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ROLE OF ICT IN IMPROVING QUALITY OF EDUCATION IN FOOD SCIENCE AND NUTRITION -REFERENCE TO NEP 2020

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Abstract

According to NEP 2020 ICT provides various chances to learners and make teachers aware of their new roles & responsibilities in educational set up. The growing use of ICT will change many of the strategies employed by both teachers and students in the learning process. The role of ICT in the educational administration is recurring and unavoidable.The paperfocuses on Role of Information and Communication Technology in the effective teaching and learning of FoodScience and Nutrition subject in our new education system. It reviewed the concept of ICT, and its place in teachingand learning. ICT tools that is suitable for use in the FoodScienceand Nutrition subject. The benefit of using ICT and factors affecting the effective use of ICTin Food Science and Nutrition subject were highlighted.This paper also attempts to address ways of improving or enhancing the ICTs teaching/learning of Food Scienceand Nutrition subject.

Keywords- ICT, NEP 2020, Food Science and Nutrition, Teaching, Learning

Introduction

ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters (UNESCO, 2002). Information and Communication Technology (ICT) is increasingly becoming essential part of the education system. ICT has completely changed the style of functioning of the educational system.

As per the NEP 2020, technology in education shall be given major emphasis. It involves several disruptive technologies which are likely to bring major changes in the ways of teaching and learning in the institutes. The vision for **NEP 2020** is "Technology use and Integration" in order to give a pathway for the students to make India a digitally empowered society and knowledge economy around the globe.

Many institutes are likely to implement the blended learning methods which involve a combination of classroom teaching with online lectures. Also, the introduction of a Academic Bank of Credits in the NEP 2020 has given rise to collaborative working among the colleges and universities to

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ICT stands for Information and Communication Technology. It is defined as the application of technology in processing of information and communication which includes the use of computers and software to not only convert and store but also process, transmit and retrieve information. National policy on ICT (NCF 2005), has defined it as all devices, tools, content, resources, forums, and services, digital and those that can be converted into or delivered through digital forms, which can be deployed for realising the goals of teaching learning, enhancing access to and reach of resources, building of capacities, as well as management of the educational system.

The Role of Information and Communication Technology in Food Science& Nutrition Education

In order to make dissemination of information easier for the teacher of Food and Nutrition,information and communication technology gadgets are used to record, direct, lead and teach studentsin learning specific concepts. Information and communication devices make learning in Food Science andNutrition are interesting, fascinating, effective, efficient exciting and explorative. (F.A Anerua and J. D. Azonuche 2010)

ICT are used for the following

In the Food Science and Nutrition lessons, the teacher can avail himself/herself with the following ICTs tools to teach the students:

- Imaging e.g. using digital camera or a digital microscope to record practical lessons from stage to stage or a scanner to take cross sections of different types of products e.g. bread making, cake making and decorations.
- Using the computer to show a flow chart of how a product is going to be made.
- Find recipes from the web in the internet and also develop recipes from the internet.
- Using iPad to access recipes different from the traditional ones.
- Using the internet to perform nutritional analysis and comparing dietary information from different countries of the world.
- Using the hedonic scale to present the sensoring evaluation of foods during practical lessons.
- Use range of information channels such as face book, twitter, and drop box to share and get information on nutrition topics.
- Using computer mediated communication (one on one, one too many to many) e.g. email, surfing the internet.
- Using the spreadsheets to track the nutritional intake of people over time and students could write down suitable captions.

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resource forintellectual enhancement. Snyder and Tadesse (1995) assented that Internet service have madecommunication easier. With this, the foodnutritionist can share knowledge across borders andobtain needed information of other parts of the world to enhance learning and teaching of the course.

The computer can be used to carry out many mathematical calculations required in assessingthe nutritional status of people. Mkpughe (2009) listed the functions of the computers to include

- Diet Analysis programme that is designing diets and comparing them with the specification ofthe diet order
- Use in food service department to store reciepe, calculate the number of meals and amount offood to prepare print menus, maintain a current inventory and generate orders according topredicted needs.
- They can combine the menu file from food service department with specific diet orders togenerate a list of food options for each diet.
- The computer provides shopping information on how to read food labels, determine unitprice, plan meals and reduce wastage.
- It assists dieticians in their duties by selecting alternative feeding programmes for their client.

