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## #15820 Summary

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### Submission

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#### Title and Abstract

Title	Study of Contraceptive Management in National Health Insurance Era at Central Java
Abstract	

Healthcare facilities partners of BPJS have not been synchronized with registered healthcare facilities. Empty stock of contraceptives, excessive storage of contraceptives, and disruption in distribution chain are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives (planning, acceptance and storage). The research used mixed method (quantitative and qualitative approach). The samples were 30 first-level healthcare facilities in Jepara and Wonosobo regencies. There was no planning at provincial level because contraceptive planning activities was regulated by the central health office. Planning of contraceptive requirement at regency/city level was conducted by provincial health office. The acceptance mechanism in the Province involved inventory officer while at health facilities it was performed by Family Planning program manager. Observation of storage rooms for contraceptive in Jepara found that there was no temperature recording device, excess stock of contraceptive injections and pills, absence of thermometer in the storage room, non-functional air conditioning, no separation between storage of hormonal and non-hormonal contraceptive, and there was no distance between pallet and the wall. Meanwhile, contraceptive storage space in Wonosobo has met the Standard Operating Procedure (SOP).

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## #15820 Review

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# Study of Contraceptive Management on JKN era in Central Java

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## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered in K / O / KB. The empty stock of contraceptives, the accumulation of contraceptives in the provincial and regency warehouses, and the mechanism of non-current distribution of contraceptives are still seen in the last three years. The purpose of this study is to identify issues related to the management of contraceptives including planning, acceptance and storage starting from central, province, regency/city and First Level Health Facilities. The research used mixed method with quantitative and qualitative approach. Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencys, namely puskesmas, practicing doctor, pratama clinic and hospital type D pratama. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city is done by Province Government. The acceptance mechanism in the Province involves PPHP (Working Recipient Committee) whereas in the health facility is done by the KB program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall, while Wonosobo contraceptive storage space is in accordance SOP (Standard Operating Procedure)

*Keyword: acceptance, contraceptive, distribution, planning, storage*

## Introduction

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (Masyarakat, 2016, BKKBN, 2015, Kesehatan, 2013)

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Keluarga Berencana (KB) services are part of promotive-preventive efforts.

The KB program aims to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the

community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN, 2010)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (Health, 2013, BKKBN, 2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of fasces provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility (K/0/KB/2014).

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K / 0 / KB.

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility.

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as

recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN.

## Method

This research uses mixed method with quantitative and qualitative approach. Selection technique of sample of district / city is done purposively considering high vacuum of contraception device. Each of the selected regencies / cities is Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that is puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection using smartphones (ODK program) while the qualitative data is done with in-depth interviews.

## Results

### The mechanism of contraceptive planning

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city differs from province. Regency/City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1.1 Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 1.2 Planning based on the source of contraceptives in health facilities**

Planning Variable	Regency/City			
	Wonosobo		Jepara	
	Yes	No	Yes	No
Sumber alat kontrasepsi				
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

### **Acceptance Mechanisms of Contraceptives**

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencys is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse.

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies



has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 1.3 Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 1.4 The duration and type of contraceptives with stock void**

Variable Length of Time and Type of Empty Contraception	Kabupaten/Kota	
	Wonosobo	Jepara
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>	25	25
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

**Table 1.5 Contraception damaged / expired**

Contraception damaged/expired variable	Regency/City	
	Wonosobo	Jepara
Contraceptives received are damaged / expired	f	f
Ever	25	10
Never	2	15

### Storage of contraceptives

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.

**Table 1.6 Observation warehouse**

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
<b>1. Condition of storage space</b>							
a. Clean		V	-	V	-	V	-
b. Dry and free from water seepage		V	-	V	-	V	-
c. There is a working AC		V	-	-	V	V	-
d. There is a functioning fan		V	-	V	-	V	-
e. There is adequate ventilation		V	-	V	-	V	-
f. There is a temperature monitor (space thermometer)		V	-	-	V	V	-
g. There is a daily temperature monitoring recorder			V	-	V	V	-
h. There is a stock card of contraceptives		V	-	V	-	V	-
<b>2. Placement of contraceptives</b>							
a. Apart from insecticides		V	-	V	-	V	-
b. Apart from chemicals and other hazards		V	-	V	-	V	-
c. Shielded from direct sunlight		V	-	V	-	V	-
d. FEFO and FIFO systems are in place		V	-	V	-	V	-
e. Expired/damaged contraceptives are separated		-	-	-	-	-	-
(If any)							
<b>3. Room temperature at observation</b>		24 °C		26 °C		24 °C	

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for

hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature  $<25^{\circ}\text{C}$ .

