

The Community Food Development Program (PUPM) and Food Price Stabilization in South Lampung

Tubagus Hasanuddin¹, Resti Anggraini², Kordiyana K. Rangga³

¹Department of Extension and Community Development, University of Lampung, Indonesia

^{2,3}Graduate School, University of Lampung, Indonesia

Corresponding Author: tb_sijati@yahoo.com

Article Info

Volume 82

Page Number: 10009 - 10019

Publication Issue:

January-February 2020

Abstract:

Food is very important for human life, including in Indonesia. Fluctuations in food prices affect the ability of consumers. The purpose of this research are: 1) The success of the Community Food Development Program (PUPM) in stabilizing food prices, 2) the factors most related to the participation of farmers in the PUPM program and successful of the PUPM Program. The study was conducted from February-March 2018. The research method used a survey method, and respondents were purposive determined are 66 farmers participating in PUPM. Data were analyzed using *Kendall Partial Correlation*. The results showed 1) The PUPM program successful in stabilizing food prices, 2) Communication of farmers and knowledge of farmer about The Community Food Development Program are variable most related to participation of farmers and successful The Community Food Development Program and The Community Food Development Program can be continued.

Keywords: participation, PUPM program, price stabilized.

Article History

Article Received: 18 May 2019

Revised: 14 July 2019

Accepted: 22 December 2019

Publication: 17 February 2020

I INTRODUCTION

Food is very important in human life, including in Indonesia. Fulfillment of food needs is guaranteed in the 1945 Constitution of the Republic of Indonesia and stated in Law No. 18 of 2012 concerning food. The price of food commodities fluctuate is a problem in Indonesia and not benefit to farmers as producers, the community as consumers, and potentially cause social unrest (Sari, 2010). According to Grunert, Sophie, and Josephine (2014), the sustainability of food existence will occur if the higher food production is carried out, the greater the use of such food production.

Therefore, the fulfillment of food needs in Indonesia must be done by the government. One of the efforts by the government is a policy on food price stability so that farmers as producers get benefit, and the community as consumers are able

to buy food at affordable prices (National Food Security Agency, 2013). According to Dorward (2013), high food prices will have an impact on development, these high food prices cause the need for low food prices in order to stimulate broader economic growth, and increase labor productivity in the economy, especially small farmers in the world agriculture. According to Francis and M. Ataman (2008), an increase in food prices will give particular concern to poor countries. Food prices that continue to soar will worsen the trade balance of underdeveloped countries. The program made by the Indonesian government to stabilize food prices is the Community Food Development Program.

Community Food Development is an activity to empowering community food institutions (farmer groups, and community institutions in the food sector), and Food Industry/Producers/Distributors

in serving Indonesian Farmers Stores (TTI) to maintain the stabilization of food price supply. Indonesian Farmers Stores is a food commodity shop/trader in partnership with the Community Food Institution (LUPM) to sell farmers' food production at the specified price. The targets of this program are farmers and farmer groups, especially rice farmers groups. Therefore the participation of farmers groups in this program is very important. According to Rashid, Md Rezwan, and Md. Quamruzzaman (2016), the factors that can be used as a measure in assessing farmers' participation in agricultural activities are attitudes,

contributions to organization, and cosmopolitan in order to achieve change and empowerment of farmers. The Community Food Development Program has been running since 2016 and has been implemented in 32 provinces in Indonesia including Lampung Province. The number of LUPM and farmers group in Lampung Province who participated in this program up to 2017 was 55 farmers groups consisted of 20 farmers groups in 2016 and increased to 35 farmers groups in 2017. Table 1 shows the list of districts/ cities that are implementing the PUPM program in Lampung province.

Table 1
Districts /cities that participate in the PUPM Program in Lampung Province.

Regency / City		In 2016		In 2017	
		Farmers stores (Unit)	LUPM (farmers groups)	Farmers stores (Unit)	LUPM (farmers groups)
Centre	of	12	6	4	2
Lampung					
East Lampung		8	4	12	6
Tanggamus		6	3	4	2
Pesawaran		6	3	2	1
South Lampung		6	3	36	18
Bandar Lampung		2	1	-	-
Pringsewu		-	-	12	6
Total		40	20	70	35

Source: Food Security Agency of Lampung Province, 2017.

