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Research Article

A Study to Assess the Impact of Covid-19 Pandemic on Quality of Life Among Adults in Selected Rural Area at Meerut

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Abstract

Objectives: To assess the quality of life during Covid-19 among general population. To find out the Association of quality of life with selected demographic variables.

Methodology: In this present study the researcher adopted descriptive research design. Sample size of this study was 50 adults. Non probability purposive sampling technique was used for collecting the samples for this study. Data was collected by using the demographic tool and SPF 36 Health Survey questionnaire.

Results: The gathered data was analysed by using descriptive and inferential statistics. The findings show that out of 50 sample (16%) were having Good Quality of life, (52%) were having Average Quality of life (32%) were having poor Quality of life. The chi-square test shows that there was a significant association between Educational status and quality of life scores among adults on Covid 19 with the quality of life.

Keywords: Covid-19; Quality of Life

Introduction

The Covid-19 pandemic had major health crisis that has changed the life of millions of peoples around the world. Mental well-being has reached its lowest level across all age groups since the onset of the crisis over a year ago. This is especially prominent among young people and those who have lost their job. Existing inequalities are widening because of the disproportionate impact of the pandemic on vulnerable groups. Women, young people and those on the margins of society are consistently affected by losing their current jobs, poor work-life balance and financial insecurity. New findings show that difficulties in making ends meet increased significantly among those already in a precarious situation. As well as disease and death, COVID-19 has taken a mental toll on citizens as more fearing illness, economic hardship and uncertainty about the real impact of the crisis.

The coronavirus disease (COVID-19) was first reported in December 2019 in Wuhan, China. The number of cases has increased exponentially not only in China but in the world. COVID-19 was officially declared a pandemic by the world health organisation on March 11,2020. From December 2019 until the time of writing this article, 11,4 million cases of COVID-19 have been confirmed worldwide and more than 535000 people have died. This pandemic has put global public health institution on alert. Developed countries like Morocco, and many countries in the world, declared a state of health emergency and quarantine on March 20,2020. Admittedly, quarantine and the state of health

emergency have a great interest in controlling the spread of the pandemic. However, it is also important to understand the implementation of these restriction on the health and well-being of the community and also reduction of morbidity and mortality rate.

Health-related quality of life is more likely to be affected during the covid-19 pandemic. The CDC is responding to a sudden outbreak of respiratory disease caused by a new coronavirus that was first detected China and it was spreading to the public very faster than other viruses and it has been detected in more than 70 locations international, including in the United States of America. The virus has been named "SARS-CoV-2" and the disease it causes has been named "Coronavirus Disease 2019" (abbreviated "COVID-19"). On January 30,2020. The International Health Regulation Emergency Committee of the world cats, and bats. Rarely, animals' coronavirus can infect people are most likely to spread the infection between people, such as with MERS-CoV, SARS-CoV and now with this new virus, SARS-CoV-2.

Fear, worry, and stress are normal responses to perceived or real threats, and at times when we are faced with uncertainty or the unknown. So, it is normal and understandable that people are experiencing fear in the context of the COVID-19 pandemic. The fear of contracting the virus in a pandemic such as COVID-19 are the significant changes to our daily lives and also work as our movements are restricted in support of efforts to contain and slow down the spread of the virus. So many health organizations are coming forward to help the people without affecting their activities. Many lost the job and unemployment has increased, home-schooling of children, and lack of physical contact with other family members, friends and colleagues, it is important that we look after our mental, as well as our physical, health to improve the society.

Material and Methods (or) Research Methodology

Research methodology indicates the general pattern of organizing the procedures to gather valid and reliable data from the problem under investigation. This chapter deal with brief description of methodology adopted for the present study. The content included in this chapter is research approach, research design, variables under study, the setting, population, sample and sampling technique, development of data collection tools and technique, development of, data collection procedure and plan for data analysis.

Research approach

The selection of research approach is a basic procedure for conducting the research study. In view of the nature of the problem selected for the study and objective to be accomplishing a Quantitative approach was adopted for the study.

Research design

The term research design refers to the plan of the scientific investigation. Research design helps the researcher in the selection of subjects identified of variables, their manipulation and control, observation of be made and type of statistical analysis to interpret the data. The overall plan for addressing a research question include specifications for enhancing the integrity of the study. In the present study the investigator adopted descriptive research design.

Setting

Setting is a physical location and conduction in which data collection takes in the study (Dense F Polit and Beck 2004). This study was conducted in selected rural area of Meerut.

Sample

Samples were adults age between 20-50.

Sample size

Sample size is the numbers of study participant in a sample [1]. In this study the Samples were adults age of 20-50 years in selected rural area at Meerut. The Sample size of this study was 50.