## **Discussion**

### **Planning Mechanisms of contraception**

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN (Indonesia, 2014)

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing age data in Central Java and Province achievements in the previous year (new FP participants, need for active family planning)

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency / City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

## **Acceptance Mechanisms of Contraceptives**

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN and BKKBN (BKKBN, 2017) According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

At the time of receipt, it is necessary to consider the quantity, quality and requirements of alokon and BHP received in accordance with the receipt documents set forth in the proceedings of acceptance of alokon. (Indonesia, 2014) Acceptance of contraceptives in Jepara and Wonosobo districts is essentially the same, but sometimes contraceptives taken by the material Treasurer to the province, or sometimes also through the process of dropping from the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event.

The next process of goods goes into the warehouse. In the receipt of goods here there is no committee of recipients of goods, goods are only accepted by the material treasurer. Recording still uses a lot of manual systems. Not yet synchronized information system tiered between Health facilities, OPD Regency, Province related to demand and acceptance. Incoming and outgoing contraceptives in both the provinces, district OPDs, and updated health facilities can be found online. This is because there are several regencies/cities recording contraceptive devices between online and offline systems (manual) is not the same.

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through the acceptor of contraceptives/family planning program manager. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility.

## **Storage Mechanisms of Contraceptives**

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used. Storage of contraceptives in Jepara warehouse is not much different from province.

The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.

Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruang KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## **Conclusion**

1. The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.
2. Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.
3. The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.
4. Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.
5. In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.
6. Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall.
7. Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

### **Acknowledgement**

The authors would like to express their thanks to the National Family Planning Coordinating Board who has supported this research by providing funds.

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# Study of Contraceptive Management on JKN era in Central Java

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**Comment [MA1]:** the possibility of people abroad not understanding the term JKN.

## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered in K / O / KB. The empty stock of contraceptives, the accumulation of contraceptives in the provincial and regency warehouses, and the mechanism of non-current distribution of contraceptives are still seen in the last three years. The purpose of this study ~~is was~~ to identify issues related to the management of contraceptives including planning, acceptance and storage starting from central, province, regency/city and First Level Health Facilities. The research used mixed method with quantitative and qualitative approach. Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencys, namely puskesmas, practicing doctor, pratama clinic and hospital type D pratama. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city ~~is was~~ done by Province Government. The acceptance mechanism in the Province involves PPHP (Working Recipient Committee) whereas in the health facility is done by the KB program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall , while Wonosobo contraceptive storage space is in accordance SOP (Standard Operating Procedure)

**Comment [MA2]:** What is PPHP??

**Comment [MA3]:** Better to use "Family Planning"

*Keyword: acceptance, contraceptive, distribution, planning, storage*

## Introduction

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (Masyarakat, 2016, BKKBN, 2015, Kesehatan, 2013)

**Comment [MA4]:** ??

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Keluarga Berencana (KB) services are part of promotive-preventive efforts.

The KB program ~~aims aimed~~ to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the

**Comment [MA5]:** Better to use Family Planning

**Comment [MA6]:** Reference??



community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN, 2010)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (Health, 2013, BKKBN, 2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of faskes provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility (K/0/KB/2014).

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K / 0 / KB.

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility.

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as

recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN.

## Method

This research ~~uses~~used mixed method with quantitative and qualitative approach. Selection technique of sample of district / city ~~is~~was done purposively considering high vacuum of contraception device. Each of the selected regencies / cities ~~is~~were Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that ~~is~~were puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection ~~using~~used smartphones (ODK program) while the qualitative data ~~is~~was done with in-depth interviews.

## Results

### The mechanism of contraceptive planning

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city differs from province. Regency/ City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1.4 Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 4-2 Planning based on the source of contraceptives in health facilities**

Planning Variable Sumber alat kontrasepsi	Regency/City			
	Wonosobo		Jepara	
	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

### Acceptance Mechanisms of Contraceptives

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencys is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse.