Based on Table 1 appears that in 2016 the number of Farmers Stores and LUPM in South Lampung Regency amounted to 6 and 3, whereas in 2017 there were 36 additional Farmers Stores and 18 Farmers Groups. The following is a list of LUPM (Farmers Groups) that take part in the Community Food Development Program in South Lampung in 2016-2017.

The Community Food Development Program cannot successful without supporting factors. One of the supporting factors is the participation of farmers groups and the community. According to Hasanudin and Dwi (2012), the success of

implementing a program is inseparable from several factors including the level of knowledge of farmers about the program, the role of agricultural extension agents, government support, and farmer participation in program implementation. According to the results of Antikaet.all (2017), the active participation of each individual or group will determine the success of a program, so that the participation of farmers and the community becomes the most important part of a program's sustainability, including the Community Food Development Program. The increase number of farmers groups in South Lampung in the Community Food Development Program was

allegedly due to the success of the Community Food Development Program and the high level of farmers participation. The purpose this research to know the most factor related to participation of farmers groups and successful the Community Food Development Program.

II LITERATURE REVIEW

A simple understanding of participation is suggested by Jalal and Dedi (2001), participation also means that decision makers suggest groups or communities to be involved in the form of submitting suggestions and opinions, goods, skills, materials and services. According to Mardikanto (2010), there are four activities that designate participation in development activities, namely participation in decision making, participation in the implementation of activities, participation in monitoring and evaluation, and participation in the utilization of development outcomes. According to Agidew and Singh (2018), things that can be done to increase farmers 'knowledge and interest in participating is to increase farmers' awareness through providing important information related to activities or programs that will be carried out by these farmers [1-19].

According Trianaet.all (2017), the factors that influence farmer participation in a program, especially programs to increase farmer production, are: (1) Level of knowledge about the program, (2) frequency of extension activities, (3) motivation level farmers, (4) the level of cosmopolitanism, while (5) the level of formal education does not affect farmers' participation in the program. According to Antikaet.all (2017), the factors that have a relationship and affect the level of participation of a farmer member in a farmer group are the intensity of communication of members, while the age, education level, level of knowledge about the program, and the level of benefits of the program are not influential towards member participation. According to

Widyantiet.all(2015), the factors that influence community participation are the level of education, number of family members, and length of time, while factors that are not related and affect participation are age and total income.

The community food development program is an activity by the government to maintain supply stability and food prices, especially rice. This program is listed in the Decree of the Minister of Agriculture of the Republic of Indonesia Number 6 of 2017 concerning Technical Guidelines for Community Food Development. The objectives of the implementation of the program are: (1) Absorbing national agricultural products at prices that are reasonable and profitable for farmers, especially basic and strategic foodstuffs; (2) Supporting supply stability and basic and strategic food prices; (3) Providing easy access for consumers or the public to quality staple and strategic food, at reasonable prices. The target of the Community Food Development Program activities in the 2017 are 898 LUPM (Community Food Institutions) which supply 2000 TTI (Indonesian Farmers Stores) in districts/cities that experience price volatility and staple /strategic food supplies in 32 provinces. According to the Minister of Agriculture's decision No. 06 / KPTS / RC.IIO / J / 01/2017 concerning "Technical Guidelines for Community Food Development Program" in 2017 to measure the success of the Community Food Development Program activities, several success indicators were used as follows; 1) Indicators of Inputs (Distribution of government aid funds, existence of LUPM, existence of Indonesian Farmers Stores (TTI); 2) Output Indicators (Distribution of government assistance funds to LUPM and TTI, LUPM conducts supply to TTI, new and advanced marketing networks for producers/farmers. Implementation of assistance, escort, and technical guidance); 3) Outcome indicators (Farmers get guaranteed purchase price of rice above farmer's basic price, LUPM is able to carry

out food supply, the formation of marketing networks for producers/farmers, easy access to food for the community, and consumers obtain reasonable food prices)[20-24].