Internet

Nowa day, a member of the family has mobile telephone service (MTS) and personal computers withfull access to the Internet network. According to Njoku (2007) the information that brings aboutbreakthrough in research cones from the web in the present world because any information that isvaluable is uploaded in the Internet almost instantly. The web provides the teacher and student with anamazing source of world-class current data. The Internet enhances both the teacher and students topurchase relevant resource books and students will have access to unlimited literature and referencematerials of Food Scienceand Nutrition topics.Information channels such as email, face book, whatsApp,telegram, twitter, and drop box, also help to share and get information on nutrition topics.

The Internet bought about

a. The online programming study

b. The chats internet study

c. The E-mail Internet study.

Artificial Intelligence

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1. **Multiple Sensory Deliveries:** ICTs in teaching Food Scienceand Nutritionwillprovide multiple sensory channels, thereby allowing students with various learning preferences to assimilate and apply the knowledge.

2. **Increased Self expression and Active learning:** ICTs provide stimulating environments that encourage students' involvement in the learning process.

3. **Co-operation learning:** Introducing the new technologies into the learning environment has been shown to support the accepted student centered curriculum which encourage cooperative learning and to stimulate increased teacher/student interaction.

4. **Promoting Critical Thinking:** Both the structure and the use of technology could promote higher level of thinking.

5. **Enhanced Communication Skill:** The communication skills of students are enhanced when appropriate technologies are utilized in Food and Nutritionlessons.

6. **Multicultural Education:** Telecommunications, internet, teleconferencing and telecommuting make it possible to expand classroom "walls" and to link students and international interactive exchanges.

7.**Individualization:** ICTs offer students broad and self paced learning by allowing them to progress at their own rate in a non threatening environment. This is vital especially in food and nutrition programmes where individualized assignment is highly encouraged.

8. **Motivation:** Motivating students is a constant challenge toFoodScience and Nutrition lessons. Multimedia instructions could inspire students and home economics teachers by making learning exciting, relevant and rewarding.

Factors Affecting Effective Use of ICT in Teaching/Learning of Food Scienceand Nutrition Subject

1. Teachers lack ICT skills: Every ICT project has its own appropriate programme and language of documentation. The information stored in the system can be taken out when it is needed. This requires theknowledge of an expert without which storage or retrieval will be difficult.Most of the teachers lack proficiency in the use of ICTs, they prefer to use obsolete materials they were taught with and are reluctant to take off sometimes to acquire ICTs skills.

2. Inadequate Trained Support Staff: Lack of adequately trained educational technologists in schools and colleges has also hindered the deployment of ICT in FoodScience and Nutrition laboratories; such staff could complement the effort of teachers with the use of ICTs.

3. Erratic and unstable power supply: The computer has to make use of electrical power to perform. Computers work effectively and efficiently on a very conducive atmosphere where there

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This is to certify that the article entitled

MOTHER'S EDUCATION LEVEL INFLUENCING THE ACQUISITION OF KNOWLEDGE ON NUTRITION THROUGH COUNSELLING

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MOTHER'S EDUCATION LEVEL INFLUENCING THE ACQUISITION OF KNOWLEDGE ON NUTRITION THROUGH COUNSELLING

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Abstract

Nutrition of Pre-School child is of paramount importance, because the foundation for life time health, strength and intellectual vitality is laid during this period. Nearly half of all deaths in children under 5 are attributable to undernutrition. India is one among the many countries where child malnutrition is severe. A mother is the first one to know and connect with her child. Hence knowledge of mothers has an important role in the maintenance of nutritional status of the children. A mother's education level has a long-lasting effect on her children. Education level is one of the personal variables likely to have a positive impact on acquisition of knowledge by the respondents and development of attitude and practices by them. In this study, it purports to verify, there will be significant association between the mothers educational status and their knowledge gain on child nutrition through counselling intervention. 300 Mothers and their preschool children aged 3-5 years belongs to pravaranagar region of Ahmednagar District, Maharashtra State, India, were selected for the counselling intervention programme study. Out of these 300 mothers 153 mothers treated as the experimental group for intervention and the other 147 as the control group. The experimental group received nutrition education through counselling by the researcher, while the control group did not. The educational level of the mother was considered as the matching variable for both the experimental and the control groups. The impact of nutritional counselling on the nutritional knowledge gain scores of mothers was significantly (p-value < 0.05) increased according to their educational status.

Keywords- Counselling, Education level, Knowledge, Nutrition, Mother.