Sampling technique

Sampling is the process of selection units from a population of interest so that by studying the sample we may fairly generalized our result back to the population from which they were chosen (Miller, 1991).

Non probability purposive sampling technique was used for collecting the sample.

Criteria for sample selection

Inclusion criteria

- Sample who can read, write, and speak English and Hindi.
- Samples those were available during the study

Exclusion criteria

Who are not willing to participate in study.

Data collection tools

- Section A - Demographic profile sheet
- Section B - SPF 36 Health Survey

Procedure for data collection

After obtaining permission from the concerned authority, the study was conducted in selected rural areas at Meerut. The samples were ensured about confidentiality. Samples were gathered in a room. After explaining the purpose of study, the written consent obtained from each sample. Based on the inclusion criteria 50 samples were selected by using Purposive sampling technique. Data was collected by using the demographic tool and SPF 36 Health Survey. The researcher clarified the doubts which the subject asked in between and the relevant data were collected. Each sample took 15 to 20 minutes to fill the relevant data. The samples were well cooperated and given relevant information. The collected data was tabulated and analysed using descriptive statistics.

Plan for final data analysis

The data was entered into the master sheet. Keeping the objectives of the main study in view, the descriptive and inferential statistics was done.

The collected data has been planned to organize, tabulate and analysed by using descriptive statistics (mean, standard deviation, mean score, percentage) and inferential statistics (chi-square).

Description and interpretations of the tool

The tool has two sections. The description of tool is as followed.

Section A

Demographic profile sheet: It includes 9 items regarding demographic profile. Age, gender, educational status, Marital status, Occupational status, Family Monthly income, Type of family.

Section B

Short form question: - Description.

The short form - 36 (SF - 36) is a 36 items questionnaire which measures quality of life (QoL) across eight domains, which are both physically and mentally based. The eight domains that the SF36 measures are as follows: physically functioning: role limitations due to physical health: role limitation due to emotional problems: energy fatigue: emotional well-being: social functioning: pain, general health. each scale is directly transformed into a 0-100 scale on the assumption that each question carries equal weight. The lower the score the more disability. the higher the score the less disability i.e. a score of zero is equivalent to maximum disability and a score of 100 is equivalent to no disability . A single item is also included that identifies perceived Chang in health, making the SF - 36 a useful indicator for Chang in QoL over time and treatment. The SF36 has been widely validated for numerous professions and patient groups and can be administered by clinicians or by the patient at home. if carried out by the patient at home clinic time will not be affected .it can take patient at last half an hour to complete the Sf-36 and the scoring and interpretation will require some time by the clinician.

In these questionnaires there are negative and positive items. the negative item (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19) include physical functioning: role limitations due to physical health: role limitation due to emotional problems and positive items are (1, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36): energy, fatigue: emotional well-being :social functioning: pain: general health.

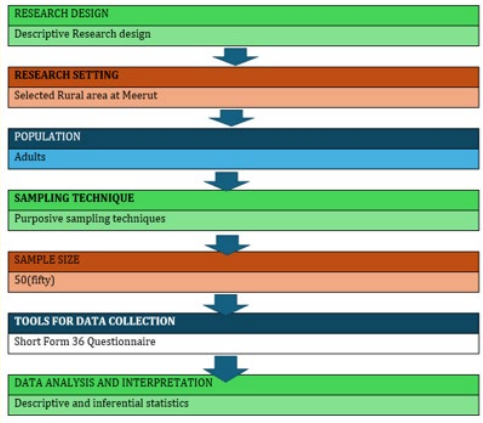

Figure 1: Schematic representation of research design.

Data analysis and interpretation

Statistical procedure enables the researcher to organize, analyse, interpret, evaluate and communicate numerical information meaningfully.

The analysis is a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested. this chapter deals with the analysis and interpretation of the data collected from 50 samples of adults in rural area.

Presentation of data

- Section-1: Distribution of subject based on demographic data.
- Section-2: Assessment of quality of life among adults based on SF-36 questionnaire.
- Section-3: Association between the quality-of-life scores among adults and their selected demographic variables.

Demographic profile		Frequency	Percentage (%)
Age	20-30	10	20%
	31-40	17	34%
	41-50	14	28%
	51-60	9	18%
Gender	male	21	42%
	female	29	58%
Educational status	Primary school	18	36%
	Middle school	3	6%
	P.U.C	1	2%
	Graduate	20	40%
	Post graduate and above	3	6%
	High School	5	10%
Marital status	Bachelor	20	40%
	Married	28	56%
	Widower	1	2%
	Divorce	1	2%
Occupational status	Unemployed	25	50%
	Private /Govt employee	7	14%
	Farmers	2	4%
	Labourer	8	16%
	Self-employee	8	16%
Family Monthly income	<10,000	6	12%
	10,000-20,000	20	50%
	20,001-30,000	12	24%
	>30,000	12	24%
Type of family	Nuclear	27	54%
	Joint	19	38%
	Extended	4	8%

Table 1: Shows the Frequency and percentage distribution of sample based on the demographic variables.