III RESEARCH METHOD

This research was conducted in South Lampung. The research location was chosen purposively with the consideration that is one of the centers of rice in Lampung Province. Data collected was carried out in February to March 2018. The population in this study were 190 members of farmer groups who carried out the Community Food Development Program, and from the population the number of samples was 66 respondents determined based on the Yamane formula quoted from Ridwan and Kuncoro (2008) with formula as follows:

$$n = \frac{N}{N d^2 + 1} \dots\dots\dots(1)$$

note:

n = Number of samples

N = Total population

d = Precision (set at 5% with a confidence level of 95%)

The sampling method of this study is simple random sampling. The research method used is the survey method. The data used in the study are primary data and secondary data. Primary data obtained from interviews using a questionnaire. Variable in this research are: 1) knowledge of farmers to the Community Food Development Program, 2) Communication of Farmers in the Community Food Development Program, 3) Motivation of Farmers in the Community Food Development Program, and Cosmopolitan of Farmers, 4) Farmer participation in the Community Food Development Program, and 5) The successful of the Community Food Development Program

Measurement of variables of participation of farmers uses scoring techniques and classified into three classes, namely low, medium, and high. The

successful of the Community Food Development Program with a classification that is less successful, quite successful, and successful. Data analysis in this study used descriptive analysis and statistical analysis of non-parametric *Correlation Partial Kendalltest* (Siegel 2011). The *Correlation Partial Kendalltest* was used to determine the most variable related to Participation of Farmers and Successful in the Community Food Development Program.

The formula for *Correlation Partial Kendall test* (Siegel 2011) is as follows:

$$\tau_{xy.z} = \frac{\tau_{xy} - \tau_{zy} \cdot \tau_{xz}}{\sqrt{1 - \tau_{xz}^2} (1 - \tau_{yz}^2)}$$

note:

$\tau_{xy.z}$ = Correlation CoefisientKendall Partial

τ_{xy} = Correlation of X and Y variable and the other variable are constant

τ_{zy} = Correlation of Z and Y variable and the other variable are constant

τ_{xz} = Correlation of X and Z variable and the other variable are constant

Decision making rules are:

1. If the value $Z_{count} \leq Z_{table}$ ($\alpha = 0,05$), hence accept H_0 and rejected H_1 , there is a no related between the two variables tested.
2. If the value $Z_{count} > Z_{table}$ ($\alpha = 0,05$), hence accept H_1 and rejected H_0 , there is related between the two variables tested.

IV RESULT AND DISCUSSION

Participation of Farmers in The Community Food Development Program

Participation of farmers in the Community Food Development Program most important to Successful this program. Participation of Farmers seen from participate in planning, implementation, monitoring and evaluation, and utilization of Result the Community Food Development Program. Based on the level of farmer participation in planning is in the low classification. This happened because of the

enthusiasm of farmers who were lacking in attending meetings in farmers group as well as meetings with discussion, farmers were also not involved in giving advice and input to the planning of the Community Food Development Program. Farmers prefer to be at home or in the fields compared to have attend meetings or discussion farmers group.

According to John (2014), price transmission

will occur mainly in rice price stabilization activities. Price transmission occurs if world prices are above the domestic base price. The basic price will act as a threshold so that the existence of the base price can cause the transmission price to be asymmetrical. The level of farmer participation in the Community Food Development Program in South Lampung can be seen in Table 2.

Table 2

Level of farmer participation based on indicators on the Community Food Development Program in South Lampung

No	Participation	Classification
1.	Participation in Planning	Low
2.	Participation in Implementation	Height
3.	Participation in Monitoring and Evaluation	Low
4.	Participation in Utilization of Resul	Height

The level of farmer participation in the implementation of the Community Food Development Program is highly classified. Farmers take part in program implementation meetings, and program socialization delivered by Agricultural Extension. Some farmers have participated in grain grinding activities until the process of distributing rice to Indonesian Farmers Stores (TTI). The level of farmer participation in monitoring and evaluation is classified as low. This happened because the lack of farmer participation in the program monitoring and monitoring process. Only a few farmers always follow the monitoring and evaluation process such as the ranks of the management, field facilitators, and people who are experienced and influential both at the fargers group level.

The level of farmer participation in the

utilization of the results is in the high classification. Based on field results, there are many benefits that farmers feel from participating in the Community Food Development Program. Grain farmers purchased at high prices will increase the income of farmers, farmers already know the target market for production, meaning that farmers know where they have to sell their produce. The Community Food Development Program also cuts the long supply chain to be shorter. Based on factors related to farmer participation the Community Food Development Program seen a Level of farmers' knowledge about the program and Communication of farmers most related to participation of farmers in the Community Food Development Program. Farmer's participation in the Community Food Development in Table 3.

Table 3

Factors related to the level of farmer participation in the Community Food Development Program in South Lampung.

