Rural Women's Coping Strategies Against the Effects of Covid-19 Pandemic in Ilorin East Local Government Area of Kwara State, Nigeria

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Abstract. The study examined the rural women's coping strategies against the effects of covid-19 pandemic in Ilorin East Local Government Area of Kwara State, Nigeria. Eight five respondents were randomly selected in seven communities for the study. The data was collected using frequency count, percentage, mean and Pearson Product Moment Correlation (PPMC). The result reveals that all the respondents (100%) were aware that covid-19 had been declared as a pandemic. The increase in price of goods and services ($\bar{x}$ = 4.59) was the highest ranked perceived effect of covid-19 pandemic on the respondents. Rearing of animals ($\bar{x}$ = 1.46) was the highest ranked coping strategy adopted by the respondents against covid-19. There is significant relationship between coping strategies and perceived effects (r=-0.207, p=0.057) at 10% level of significance. The study there recommended that there should be provision of more awareness on covid-19 pandemic and there should be creation of additional job opportunities in the rural areas for women who are affected by covid-19 pandemic.

Keywords. Rural Women, Coping Strategies, Covid-19 Pandemic, Perceived Effects.

I. INTRODUCTION

Rural women play crucial roles in ensuring food and nutrition security and improving the well-being of their families and communities. Rural Women plays immeasurable role in Nigerian food production, although motivation for participating in agriculture is first to contribute to household food security and income. Despite the contributions of rural women, they have limited access to land and other economic resources within their communities. The Coronavirus (COVID-19) pandemic is a systemic shock that affects every spheres of life including rural women who plays vital roles in the agricultural value chain activities. A growing range of impacts on rural women is evident. This includes lock down and restriction of movements, disruptions in Rural Areas marketing activities and high incidence of hunger and poverty.

The onset of the COVID-19 pandemic has been accompanied by major changes and challenges in many dimensions of human lives (Mahona and Pacho, 2021). COVID-19 is continuing to spread around the world, causing tough times for many rural women and posing serious challenges for the sustainability of food production and supply, and agricultural markets (Jámbor, Czine and Balogh, 2020). According to World Farmers Organization (2020), the pandemic outbreak of COVID-19 has an impact on the entire food supply chain, confirming in the most terrible way that we are all part of a food system that is interconnected and fragile.

The struggle to fight the COVID-19 pandemic is compounded by lack of information, poor health services and loss of means of livelihoods (FAO, 2020). The implication of this is that rural women who are more vulnerable to poverty and food insecurity were severally affected. Sub-Saharan Africa Agriculture is largely dominated by smallholder farmers, many of whom are landless women who dwell in rural areas, faced by climate variability and resource constraints (Bashuna and Addom, 2020). Thus, with the negative impact of COVID-19 pandemic on rural women, food security could become a major challenge, coupled with poverty and malnourishment.

The pandemic is exacerbating already existing structural inequalities, increasing the burden on women as they struggle to fulfill their multiple roles of managing their families, farms, and small businesses. Furthermore, the gendered access to opportunities means that women and men have different resources available to them to prepare for, cope with, and recover from such a crisis. There is paucity of information on the rural women's coping strategies against the effects of covid-19 pandemic in the study area. Hence, the effect of COVID-19 and the coping strategies the rural women are adopting to be resilient in the phase of the pandemic needed to be investigated. Studies on the rural women's coping strategies against COVID-19 pandemic in Nigeria are needed so as to identify areas where further interventions would be made as COVID-19 pandemic has not been declared to be over in the country. Therefore, there is a need to examine the rural women's coping

strategies against the effects of covid-19 pandemic in Ilorin East Local Government Area of Kwara State, Nigeria. The main objective of this study was to examine the rural women's coping strategies against the effects of covid-19 pandemic in Ilorin East Local Government Area Kwara State, Nigeria.

The specific objectives were to:
1. Identify the Bio-security measure used to prevent covid-19 by the respondents in the study area
2. Assess the rural women' knowledge of Covid-19 pandemic in the study area.
3. Determine the Perceived Effects of Covid-19 pandemic of the respondents in the study area.
4. Identify the Coping Strategies used by the respondents against the Effects of Covid-19 Pandemic in the study area.

Hypothesis of the Study

Ho₁: There is no significant relationship between the Perceived Effects of Covid-19 pandemic and coping strategies used by the respondents against the effects Covid-19 Pandemic.