Introduction

Malnutrition is the most severe consequence of food insecurity amongst children under the age of 5 years. Acute malnutrition can lead to morbidity, mortality and disability, as well as impaired cognitive and physical development with an increased risk of concurrent infections (Wali N,et al;2019). A mother is the principal provider of the primary care that her child needs during the first six years of its life. The type of care she provides depends to a large extent on her knowledge and understanding of some aspects of basic nutrition and health care. It is understandable that her educational status has been reported to influence her child-care practices. Many research shows that there is a strong linkage between maternal education and children's health. Maternal education is an important determinant of infant and child mortality (Caldwell JC 1981, Chen LC 1986). Children born to educated women suffer less from malnutrition which manifests as underweight, wasting and stunting in children. Maternal education has been associated with nutrition outcomes among children in studies in various settings including (Handa S 1999, Frost MB et al;2005, Kabubo-Mariara J et al;2008, Abuya BA, et al;2011). However, It cannot be assumed either that the mothers of malnourished children are necessarily ignorant or that all illiterate mothers, whether their children are healthy or malnourished, are ignorant (Kimati VP, 1986). Their knowledge of child nutrition and child-care practices can be expected to have a significant bearing on their children's nutritional status, but conflicting results have been reported in this regard. Whereas some studies have observed a positive relationship between childhood malnutrition and maternal knowledge and beliefs regarding nutrition (Srikantia SG, Sastry CY; 1972, Smith MF, et al; 1983) and others have shown no such relationship [Walia BNS, Gambhir SK 1975, Grant K, Stone T, 1986).

Against this background, this study focuses on, to verify there will be significant association between the mother's educational status and their knowledge gain on child nutrition through counselling.

Primary School	56	-	-	7	12.5	49	87.5
Secondary School	166	-	-	30	21.67	136	78.31
Higher Secondary School	126			64	50.79	62	49.21
Under graduate (UG)	102	30	29.41	36	35.29	36	35.30
Graduate/Post graduate(PG)	49	19	38.77	10	20.41	20	40.82
Total	504	49	**9.72**	147	**29.17**	308	**61.11**

n=number

The table 1 also indicates that as the educational level of the mothers decreased the knowledge scores were also lowered. A high proportion of the respondents whose were illiterate or had studied only up to primary and secondary school had 'poor' knowledge on nutrition. As the educational level of the mothers raised the proportion of the respondents with 'fair' and 'good' knowledge on nutrition also increased. However 40.82 % Post graduate (PG) level of education of the respondents (mothers) had obtained poor knowledge scores. The similar finding with this result was found in a study done by Gupta Mahesh et al (1991) which reported that there was no significant association between mothers' KAP and educational level. This is also supported by a study on relationship between the mothers' nutrition knowledge and literacy done by Parul Christian et al (1988) found that the great majority of both literate and illiterate mothers had scores in the poor range (1-3 points).

B) Distribution of the poor nutritional knowledge scorer mothers for counselling

On the basis of pre knowledge obtained scores from selected 504 mothers, 308 mothers had poor knowledge about nutrition. Among these 308 mothers, 300 mothers, and their respective preschool children were selected as sub sample for the counselling intervention programme study. Out of these 300 mothers, 153 mothers were randomly selected and treated as the experimental group for intervention and the other 147 as the control group.

Table 2: Distribution of the poor nutritional knowledge scorer mothers for counselling intervention programme on the basis of educational level

Mothers educational level	Poor nutritional knowledge scorer mothers (n=300)		Total (n=300)
	EG(n=153)	CG(n=147)	
Illiterate (unable to read and write)	3	2	5
Primary School	24	23	47
Secondary School	68	68	136
Higher Secondary School	29	28	57
Under graduate (UG)	20	16	36
Graduate /Post graduate(PG)	9	10	19
Total	153	147	300

EG=Experimental Group CG=Control Group n=number

Education is one of the most personal variables likely to have a positive impact on acquisition of knowledge by the respondents and development of attitude and practices by them. Hence in the present study sub sampled mothers were distributed on the basis of educational level for the nutrition counselling intervention programme. These mothers were further classified into two groups in such a way that they could be matched.

Educational level wise distribution of the selected mothers in the sub sample shown in the **table 2** indicates that most of 136 mothers had educational status up to secondary level. Followed by 57 had up to higher secondary school level, 47 up to primary school level, 36 up to under graduate (UG) level, 19 up to graduate /post graduate (PG) level. Only 5 mothers were illiterate in the counselling intervention programme.