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies

has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 4.3 Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 4.4 The duration and type of contraceptives with stock void**

Variable Length of Time and Type of Empty Contraception	Kabupaten/Kota	
	Wonosobo	Jepara
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>	25	25
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

Table 1.5 Contraception damaged / expired

Contraception damaged/expired variable	Regency/City	
	Wonosobo	Jepara
Contraceptives received are damaged / expired	f	f
Ever	25	10
Never	2	15

### Storage of contraceptives

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.

Table 1.6 Observation warehouse

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
1.	Condition of storage space						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water seepage	V	-	V	-	V	-
	c. There is a working AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
2.	Placement of contraceptives						
	a. Apart from insecticides	V	-	V	-	V	-
	b. Apart from chemicals and other hazards	V	-	V	-	V	-
	c. Shielded from direct sunlight	V	-	V	-	V	-
	d. FEFO and FIFO systems are in place	V	-	V	-	V	-
	e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
	(If any)						
3.	Room temperature at observation	24 °C		26 °C		24 °C	

Comment [MA7]: the maximum number of tables is 5. so a simple table can be combined, then the discussion can be explained afterwards.

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for

hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature <25 C.

## **Discussion**

### **Planning Mechanisms of contraception**

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN (Indonesia, 2014)

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing agedata in Central Java and Province achievements in the previous year (new FP participants, need for active family planning)

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency / City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

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BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN and BKKBN (BKKBN, 2017) According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

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## **Storage Mechanisms of Contraceptives**

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used. Storage of contraceptives in Jepara warehouse is not much different from province.

The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.



Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruang KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## Conclusion

1. The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.
2. Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.
3. The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.
4. Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.
5. In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.
6. Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall.
7. Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

**Comment [MA8]:** Without bullet and numbering

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**Comment [MA9]:** The minimum number of references were 20. Consists of 80% of journals, and 20% of other sources.

# Study of Contraceptive Management on National Health Insurance era in Central Java

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## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered in K / O / KB. The empty stock of contraceptives, the accumulation of contraceptives in the provincial and regency warehouses, and the mechanism of non-current distribution of contraceptives are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives including planning, acceptance and storage starting from central, province, regency/city and First Level Health Facilities. The research used mixed method with quantitative and qualitative approach. Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencies, namely puskesmas, practicing doctor, pratama clinic and hospital type D pratama. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city was done by Province Government. The acceptance mechanism in the Province involves inventory officer whereas in the health facility is done by the Family Planning program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall , while Wonosobo contraceptive storage space is in accordance SOP (Standard Operating Procedure)

*Keyword: acceptance, contraceptive, distribution, planning, storage*

## Abstrak

Faskes yang bekerjasama dengan BPJS Kesehatan belum tersinkronisasi dengan Faskes yang teregister dalam K/O/KB. Kekosongan alat kontrasepsi, penumpukan alkon di gudang provinsi dan kabupaten, dan mekanisme distribusi alkon tidak lancar masih dijumpai dalam tiga tahun terakhir. Tujuan penelitian ini adalah mengidentifikasi permasalahan terkait dengan pengelolaan alkon yang meliputi perencanaan, penerimaan, dan penyimpanan mulai dari tingkat pusat, provinsi, kabupaten/kota dan Fasilitas Kesehatan Tingkat Pertama. Penelitian menggunakan mixed method dengan pendekatan kuantitatif dan kualitatif. Sampel diambil 30 fasilitas kesehatan tingkat pertama (FKTP) di masing-masing Kabupaten Jepara dan Wonosobo yaitu puskesmas, dokter praktek, klinik pratama dan rumah sakit tipe D pratama. Provinsi tidak pernah melakukan perencanaan karena kegiatan perencanaan alkon telah diatur oleh Pusat. Perencanaan kebutuhan alkon di Kabupaten/Kota dilakukan oleh Provinsi. Mekanisme penerimaan di Provinsi melibatkan PPHP (Panitia Penerima Hasil Pekerjaan) sedangkan di Faskes dilakukan oleh petugas pengelola program KB. Ruang penyimpanan alkon Jepara ditemukan data bahwa pencatatan monitoring suhu belum ada, adanya kelebihan stock jenis alkon suntik dan pil, tidak adanya termometer dalam ruang penyimpanan, AC tidak berfungsi, penyimpanan alkon hormonal dan non hormonal menjadi satu ruangan dan tidak ada jarak antara pallet dengan tembok, sedangkan ruang penyimpanan alkon Wonosobo sudah sesuai SOP.