II. METHODOLOGY

This study was carried out in Ilorin East Local Government Area of Kwara State, Nigeria. The population for the study consists of eighty-five (85) rural women who were randomly selected from seven (7) rural communities in Ilorin East Local Government Area of Kwara State, Nigeria. The rural communities are Oke-ese, Eleko, Oke-oyi, Agbede, Abeyangi, Panada and Apado. The Bio-security measures was determined using a 3-point likert typed scale, where Never=1, occasionally =2 and Always =3. To determine the knowledge of rural women on covid-19 pandemic, a scale of Yes and No was used where Yes = 1 and No = 0. The perceived effect of Covid-19 pandemic on rural women was measured using a 5-point likert-typed scale, where Strongly Disagreed =1, Disagreed =2, Undecided =3, Agreed =4 and strongly agreed =5. The coping strategies used by rural women against the effects of covid-19 pandemic was measured using a 3-point likert typed scale, where Not used =1, Rarely used =2, Always used =3. Data were analysed using frequencies, mean, percentages and Pearson Product Moment Correlation (PPMC).

III. RESULTS AND DISCUSSION

TABLE 1. Bio-security Measures of the Respondent.

Bio-Security Measures	Never (freq%)	Occasionally (freq %)	Always (freq%)	Mean score	Rank
1. Wearing of mask	4 (4.7)	25 (29.4)	56 (65.9)	1.61	3
2. Wearing of hand gloves	28 (32.9)	33 (38.8)	24 (28.2)	0.95	9
3. Maintaining of social distance	4 (4.7)	25 (29.4)	56 (65.9)	1.61	3
4. Use of hand sanitizers	7 (8.2)	28 (32.9)	50 (58.8)	1.50	5
5. Washing of hand always after touching any objects	13 (15.3)	28 (27.1)	49 (57.6)	1.42	7
6. Avoid using hand to touch eyes, mouth and nose	10 (11.8)	30 (35.3)	45 (52.9)	1.41	8
7. Avoid shaking hands	8 (9.4)	14 (16.5)	63 (74.1)	1.65	2
8. Avoid hugging people	5 (5.9)	18 (21.22)	62 (72.9)	1.67	1
9. Always telling people to comply with the preventive measures	11 (12.9)	25 (29.4)	49 (57.6)	1.45	6
10. Covid-19 testing	64 (75.3)	17 (20.0)	4 (4.7)	0.29	10

Sources: Field Survey 2020

The result in table 1 reveals that the avoid hugging people ($\bar{x}$= 1.67) was the highest ranked bio-security measure, avoid shaking of hands ($\bar{x}$= 1.65) was the second ranked bio-security measure and maintaining of social distance and wearing of mask ($\bar{x}$= 1.61). This result implies that the most frequently used biosecurity measures by the respondents was to avoid hugging, avoid shaking of hands, and maintaining of social distance and wearing of masks.

TABLE 2. The Respondents' Knowledge of Covid-19 Pandemic

Knowledge statement	Frequency	Percentage	Mean Score (S.D)	Rank
1. Aware that covid-19 has been cleared as a pandemic disease by WHO	85	100.0	1.00	1
2. Covid-19 is a viral disease	84	98.8	0.99	2
3. Covid-19 does not have a known cure for now	81	95.3	0.95	5
4. There is no link between covid-19 and 5G network	42	49.4	0.49	14
5. The main clinical symptoms of covid-19 are fatigue, fever, dry cough, and loss of smell and tastes	78	91.8	0.92	8
6. Not all person with the virus develops the symptoms	59	69.4	0.69	12
7. Covid-19 spreads through respiratory droplets in the air from coughing and sneezing	81	95.3	0.95	5

8. Covid-19 can be contacted through shaking of hand and hugging of infected person	82	96.5	0.96	3
9. Use of facemask, observing personal hygiene and social distancing are effective in preventing covid-19	82	96.5	0.96	3
10. There is high mortality rate among the elderly and those with underlying illness, liker hypertension, asthma and diabetes	48	56.5	0.56	13
11. Supportive care is the current treatment	72	84.7	0.85	11
12. Covid-19 affects people of all ages	80	94.1	0.94	7
13. Incubation period of covid-19 is between 2 – 14days	78	91.8	0.92	8
14. Knows that farmers are part of essential people that should work during covid-19	73	85.9	0.86	10