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Conclusion

The impact of nutritional counselling on the nutritional knowledge gain Scores of mothers was significantly (p-value < 0.05) increased according to their educational status. In the present study knowledge gain scores of mothers was more appreciable observed in the Under graduate and Graduate/ Post graduate level of educated mothers than the others after nutritional counselling. This means that as educational level increases, knowledge gain acquisition also increases.

So further research is also needed to identify which characteristics of illiterate and low-literate mothers influence the ability to learn nutritional information. Identifying these factors and incorporating solutions into nutritional education intervention may help bridge the learning gap related to literacy status.

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IMPACT OF DIETARY COUNSELING ON PREGNANT WOMEN

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Abstract:
Well-balanced and healthy diet has an important role in health throughoutthe lifecycle and affects the functioning of all body systems. Need to increase of nutritional dietand energy in pregnancy cause of the physiologic and hormonal changes of pregnant women andtherefore complete metabolic demands process of fetus. Major aim and objective of this study tofind out the nutritional and socioeconomic status of the rural and urban pregnant women through the polite study method. Dietary counseling is a cornerstone of prenatal care for all women. Furthermore, an individualized approach tonutritional counseling that considers a woman's assess to intake diet, socioeconomic status, and body mass index (BMI) is recommended. The evaluation and create awareness regarding effect of pregnant women health status through dietary counseling on the outcome of pregnancy.

In the current study, the majority of 194 (80.8%) participants were between 20 and 30 years of age, with their mean age being 18.1±2.3 years in rural region, and 230 (95.8%) majority were also between the age group 20-30 in urban region. 164 (68.3%) majority were belong to Hindus by religion in rural region and in urban region (128) 54% respondents belong to Hindu religion. As many as 189 (78.75%) teens were housewives in rural and in urban were78.75%.
Their husbands were farmers in rural mostly and as well as majority 74(30.8%) were engage as a Labour in urban. Most 170 (70.8%) of the teens belonged to class IV (income below Rs. 100 00) and their socioeconomic status calculated as per modified BG Prasad classification showed Monthly income very less than urban region Most of them were living in a Nuclear family in both regions. Education qualification of 76 (32%) respondents was till UG, as well as most educated respondents were located in urban region.
Keywords: Pregnancy, Nutrition,Physiological, Dietary intake, Socioeconomic status, and Health.

Introduction:

Pregnancy is one of the most exciting and important events in each woman's life. Childbirth incident is like a rebirth to all the pregnant women, because many factors influences thatshould be considered in advance such as changes in diet, habits and lifestyle. In pregnancy anabolism process is rapidly activated therefore many changes during pregnancy, women undergo a number of physiological changes in order to achieve the normal development and health of the fetus. In urban and rural pregnant women was not more aware about nutritional diet intake. So definitely positive impact of dietary counseling on pregnant women health and their fetus.

1. Nutritional is not only an important responsible factor for health of baby, but also to the baby's long term growth.
2. Therefore understanding nutrition and foetal growth relationship is critical.
3. In many countries low birth weight was major problem. According to WHO low birth weight define as birth weight less than 2.5kg. Prevalence of Low birth weight in India since independence has not shown any significant decline, it remains high at 28.0 percent,
4. Despite launching of successive interventional programmes by the Government of India for reducing the problem- in India has been attributed to widespread maternal under nutrition. . Krishna Kumar shau (2017) et.al.

Nutritional deficiency during pregnancy was positively related with socioeconomic status.

Aims and Objectives:

To assess and create awareness regarding effect of pregnant women health status and nutrition correlation on the outcome of pregnancy. The main aim of the study is to understand dietary counseling correlation with socioeconomic.

Research methods and materials:

The baseline study was carried out in urban and rural area ofAhmednagar District of Maharashtra state. With a total sample size of 480 pregnant women (240 of rural and 240 of urban region) particularly selected within 14 blocks. A presented structured Questionnaire was used to collect thedata in rural and urban area of Ahmednagar District.

Background:

Dietary counseling signifies about the view of socioeconomic and Anthropometric and regular intake diet assessed tothe individual respondents therefore gained widespread significance in recent times.

Data Analysis:

The statistical analysis would perform using Indian food composition tables. t- test and chi-square would used for rural and urban finding out result socioeconomic status.