Variable	Variable	Correlation Coefisien Partial	Sig.
----------	----------	-------------------------------	------

		Kendall	
Level of farmers' knowledge about the program		0.542**	0.000
Motivation of Farmer		0.129	0.127
Communication of farmers	Participation	0.546**	0.000
Cosmopolitan of farmer	of Farmers	0.518**	0.002

Note:

** : Related at 95% confidence level ($\alpha = 0.05$)

Not related at the 95% confidence level

The Successful of the Community Food Development Program

The successful of the Community Food Development Program is seen from input, output, and outcome indicators. Based on indicators the successful of the the Community Food Development Program classified in not successful, sufficiently successful, and successful. Based on the input indicators the Community Food Development Program is classified as

successful but based on the results of the field, some respondents knew that the funding sources of the Community Food Development Program came from the government, but not all respondents knew about the system of channeling the funds, then some respondents also knew that the existence of Indonesia Farmers Stores (TTI) and Community Food Institutions (LUPM). Data distribution about input in the Community Food Development Program shows at Table 4.

Table 4

Data Distribution According to Respondents about Input in the Community Food Development Program in South Lampung

Classification	Number of Farmers (Soul)	Percentage (%)
Not Successful	3	4.55
Sufficiently Successful	31	46.97
Successful	32	48.48

Based on the output in the Community Food Development Program is classified as medium, meaning that the Program is running well, farmers say that the Community Food Development Program funds are properly channeled, and Community Food Institutions (LUPM) is able to

carry out tasks according to its provisions properly, there is escort and supervision from Extension Worker (PPL) or local government agencies. Distribution According to Respondents About Output in the Community Food Development Program seen Table 5.

Table 5

Data Distribution According to Respondents about Output in the Community Food Development Program in South Lampung

Classification	Number of Farmers	Percentage (%)
----------------	-------------------	----------------

	(Soul)	
Not Successful	12	18.18
Sufficiently Successful	23	34.85
Successful	31	46.97
	66	100

The outcome of the Community Food Development Program was classified as high, meaning that the results or outcome indicators in the Community Food Development Program were successful. Based on the results of data in the field, farmers really feel the benefits of participating in the Community Food

Development Program, increased income, prosperous life. Farmers as producers are not harmed and the community as consumers can buy food at reasonable prices. Table 6 shows that successfully Community Food Development Program in South Lampung.

Table 6
Data Distribution Outcome in the Community Food Development Program in South Lampung

Classification	Number of Farmers (Soul)	Percentage (%)
Not Successful	8	12.12
Sufficiently Successful	13	19.70
Successful	45	68.18

Based on this description, it can be said that the Program was successfully implemented because the Community Food Development Program was very beneficial for farming activities and farmer life, as evidenced by the price of farmers' grain purchased is high, easy access of food for people and farmers, the price of rice circulating in Indonesian Farmers Stores (TTI) reach by

consumers. The success of the Community Food Development Program is seen from price stabilization. The price development of rice and dried paddy grain (GKP) in South Lampung after participating in the Community Food Development Program in 2016-2017 can be seen in Figure 1 below:

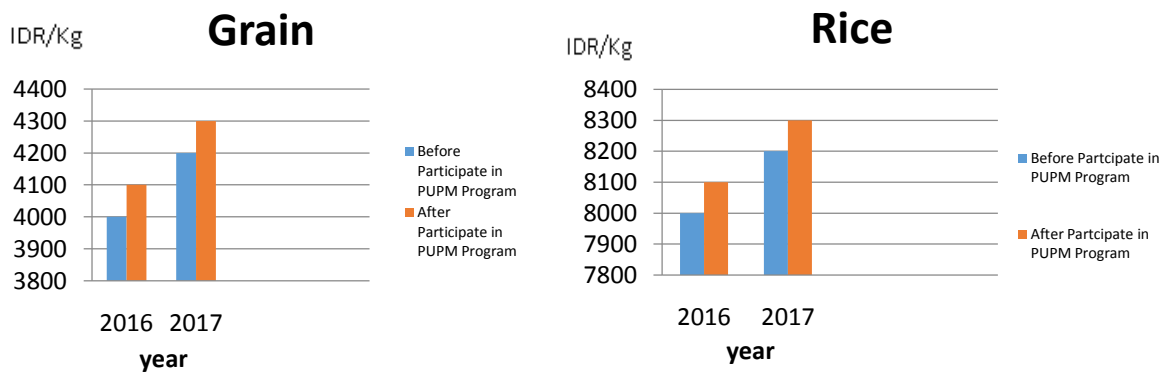


Fig. 1. Harvest Dry Grain Prices (GKP) and Rice South Lampung in 2016-2017.