Sources: Field Survey 2020

The result in table 2 reveals that the awareness that covid-19 has been declared as a pandemic disease by World Health Organisation ($\bar{x}$= 1.00) was the highest ranked knowledge statement, the knowledge statement that covid-19 is a viral disease ($\bar{x}$= 0.99) was ranked second, the knowledge statement that covid-19 can be contacted through shaking of hands and hugging of infected person and use of facemask, observing personal hygiene and social distance are effective in preventing covid-19 ($\bar{x}$= 0.96) was ranked third, covid-19 spreads through respiratory droplets in the air from coughing and sneezing ($\bar{x}$= 0.95). This implies that there is high level of awareness of Covid-19 pandemic outbreak and the various means of contacting it among the respondents. There is need to educate people on covid-19 as FAO (2020) reported that lack of information hinders the fight against covid-19 pandemic.

TABLE 3. Perceived Effects of Covid-19 Pandemic on Rural Women.

Perceived Effects	Mean score	S.D	RANK
1.Reduced or loss of income	4.46	0.84	3
2. High incidence of hunger/food insecurity	4.46	0.92	3
3. Makes many people depend on remittance and gift	3.75	0.95	12
4. Reduced crime rates in the rural areas	2.52	1.59	15
5. Increased poverty level in the rural areas	4.34	1.03	5
6. Increased health problem/challenges	3.80	1.08	10
7. Loss of job	3.88	1.04	9
8. There is increase in rural-urban migration in the rural areas	2.72	0.97	14
9. There are movement restriction	4.13	1.22	6
10. Increased in price of goods and service	4.59	0.82	1
11. Spend more on household's food consumption	4.48	0.77	2
12. Increase in food production	3.92	1.41	8
13. Pandemic period encourages many people to go back to farming	4.02	1.17	7
14. Rural health centre were refurbished and well equipped during the covid-19 pandemic period	3.76	1.01	11
15. Loss of small-scale rural business opportunities and outlets	3.74	0.94	13

Sources: Field Survey 2020, Likert Scale: Strongly Disagreed = 1, Disagreed = 2, Undecided = 3 Agreed = 4, Strongly Agreed = 5

The result in table 3 reveals that the increase in price of goods and services ($\bar{x}$= 4.59) was the highest ranked perceived effect of covid-19 pandemic on the respondents, spend more on household's food consumption ($\bar{x}$= 4.48) was ranked second and reduced or loss of income and, high incidence of hunger and food insecurity ($\bar{x}$= 4.46) was ranked as the third highest ranked perceived effect of covid-19 pandemic on the respondents. This implies that high cost of goods and services, reduced or loss of income and food insecurity was the most severe effects of covid-19 pandemic on the respondents in the study area. The implication of this is that the rural women would experience food-insecurity and there would be high incident of poverty among the rural women. This result is in agreement with the findings of World Farmers Organization (2020) which reported that Covid-19 pandemic created several shocks that affected the world food system. Also, Siche (2020), reported that food demand and thus food security are greatly affected due to mobility restrictions, reduced purchasing power, and with a greater impact on the most vulnerable population groups.

The results in table 4 reveals that rearing of animals ($\bar{x}$= 1.46) was the highest ranked coping strategy adopted by the respondents against covid-19, change in lifestyle ($\bar{x}$= 1.44) was the second highest ranked coping strategy and taking additional job and labour opportunities ($\bar{x}$=1.39) was the third ranked coping strategy. This implies that covid-19 pandemic affected the means of livelihoods of the respondents that they had to find several ways of adjusting their lifestyle by seek additional ways of getting income. This result is in agreement with the findings of Prokopy *et al.*, (2015) who reported that different strategies needs to be taken to mitigate the negative effects of covid-19 on the people so as to achieve food security.

Ho₁: There is no significant relationship between the Perceived Effects of Covid-19 pandemic and coping strategies used by the respondents against the effects of Covid-19 Pandemic.

TABLE 4. Coping Strategies used by the Rural Women against the Effects of Covid-19 Pandemic.