Future perspectives:

Studies about socioeconomic gradients in health provide away to identify gaps. First, improving accessibility and adequate and high quality prenatal care, especially for the lower SES groups, may reduce socioeconomic-related inequalities inmaternal and prenatal health in both rural and urban areas.

RESULTS AND DISCUSSION:

The findings of the study entitled “Impact of Dietary Counseling on Pregnant Women” are discussed in this study. Nutrition and socioeconomic status is an important factor contributing to health and toimprove energetic functional ability. The effect of nutritional statuson physical and psychological well being is especially high during pregnancy. With the increasing longevity, nutrition plays a significant role in the quality of life in the pregnancy.

Table1: Distribution shown of selected respondents according to the demographic profile of Rural and Urban area.

	Rural Area		Urban Area	
Variables	n = 240	%	n=240	%
Age				
< 20	44	18.3	6	2.5
20-30	194	80.8	230	95.8
31-40	2	2	4	1.7
<40	0	0	0	0
Total	240	100	240	100
Mean= 23.25 ± 1.99				Mean=24.92
Education				
Secondary	84	35	58	24.16
Higher Sec.	62	26	16	6.66
UG	76	32	54	22.5
PG	18	7.5	112	47
Total	240	100	240	100
Religion				
Hindu	164	68.3	128	54
Muslim	22	9.2	36	15
Christian	42	17.5	40	16
Buddha	12	5	40	16
Total	240	100	240	100

Nature of Family				
Nuclear	170	70.8	150	62.5
Joined	50	20.8	60	25
Extended	20	8.3	70	12.5
Total	240	100	240	100
Married Age				
< 20	96	40	112	47
21-30	100	41.6	108	45
31-40	32	13.3	20	8
> 40	12	5	0	0
Total	240	100	240	100
	Mean= 23.33		mean= 21.04	
Occupation of the respondents:				
Housewives	189	78.75	174	72.5
Service	6	2.5	15	6.1
Labour	21	8.75	26	10.83
Farmer	19	7.91	10	4.16
Self Employee	5	2	15	6.25
Total	240	100	240	100
Occupation of Husband				
Govt. Service	16	6.7	12	5
Priv. Service	24	10	16	6.7
Labour	44	18.3	74	30.8
Farmer	76	31.7	18	7.5
Self Employee	36	15	80	33.3
Business	42	17.5	40	16.7
Total	240	100	240	100
House hold Income				
Below-10000	170	70.8	58	24.2
10001-20000	28	11.7	134	55.8
20001-30000	14	5.8	9	7.5
30001- 40000	14	5.8	20	8.3
>40000	14	5.8	10	4.2
Total	240	100	240	100

Table No.1: In the current study showed, the mean age among the study population range 80.8 % was 20-30 year the majority mean 23.25±1.99 from rural area and as well as urban area 95.5% respondents range was 20-30 year(mean 24.92),While in rural 35% respondents education were unto secondary level and urban majority 46% were educated at PG level and as well as 68.3% respondents were Hindus by Religion in urban, and in urban were 54% a majority belong Hindu , While 78.75% were housewives in rural and in urban 72.5% were as a housewives and majority 31.7% of husbands of participants were farmer in rural while in urban majority 33.3% were occupation of self-employee. A most 70.8% of them belonged income unto 10,000 therefore majority under Class IV socioeconomic status in rural area and in urban majority 55.58% income belong Rs.20000-30000.It consist middle class. As well as a great number of study participants, 100 (41.6%)

had married in the age group of 21-30 in rural area and married age group 21-30 years were 112 (47%) in urban area and the mean age of marriage was 23.33.for rural and 21.04 of urban. These findings were consistent with the study conductedby Mishra et al.

Table No. 2: Shown distribution of respondents according to their Height and Weight (N=480)

Variables	Rural n = 240	%	Urban n = 240	%
Height (cm)				
< 140	96	40	76	32
141-150	68	28	86	35.5
151-160	36	15	54	22.5
> 160	40	17	24	10
Total	240	100	240	100
	Mean=146.23		mean= 145.08	
Weight				
up to 50	78	33	96	40
51-60	94	39	70	29
61-70	52	22	48	20
>71	16	6	26	11
Total 240	100	240	100	

Table No.2: In the present study shown, the height among the studypopulation range below 140 cm, 40 % was height the majority mean 146.23 in rural area and while in urban area 35.5% respondents height range was 141-150 cm (mean=145.08), and rural region majority respondents weight group 51-60 kg were 39% and for urban region majority weight were up to 50 kg and their percent were 40.