Table 1 revealed that:

- Regarding age 10 (20%), were belong to the age group between 20 -30 years of age and17 (34%) were belong to age group between 31 - 40, 14 (28%) were belong to age group between 41-50, 9 (18%) was belonged to age group between 51 - 60 years of age.
- Regarding gender out of 50 samples 29 (58%) sample were female and 21 (42%) males.
- Regarding the education 18 (36%) were had primary school education, 3 (6%) was had middle school education, P.U.C were had 1 (2%), graduate was 20 (40%), 3 (6%) were had post graduate education.
- Regarding occupation 7 (14%) were doing private job, 25 (50%) were unemployed, 8 (16%) were labor, 2 (4%) were farmers, 8 (16%) were self-employers.
- Regarding marital status 20 (40%) were bachelor, 28 (56%) were married, 1 (2%) were widower, 1 (2%) were divorce.
- Regarding monthly income 6 (12%) were having monthly income less than 10,000, 26 (50%) were having monthly income between 10,000-20,000, 20 (50%were having monthly income between 20,001- 30,000, 12 (24%) were having monthly income less than 30,001.
- Regarding type of family, 27 (54%) belongs to nuclear family, 19 (38%) belongs joint family, 4 (8%) belongs extended family.

Dimensions	Items	Mean	SD
General activity	2	64.23	21.06
Limitation of activity	10	337.2	84.4
Physical health problem	4	26.2	44.21
Pain	2	91.2	27.3
General health	4	94.5	26.38
Emotional health problem	3	56.6	92.2
Social and emotional activity	1	58.5	22.9
Energy and emotions	9	235.2	28.44
Social activity	1	53.3	8.6
Total	36	1016.93	355.49

Table 2: Shows the Mean and standard deviation regarding the quality of life among adults in selected rural area at Meerut.

Section-3: Association between the quality-of-life scores among adults and their selected demographic variables.

Table 2 shows the assessment of quality of life among adults during COVID 19. In general activity, the mean score was 64.23with SD of 21.06, In limitation of activity, the mean score was 337.2 with SD of 89.04. In physical health problem, the mean score was 26.2 with SD of 44.2, In pain, the mean score was 91.2 with SD of 27.3, In general health, the mean score was 94.5 with SD of 26.38, In emotional health problem, the mean score was 56.6 with SD of 92.2, In social and emotional activity, the mean score was 58.5 with SD of 22.9, In energy and emotions, the mean score was 235.22 with SD of 28.44, In social activity, the mean score was 53.3 with SD of 8.6 . The overall mean score was 1016.93 with standard deviation of 355.49.

Knowledge level	Frequency	Percentage
GOOD QOL	8	16%
AVERAGE QOL	26	52%
POOR QOL	16	32%

Table 3: Frequency and Percentage distribution of the level of quality of life among adults.

Demographic Variables	AM (above mean)		BM (below mean)		Total	Pearson chi square		Table Value/df	Significance
	F	%	F	%					
Age									
20- 30	4	8	6	12	10	1.497		7.8 Df=3	NS
31- 40	10	20	7	14	17				
41- 50	8	16	6	12	14				
51- 60	6	12	3	6	9				
Gender									
Male	14	28	7	14	21	1.65	3.84 Df=1		NS
Female	14	28	15	30	29				
Education									
Primary school	15	30	3	6	18	14.3		12.59 Df=5	S
Middle School	1	2	2	4	3				
Graduate	8	16	12	24	20				
Post graduate	3	6	0	0	3				
High school	1	2	4	8	5				
P.U.C	0	0	1	2	1				
Marital Status									

Bachelor	8	16	12	24	20	5.98	7.82 Df=3	NS
Married	19	38	9	18	28			
Widower	0	0	1	2	1			
Divorce	1	2	0	0	1			
Occupation								
Unemployed	14	28	11	22	25	5.384	9.49 Df=4	NS
Private/Govt employee	5	10	2	4	7			
Farmers	1	2	1	2	2			
labourer	6	12	2	4	8			
Self-employee	3	6	5	10	8			
Monthly Income								
<10,000	3	6	2	4	5	3.53	7.82 Df=3	NS
10,000-20,000	14	28	9	18	23			
20,001-30,000	4	8	8	16	12			
>30,001	7	14	3	6	10			
Type of family								
Nuclear	15	30	12	24	27	0.0782	5.99 Df=2	NS
Joint	11	22	8	16	19			
Extended	2	4	2	4	4			

Table 4: Association between the quality-of-life scores among adults and their selected demographic variables.