Coping Strategies	Not used frequency (%)	Rarely used frequency (%)	Always used frequency (%)	Mean score	Ranks
1. Acquisition of new skills	26 (30.6)	31 (36.5)	28 (32.9)	1.02	6
2. Reducing prices of farm produced goods to motivate the buyers	34 (40.0)	18 (21.2)	33 (38.8)	0.99	8
3. Borrowed money from family, friends and neighbours	26 (30.6)	31 (36.5)	28 (32.9)	1.02	6
4. Change in lifestyle (looking for cheaper alternatives and prioritize spending)	9 (10.6)	30 (35.3)	46 (54.1)	1.44	2
5. Depends on palliative and gifts from government and individuals	39 (45.9)	29 (34.1)	17 (20.0)	0.74	9
6. Sales of property	57 (67.1)	16 (18.8)	12 (14.1)	0.47	10
7. Sales of livestock and farm produce	29 (34.1)	8 (9.4)	48 (56.5)	1.22	5
8. Cultivation of crops	27 (31.8)	8 (9.4)	50 (58.8)	1.27	4
9. Rearing of animals	19 (22.4)	8 (9.4)	58 (68.2)	1.46	1
10. Taking additional job and labour opportunities	13 (13.3)	26 (30.6)	46 (54.1)	1.39	3

Sources: Field Survey 2020

TABLE 5. The result of Correlation between Coping Strategies and Perceived Effects of Covid-19 Pandemic

Variable	R value	P value	Remark
Coping strategies and Perceived Effects of Covid-19 Pandemic	-0.207[xx]	0.057	Significant

[xx] – significant at 10%

The result in table 5 reveals that there is an inverse relationship between coping strategies and perceived effects of covid-19 pandemic (r=-0.207, p=0.057) at 10% level of significance. This implies that the higher the coping strategies against the effects of covid-19 pandemic, the less the effects of covid-pandemic on the respondents in the study area. This implies that the coping strategies are effective in cushioning the negative effects of covid-19 pandemic on the respondents.

CONCLUSION

Based on the findings of this study, the study concluded that the most frequently used biosecurity measures by the respondents was to avoid hugging, avoid shaking of hands, and maintaining of social distance and wearing of masks. The high cost of goods and services, reduced or loss of income and food insecurity was the most severe effects of covid-19 pandemic on the respondents in the study area. Rearing of animals, change in lifestyle and taking additional job and labour opportunities were the main coping strategies used by the respondents in the study area.

RECOMMENDATION

1. There should be further creation of more awareness and provision of health education to the rural women on the covid-19 pandemic.
2. There should be provision of welfare support inform of food supply, health care services, farming inputs and grants to rural women.
3. Government should create more job opportunities for the rural women.

REFERENCES

1. Bashuna, S. D. and Addom, B. (2020). Digital agriculture to help Africa through coronavirus. Retrieved 17/7/2020 from www.cta.int/en/profile/benjamin-addom-sid03497b7ae-0fcf-4b8d-8c56-bb4b1fd0876a.
2. Food and Agriculture Organization (FAO) (2020). Extension and advisory services: at the frontline of the response to COVID-19 to ensure food security. Rome. https://doi/10.4060/ca8710en
3. Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: a simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E.*: *Logistic and Transportation Review,* 136:101922. https://doi.org/10.1016/j.tre.2020.101922
4. Jámbor, A., Czine, P. and Balogh, P. (2020). The Impact of the Coronavirus on Agriculture: First Evidence Based on Global Newspapers. *Sustainability*, 12(4535): 1-20.
5. Mahona, P, Pacho T (2021). Reshaping education in the post- COVID-19 pandemic in Africa. Afri. Res. J. Educ. Soc. Sci. 8(3):13-26.
6. Prokopy, L. S., Carlton, J. S., Arbuckle, J. G., Jr., Haigh, T., Lemos, M. C., Mase, A. S., . . ., Power, R. (2015). Extension's role in disseminating information about climate change to agricultural stakeholders in the United States. Climatic Change, 130(2), 261–272.

7. Siche, R. (2020). What is the impact of COVID-19 disease on agriculture? *Scientia Agropecuaria*, 11(1): 3-6.
8. World Farmers Organization (2020). Covid-19 pandemic outbreak: overview of the impact on the agricultural sector. A technical assessment of the undergoing situation. Retrieved 17/7/2020 from *www.wfo-oma.org/covid-19-agri-information-hub*