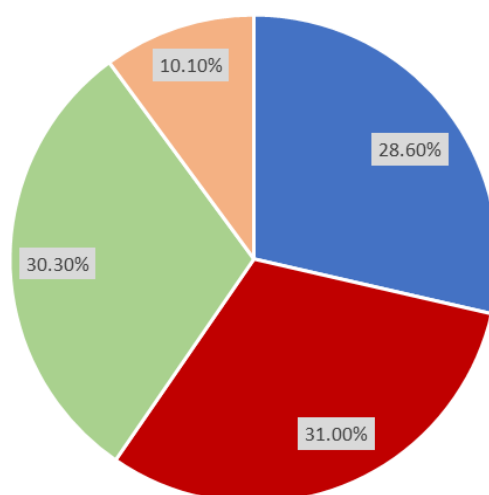


Fig.: 2 ■ 5 Years and Below ■ 6-10 Years ■ 11-15 Years ■ 16 Years and Above **Distribution Of Respondents By Their Age**

Table 1

Difference Between Varied Age Groups Of The Respondents And Their Bmi

Variable	Sd	Mean Square	Mean	Statistical Inference
Age				
Between Groups	10.472	460.592	G1=17.01	F= 8.889 Df=3 P<0.05 Significant
Within Groups	5.878	51.815	G2=15.44	
	4.606		G3=17.05	
	5.744		G4=20.44	

G1= 5 Years And Below, G2= 6-10 Years, G3= 11-15 Years, G4= 16 Years And Above

(Note - Lower Mean Value Indicates Underweight Condition Of The Children)

The Survey Findings Reveal That It Is The Age Group Of 6-10 Years That Require Nutritional Intervention As They Are Found To Be More Underweight Than The Other Age Groups.

Table 2
Cross Tabulation Between The Respondents Gender And Their Bmi

Gender	Bmi Categorisation				Total
	Normal	Obese	Underweight	Overweight	
Male	101	14	219	3	337
Female	113	23	241	2	379
Total	214	37	460	5	716

Female Children Are Found To Be Slightly More Underweight Than The Male Children.

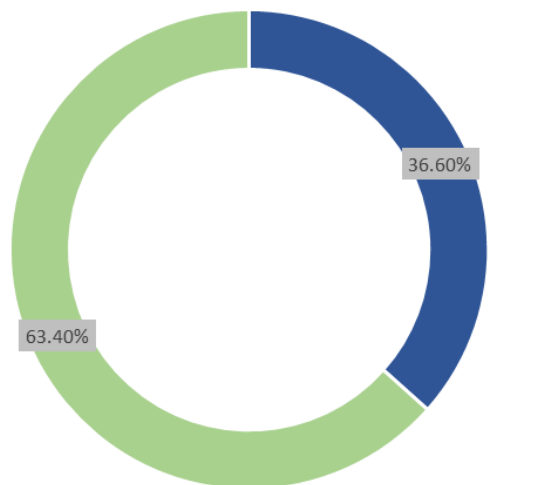


Fig.: 3
Respondents ■ Less than 6 months ■ Beyond 6 months to 1 Year **Distribution Of**
Of Exclusive Breast Feeding **By Their Duration**

Importance Of Breast Feeding The Infants Has Been Emphasised By The Health Care Professionals And There Are Proven Scientific Findings Substantiating The Correlation Between Breast Feeding Of The Infants And Their Healthful Living Later On In Their Lives. This Has Been Further Reiterated By The Findings From The Inferential Finding As Presented Below:

Table 3
Difference Between The Duration Of The Respondents' Exclusively Breast Feeding
Their Children And The Children's Bmi

Variable	N	Mean	Sd	Statistical Significance
Less Than 6 Months	262	16.62	7.180	T=.732 Df=712 P<0.05 Significant
Six Months To 1 Year	452	17.03	7.398	

(Note - Lower Mean Value Indicates Underweight Condition Of The Children)

From The Above Table It Is Evident That There Is A Significant Difference Between Children The Duration Of The Respondents Exclusively Breast Feeding Their Children And The Children's Bmi. Further From The Mean Values It Is Seen That Children Who Were Breast Fed For A Period Of Less Than 6 Months Are Underweight Than Those Children Who Were Breast Fed For A Period Of One Year.