Source: Based on down-field research, 2018.

Based on Figure 1 it can be seen the price of harvested dry grain (GKP) and rice obtained in 2016-2017 changes are not too significant. Before farmers join the Community Food Development Program, the price of GKP is classified as a low price with a price range of around IDR 3200-3500/kg, and farmers join the Community Food Development Program, farmers feel helped by the increased prices and not only farmers who are profitable but the community/consumers also get affordable rice prices. Harvested Dry Grain Prices (GKP) in South Lampung purchased by farmers group between 2016 and 2017 have not changed

too much in the range IDR 4000 / kg - 4300 / kg. Grain purchased by farmers group is processed and milled to become rice and distributed to the Indonesian Farmers Stores (TTI) at prices ranging from IDR 8000 / kg - 8300 / kg. Based on these descriptions it can be seen that the price range changes that occur both at rice prices and grain prices tend to be stable and consistent in the price comparison range of around IDR 100-200. The factors most related the Successful of the Community Food Development Program seen Table 7.

Table 7
Factors related to Successful the Community Food Development Program in South Lampung.

Variable	Variable	Correlation Coefisien Partial Kendall	Sig.
Level of farmers' knowledge about the program		0.456**	0.000
Motivation of Farmer		0.065	0.406
Communication of farmers	Successful the Program	0.569**	0.000
Cosmopolitan of farmer		0.284	0.054

Note:

** : Related at 95% confidence level ($\alpha = 0.05$)

Not related at the 95% confidence level

Based on Table 7 shows that the level of farmers knowledge about program and

communication of farmers about this program most related to Successful the Community Food Development Program in South Lampung. The results of statistical testing of the relationship between farmer motivation and the level of farmer participation in the Community Food Development Program in South Lampung is not related. There is no motivation for encouragement from outside the farmer's environment, such as the ranks of the management and the local government. Farmers participate in the Community Food Development Program in South Lampung just to increase income, add relationships or friends to their social life. The results of this study are not in accordance with the results of the Triana (2017) that there is a real relationship between the level of motivation of farmers and the level of farmer participation in a program. The relationship between the Frequency of Communication of Farmers and Farmer Participation Levels are high.

The intensity of communication interactions that often occur between farmers and other farmers, farmers with fellow members and farmers with administrators. The results of this study are in accordance with the results of the study of Antika (2017) which concluded that there was a significant relationship between frequency/intensity of communication with the level of farmer participation in a program. Relationship between Farmers' Emphasis Level and Farmer's Participation Rate in the Community Food Development Program in South Lampung obtained significant. Farmers have begun to use mass media to obtain the latest information both related to agriculture and those that are not. Some farmers have started using the internet, and social media applications like what's up etc. There is contact/interaction between farmers and the outside environment in order to get new knowledge whether it is connected to the world of agriculture or not. The results of this study are in accordance with Triana's (2017) study which

states that there is a real relationship between the level of cosmopolitan and the level of farmer participation.

V CONCLUSIONS

The research results showed that: 1) The PUPM program successful in stabilizing food prices, 2) Communication of farmers and knowledge of farmer about The Community Food Development Program are variable most related to participation of farmers and successful The Community Food Development Program and 3) The Community Food Development Program can be continued. Further Study about contribution the Community Food Development Program to Farmers income is important.

VI REFERENCES

- [1]. Agidew, A.A., and K.N. Singh. 2018. Factors affecting farmers' participation in watershed management programs in the Northeastern highlands of Ethiopia: a case study in the Teleyayen sub-watershed. *Ecological Processes Vol 7 (14) pages : 1-15.*
<https://ecologicalprocesses.springeropen.com/articles/10.1186/s13717-018-0128-6>.
- [2]. Antika, A.Y., D. Nikmatullah., dan R.T.Prayitno. 2017. Level of Participation of P3A Members in the Irrigation Network Development Program (PJI) in Fajar Esuk Village, Pringsewu District, Pringsewu Regency. *JIIA, Volume 5 No. 3.* Universitas Lampung.
- [3]. Dorward, A. 2013. Agricultural labour productivity, food prices and sustainable development impacts and indicators. *Food Policy Vol 39 pages : 40-50.*
<https://www.sciencedirect.com/science/article/pii/S0306919212001285>.
- [4]. Francis, Ng., and Ataman A. 2008. Food price increases and net food importing countries: lessons from the recent past.