NS-Non significant, S -significant. The above table shows that there is a significant association between educational status and quality of life scores among adults. (chi-square=14.38 > table value 12.59).

Discussion

The chapter discusses the main findings of the research study and review that are in relation to the findings from the results of the present study. for this study the data was obtained from VILLAGE "AMANULLAHPUR at Meerut. Regarding the quality of life among adults. In order to achieve the objectives of the descriptive study was adapted and 50 samples were selected by non - probability sampling technique to fulfilling the inclusion and exclusion criteria.

The subjects were evaluated by using short form question for socio- demographic data and the existing problem of COVID-19.

Discussion of baseline data of adults

Section I: Analysis of demographic data.

- Regarding age 10 (20%), were belong to the age group between 20 -30 years of age and17 (34%) were belong to age group between 31 - 40, 14 (28%) were belong to age group between 41-50, 9 (18%) was belonged to age group between 51 - 60 years of age.
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- Regarding education 18 (36%) were had primary school education, 3 (6%) was had middle school education, P.U.C were had 1 (2%), graduate was 20 (40%), 3 (6%) were had post graduate education.
- 4.Regarding occupation 7 (14%) were doing private job, 25 (50%) were unemployed, 8 (16%) were labor, 2 (4%) were farmers, 8 (16%) were self-employers.
- Regarding marital status 20 (40%) were bachelor, 28 (56%) were married, 1 (2%) were widower, 1 (2%) were divorce.

- 6.Regarding monthly income 6 (12%) were having monthly income less than 10,000, 26 (50%) were having monthly income between 10,000-20,000, 20 (50%) were having monthly income between 20,001- 30,000, 12 (24%) were having monthly income less than 30,001.
- 7. Regarding type of family, 27 (54%) belongs to nuclear family, 19 (38%) belongs joint family, 4 (8%) belongs extended family.

Section II: Assessment of quality of life among adults based on SF-36 questionnaire.

- Out of 50 sample (16%) were having Good Quality of life, (52%) were having Average Quality of life (32%) were having poor Quality of life.

Section III: The chi square value shows that there is a significant association between educational status and quality of life scores among adults. (chi-square=14.38 > table value12.59).

Summary, major finding, implication, limitation, recommendations

This chapter deals with summary of study undertaken discussion on the feelings of the study and its implication to nursing field, limitation of study and recommendation for future research in this field.

Summary

Keeping all the context this study was undertaken to assess the quality of life among adults during COVID 19 in selected rural area at Meerut. The main purpose of the study was to assess the quality of life among adults during Covid-19 and also to find out the association with selected demographic variables.

Major findings of the study

Section I: Analysis of demographic data:

- Regarding age 10 (20%), were belong to the age group between 20 -30 years of age and17 (34%) were belong to age group between 31 - 40, 14 (28%) were belong to age group between 41-50, 9 (18%) was belonged to age group between 51 - 60 years of age.
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Implications

The findings of the study have implication in various areas of nursing practice, nursing education, nursing administration and nursing research.

Nursing education

Nursing students should be educated on health promotion and importance of health education regarding covid among general population to improve the quality of life. Every student encourages in providing information to the community about the preventive aspects of covid and to provide psychological support for needy7 people. Nursing personnel should be oriented, guided and trained for giving proper informat4ion t4o t4he community.

Nursing practice

Mental health nurses working in hospital and community play an important role in giving health education regarding the positive coping strategies that can be adopted to decrease the level of stress and anxiety among general population and thus increasing quality of Life. Special emphasis needed to be given improve quality of life of community people by organizing awareness programme in community area about Preventive aspects and adopting healthy life style to fight against covid. The nursing administrator should organize in service education programme to nursing personnel and allied paramedical regarding the same.

Nursing research

There is a wide scope of conducting research study in depth using other tools among general population to assess the impact of crisis situations on quality of life and psychological wellbeing, as crisis situation like covid may result severe anxiety stress, emotional and physical issues among general population. The nursing leaders can motivate nurses to do more research in this aspect.

Limitation

The finding of the study could not be generalized in view of small size sample and limited area of setting.

- The findings of the study were limited to50 adults.

Recommendations

- A similar study can be conducted on a larger sample for wider generalizations.
- An interventional study can be conducted to improve quality of life
- During covid pandemic.

Conclusion

The present study revealed that majority of adults were having poor quality of life and few were having good quality of life and there was no significant association between the quality of life and demographic variables [2-19].

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