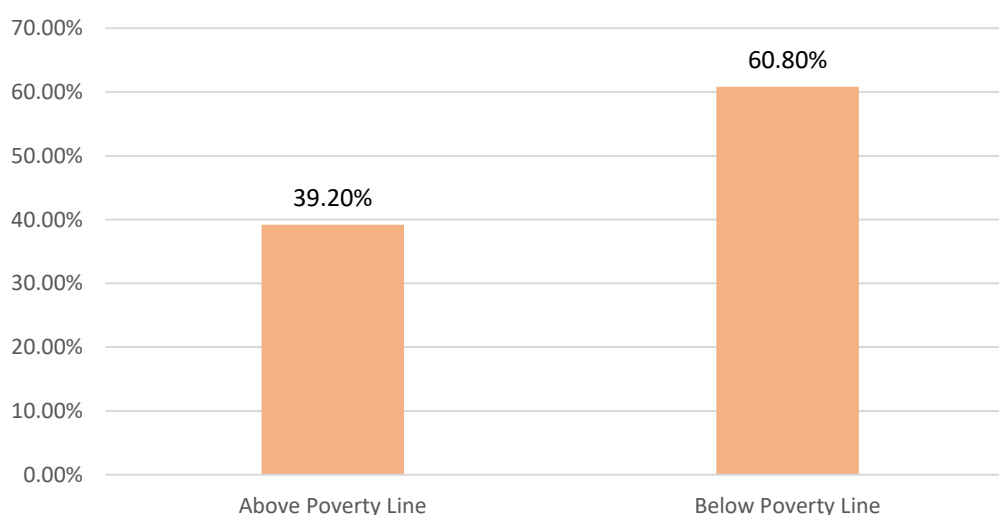


Fig.: 4distribution Of Respondents By Their Socio-Economic Status

Majority Of The Respondents (60.80%) From The Surveyed Slums Are In Below Poverty Line.

Table 4

Cross Tabulation Between The Respondents Socio-Economic Status And Their Bmi

Socio-Economic Status	Bmi Categorisation				Total
	Normal	Obese	Underweight	Overweight	
Above Poverty Line	86	10	182	3	281
Below Poverty Line	128	27	278	2	435

Total	214	37	460	5	716
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From The Above Table It Is Seen That Most Of The Underweight Children Are Hailing From Families In Below Poverty Line. The Intervention Plan Can Accordingly Be Prioritised.

Table 5

Cross Tabulation Between The Illness Treated Among Morbid Children Of The Respondents And The Children's Bmi

Illness Treated Among Morbid Children	Bmi Categorisation				Total
	Normal	Obese	Underweight	Overweight	
Yes	11	4	27	1	43
No	203	33	433	4	673
Total	214	37	460	5	716

From The Above Table It Is Seen That Children's Whose Morbid Condition Had Not Been Attended To By Their Parents / Caretakers Are Found To Be More Underweight, In Terms Of The Sheer Number.

Table 6

Difference Between Varied Regions The Respondents Belong To And Their Bmi

Variable	S. D	Mean Square	Mean	Statistical Inference
Region				
Between Groups	9.548	394.313	G1=18.85	F= 7.569
Within Groups	5.581	52.095	G2=15.85	Df=3
	4.868		G3=16.73	P<0.05
	5.935		G4=16.01	Significant

G1= Court Road Colony (243), G2= Nanjampatty (288), G3= Sathya Nagar (35),

G4= Kichipalayam (148)

Note: Lower Mean Value Indicates Underweight Condition Of The Children

From The Above Table It Is Evident That Those Children Who Hail From Nanjampatti Are Found To Be More Underweight Than The Children From The Other Areas.

As Part Of The Qualitative Data Collection Initiative Pra Using Problem Analysis Was Done At Nanjampatti And The Following Problems Were Elicited From The Local Community:

Poverty And Malnutrition Were Cited As The Major Sources Of Concern By The Local Community, The Reason For The Same Being Lack Of Adequate Education Amongst The Localities, As Opined By The Community Themselves, Who Participated In The Pra.

The Other Socio-Demographic Findings Of The Study Reveal That Mothers Are The Caretakers Of Majority Of The Children Surveyed And Most Of Them Are Homemakers. They Are Literates As Well.

Hence Our Proposed Intervention Plan Needs To Focus On Enabling The Mothers To Have An Insight On The Need For Adequate Nutritional Supplements To Their Children And Facilitate Access And Availability Of Nutritional Provisionsto Be Given To Their Children. Monitoring Of The Progress Made In Terms Of Adherence To The Standard Operating Procedures (Sop) To Be Laid Down For This And Improvements Evident In The Nutritional Status Of The Children Needs To Be Evaluated.Further The Mothers Have Stated In The Survey That They Do Provide Their Children With Non-Veg Food, Vegetables, And Fruits At-Least Once A Week, However The Fgd Done With The Children As Part Of The Qualitative Data Collection Did Not Show Evidence For This. In-Fact Most Of The Children Stated That They Eat Only Once A Day And That They Do Not Take Their Morning Breakfast. Continued Support To The Mothers In Terms Of Sensitization And Provision Of Nutritional Supplements Might Be Required As Socio-Economic Constraints Are The Major Hindrance In Ensuring Access To A Nutritious Diet For The Children.

Implications For Social Work Intervention

- Sessions With The Mothers On The Importance Of Nutritious Diet For The Children To Prevent Malnutrition Related Disorders.
- Nutritive Supplements For The Children.
- To Enable Effective And Continuous Participation Of Beneficiary Children In The Programme We Propose That Evening Tuition Centres Be Run (Age-Appropriate) And Nutritive Supplements To Be Provided On All Working Days Serving The Dual Purpose Of Enhancing Their Academic Learning As Well As Their Good Health.
- Monitoring And Evaluation Of The Progress Made By The Children.
- A Team Comprising Faculty Of Social Work Department Bishop Heber College And Don Bosco Would Continuously Monitor And Evaluate The Implementation Of Proposed Plans.

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