Table 3: Shown distribution of respondents according to their BMI (Pre and post Counseling) N=240 + 240= (480)

Category	Pre- Counselling I Trimester				Post Counselling II Trimester			
BMI	Rural		Urban		Rural		Urban	
	N	%	N	%	N	%	N	%
Normal	185	77	172	71.7	220	91.7	158	65.5
Underweight	32	13.33	48	20	16	6.7	52	22
Over the weight	13	5.41	20	8.3	4	1.7	30	12.5
Total	240	100	240	100	240	100	240	100

Table No.3: In the present study shows, the BMI among the study majority population range normal, It was taken data in first trimester 70 % respondents BMI was normal and need to focus on 5.41% over weight respondents in rural region and in same trimester in urban majority71.7% belong to normal with need to focus on overweight Respondents (8.3%). And in II trimester rural region majority respondents of 91.7% category were normal as well as 65.5% respondents BMI were normal in urban region and in II trimester need to focus on 12.5% of overweight urban respondents.

Table No. 4: Distribution of respondents according to dietary counselling

S. No.	Food Intake	Rural Total (N=480) N =240	%	Urban N=240	%
1.	Vegetarian	104	51	96	40

2.	Non-vegetarian	59	24.58	46	19.17
3.	Veg and non Veg	61	25.42	68	28.33
4.	Ovo-vegetarian	16	6.67	30	12.5

Above the tables hows the distribution of respondents according to dietary counseling. It was revealed that most of the respondents were vegetarian (51%) in rural. And 40% vegetarian in urban because most of the pregnant women are belongs to Hindu religion. About 25.42% of rural and 28.33% of urban respondents were consumption both veg and non –veg.

Table 5: Prevalence of Anemia among the ANC Mothersof Rural and urban area N=480.

Variables	Rural n = 240	%	Urban n = 240	%
Normal	144	60.5	136	56.5
Mild	60	25	64	26.5
Moderate	20	8	30	13
Severe	16	6.5	10	4
Total	240	100	240	100

Table No.5: In the present study shows, Prevalence of Anemia among the study majority60.5% population range were normal, and need to focus on 6.5% of severe respondents in Rural and as well as urban 56.5% of respondents belong normal, need to focus on 4% severe anemic respondents. Survey of India government shown that anemia during pregnancy is a significant public health problem, with 52.1% in rural areas as well as 45.7% of pregnant women in urban areas having hemoglobin levels <11 g/dl [3]. Compared in this study in rural area was less 12.1% and in urban area also less 2.4%. Because to positive impact of dietary counseling in result of both area's pregnant women in Ahmednagar District.

Conclusion: In the rural and urban area of the Ahmednagar District setup of Maharashtra majority of the pregnant women were having inadequate dietary intake. Hence, policies implement related to pregnant women nutrition should be made so as to decrease the prevalence of low birth weight. Nutritional deficiency during pregnancy in rural and urban area is common problem. The nutritional requirements during pregnancy are increased and on the other hand the dietary intake decreases because to create general complication related to pregnancy. View of Socioeconomic status the nutrition adversely affects on the health of pregnant women. This study carried out according to dietary counseling more effect on the respondents to improve the nutritional diet intake for maintain the healthy life which are most important regulators during pregnancy. Due to low socioeconomic status women are inadequately nourished thus it convert in malnutrition, they are more likely to give birth to weak babies, thereby resulting in high infant mortality. Data was tabulated on Microsoft Excel Sheet and analyzed by using the software IBM SPSS,Version 29.

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THE EFFECT OF SWIMMING AND AQUATIC EXERCISE ON THE BODY

ABSTRACT

Swimming is a great way to tone muscles all over your body every time you go, but lifting weights at the gym is the best way to focus on building muscle if this is part of your weight loss goal. In terms of age markers like muscle mass and lung function swimming really does help you stay younger for longer. On average, swimmers live longer than non-swimmers, even compared to people who partake in other physical activities. Regular exercise has countless benefits including improved mental and heart health and reduction in risk of cardiovascular disease.