- Agricultural Economis Vol 39 pages 443-452.*<https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1574-0862.2008.00350.x>
- [5]. Grunert, K.G., Sophie H., and Josephine W. 2014. Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy Vol 44 pages :177-189.* <https://www.sciencedirect.com/science/article/pii/S0306919213001796?via%3Dihub>.
- [6]. Jalal, F. dan Dedi S. 2001. *Educational Reform in the Context of Regional Autonomy.* Depdiknas Bapenas Adicitakartanusa. Jakarta.
- [7]. John, A. 2014. Price relations between international rice markets. *Agricultural and Food Economics Vol 2(1) pages : 1-16.* <https://agrifoodecon.springeropen.com/articles/10.1186/2193-7532-2-1>
- [8]. Hasanudin, T., dan Dwi. M. 2012. The Success Rate of the Rural Agribisnis Business Development Program (PUAP) in Increasing the Income and Empowerment of Rural Farmers Communities. *Activita Volume IV No. 2 Agustus 2012.* LPPM Universitas Lampung.
- [9]. Kuncoro, E.A. dan Riduwan. 2008. *How to use and use path analysis.* Alfabeta. Bandung
- [10]. Lampung Province Food Security Agency. 2017. *Community Food Development.* Food Security Agency. Lampung Province
- [11]. Mardikanto, T. 2010. *The Concept of Community Empowerment.* Tiga Serangkai. Surakarta
- [12]. National Food Security Agency. 2013. *Food Price Stabilization Policy.* Food Security Agency. Jakarta.
- [13]. Sari, D.L. 2010. *Analysis of Grain and Rice Price Spreads and Market and Commodity Integration.* Tesis. IPB. Bogor.
- [14]. Siegel, S. 2011. *Non Parametric Statistics for Social Sciences.* PT Gramedia Pustaka Utama. Jakarta.
- [15]. Triana, R.S., K.K. Rangga., dan B. Viantimala. 2017. Farmers Participation in Special Efforts to Increase Rice, Corn and Soybean Production (UP2PJK) in Seputih Raman District, Central Lampung Regency. *JIIA, Volume 5 No.4.* Universitas Lampung
- [16]. Undang-Undang Dasar Republik Indonesia No 18. Tahun 2012, About Food Security.
- [17]. Widyanti, E., S. Gitosaputro., dan H. Yanfika. 2015. Needs and Community Participation in the Partnership and Community Development Program (PKBL) of PTPN VII Rejosari Business Unit, Natar District, South Lampung Regency. *JIIA, Volume 3 No 2.* Universitas Lampung.
- [18]. Wijaya, W. 2004. *Complete English-Indonesian Dictionary.* Bintang Jaya. Semarang.
- [19]. Yama, I.M.T., S. Gitosaputro., dan T. Hasanuddin. 2018. Participation of Rice Farmers in the Implementation of the National Rice Production Improvement Program (P2BN) in Mataram District, Central Lampung Regency. *JIIA, Volume 6 No 1.* Universitas Lampung.
- [20]. Ritter, V.C., Nordli, H., Fekete, O.R. and Bonsaksen, T., 2017. User satisfaction and its associated factors among members of a Norwegian clubhouse for persons with mental illness. *International Journal of Psychosocial Rehabilitation.* Vol 22 (1) 5, 14.
- [21]. Ferrazzi, P., 2018. From the Discipline of Law, a Frontier for Psychiatric Rehabilitation. *International Journal of Psychosocial Rehabilitation,* Vol 22(1) 16, 28.
- [22]. Bornmann, B.A. and Jagatic, G., 2018. Transforming Group Treatment in Acute Psychiatry: The CPA Model. *International*

Journal of Psychosocial Rehabilitation, Vol 22(1) 29, 45.

- [23]. Koder, D., 2018. Recovery-Oriented Care for Older People: Staff Attitudes and Practices. *International Journal of Psychosocial Rehabilitation*, Vol 22(1) 46, 54.
- [24]. Binnie, J., 2018. Teaching CBT to Pre-Registration nurses: A critical account of a teaching session to pre-registration mental health nurses on the subject of cognitive behavioural therapy and trauma. *International Journal of Psychosocial Rehabilitation*, Vol 22(1), pp.55-64.