Keywords *:- Swimming, Aquatic Exercise*

Introduction :

Regular exercise has countless benefits including improved mental and heart health and reduction in risk of cardiovascular disease. Sometimes as the summer it rolls in, it can be tempting to relaxed inside in the aircon but why not try exercise like swimming or aquatic exercise? It stayed cool while maintain your fitness with this low impact exercise, and it suitable for all of the age group. Swimming makes heart and lungs strong. Swimming is so good for that researchers share it may reduce the risk of death. It compared with inactive people to swimmers have about half the risk of death. Some studies shown that swimming may help our lower blood pressure and it control blood sugar. Swimming is a great way to tone muscles all over the body every time, but lifting the weights at the gym is the best way to focus on building muscle if this is part of the weight loss goal.

Swimming is a low-impact exercise

Water gives the buoyancy, and removing pressure from joints normally to be experienced on land. Those suffering from osteoarthritis, joint injury or have recently undergone surgery can be benefitted from low impact exercise as well as it removes extended strain on the body. Aquatic exercise is a low-impact activity and it takes the pressure off bones, joints and muscles.

Benefits of aquatic exercise

Improvement in muscle tone. Reduce stiffness and pain. It helps increase tolerance for exercise. Continual adjustment to dynamic environment heightens body awareness that may enhance posture and motor control during walking. The swimmers tend to be tall and thin with long arms, legs, feet, and hands. The size of hands gives them great "water grasp power", and only a very small hand movement keeps them afloat.

The more swim will help body become unrecognizable. Swimming creates a slightly elongated, broad-shouldered, thin, and fit body shape, which many of us covet.

Body conditioning and weight loss

Swimming is a aerobic workout that tones our body and burns calories without putting stress on our joints, tissues and bones. Regularly it can also help reduce high blood pressure and prevent the stroke and heart disease.

Many aquatic centers offers various forms of aquatic exercise like deep water running, aqua Pilates, aqua Zumba and other options. As a replacement, to make friends while swim, join a water polo, triathlon or synchronized swimming team. To perceive the whole body conditioning and weight loss, gives the swimming.

Swimming is a great way to destress

The hustle of school, work and other commitments often gets tense and stressed environment. Exercise releases from endorphins, a chemical as the 'happy hormone'. Swimming can give this feel good kick! The combination of stretching muscles, deep breathing and lack of distraction while swimming can calming and relaxing. So, anyone drowning in stress - jump in the pool.

Relax and tone up with the swimming in summer season, while forgoing the stress put on joints during most traditional exercises and heat. Remember only swim

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within comfort zone and follow recommendations from guide or physiotherapist.

Physical Benefits

- Improvisation in flexibility and strength
- Builds up endurance
- Increasing muscular flexibility
- Muscular balance
- Stronger heart muscle
- Increases blood circulation
- Rehabilitates muscle tone
- Ability to control and maintain healthy weight

Social Benefits

- Fun
- Enjoyable when working hard

Psychological Benefits

- To help to develop a positive attitude
- Feeling of well-being
- Learning patience
- Removes stress and tension
- Builds up energy

What exercise options are there in the water?

- Water Walking
- Water Aerobics
- Water Toning/Strength Toning
- Flexibility Training
- Water Therapy & Rehabilitation
- Water Yoga & Relaxation
- Deep Water Running
- Wall Exercise (Deep or shallow)
- Water Fitness Products
- Lap Swimming

Health benefits of swimming

Swimming is the good workout because everyone needs to move the whole body against the resistance of the water. Swimming is the great round activity because it:

- keeps your heart rate up but also it takes some of impact stress off body
- builds endurance, muscle strength and cardiovascular fitness
- helps you maintain a healthy weight, healthy heart and lungs
- tones muscles and builds strength
- it provides an all-over body workout

Other benefits of swimming

- relaxing and peaceful structure of exercise
- alleviating tension and stress
- improving coordination of balance and posture
- improving flexibility
- providing good low impact therapy for some injuries and conditions
- providing a pleasant way to cool down during the hot day
- swim at many places like swimming pools, beaches, lakes, dams and rivers.

The Disadvantages to Exercising in Water

One of the disadvantages is that not all pool water is created equal, or a person's tolerance to the chemicals. Some of the symptoms people with sensitivity to chemicals such as chlorine or bromine include itchy skin and eyes, or even some respiratory irritation in rare cases

Conclusion :

On average, swimmers live longer than non-swimmers, even compared to people who partake in other physical activities. In terms of age markers like muscle mass and lung function swimming really does help you stay younger for longer. A long-term study at Indiana University Center for the Science of Swimming found that swimmers aged over 35 swimming roughly 3,200 to 4,500 metres three to five times a week, postponed the ageing process.

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