Kata Kunci: alkon, perencanaan, penerimaan, distribusi, penyimpanan

## **Introduction**

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (BKKBN 2015)

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Family planning services are part of promotive-preventive efforts.(BKKBN 2011)

The family planning program aimed to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN 2015)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. (Bawing et al. 2017) It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (Health, 2013, BKKBN, 2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of fasces provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility.

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K/0/KB.(Kementerian Kesehatan Republik Indonesia 2014)

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. (Purwaningsih 2012) The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training

Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility. (Oktriyanto 2016) (Paramita Boni Lestari 2017)

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN. (Panjaitan & Goenawi 2014)

## **Method**

This research used mixed method with quantitative and qualitative approach. Selection technique of sample of district / city was done purposively considering high vacuum of contraception device. Each of the selected regencies / cities were Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that were puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection used smartphones (ODK program) while the qualitative data was done with in-depth interviews.

## **Results**

### **The mechanism of contraceptive planning**

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city differs from province. Regency/City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. (Purwaningsih 2012) For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1. Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 2. Planning based on the source of contraceptives in health facilities**

Planning Variable	Regency/City			
	Wonosobo		Jepara	
Sumber alat kontrasepsi	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

### **Acceptance Mechanisms of Contraceptives**

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the

provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day. (Panjaitan & Goenawi 2014)

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencies is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse. (Oktriyanto 2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 3. Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1
<b>Contraceptives received are damaged / expired</b>		
Ever	25	10
Never	2	15

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 4. The duration and type of contraceptives with stock void**

Variable Length of Time and Type of Empty Contraception	Kabupaten/Kota	
	Wonosobo	Jepara
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-

>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>		
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

## Storage of contraceptives

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.

**Table 5. Observation warehouse**

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
<b>1.</b>	<b>Condition of storage space</b>						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water seepage	V	-	V	-	V	-
	c. There is a working AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
<b>2.</b>	<b>Placement of contraceptives</b>						



a. Apart from insecticides	V	-	V	-	V	-
b. Apart from chemicals and other hazards	V	-	V	-	V	-
c. Shielded from direct sunlight	V	-	V	-	V	-
d. FEFO and FIFO systems are in place	V	-	V	-	V	-
e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
(If any)						
<b>3. Room temperature at observation</b>	24 °C		26 °C		24 °C	

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature <25 C.

## Discussion

### Planning Mechanisms of contraception

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN. (BKKBN 2017)

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. (Astuti 2015) There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing age data in Central Java and Province achievements in the previous year (new FP participants, need for active family planning).

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency /

City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

### **Acceptance Mechanisms of Contraceptives**

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN and BKKBN (BKKBN, 2017) According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

At the time of receipt, it is necessary to consider the quantity, quality and requirements of alokon and BHP received in accordance with the receipt documents set forth in the proceedings of acceptance of alokon. (Indonesia, 2014) Acceptance of contraceptives in Jepara and Wonosobo districts is essentially the same, but sometimes contraceptives taken by the material Treasurer to the province, or sometimes also through the process of dropping from the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also

check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event.

The next process of goods goes into the warehouse. In the receipt of goods here there is no committee of recipients of goods, goods are only accepted by the material treasurer. Recording still uses a lot of manual systems. Not yet synchronized information system tiered between Health facilities, OPD Regency, Province related to demand and acceptance. Incoming and outgoing contraceptives in both the provinces, district OPDs, and updated health facilities can be found online. This is because there are several regencies/cities recording contraceptive devices between online and offline systems (manual) is not the same. (Dieleman et al. 2018)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through the acceptor of contraceptives/family planning program manager. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. (Glasier & Gebbie 2005)

### **Storage Mechanisms of Contraceptives**

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. (Rakhi & Sumathi 2011) Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. (Mukasa et al. 2017) Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used. Storage of contraceptives in Jepara warehouse is not much different from province.

The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.

Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruang KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## **Conclusion**

The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.

Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.

The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.

Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.

In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.

Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall. Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

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# Study of Contraceptive Management on National Health Insurance era in Central Java

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## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered in K/0/KB. The empty stock of contraceptives, the accumulation of contraceptives in the provincial and regency warehouses, and the mechanism of non-current distribution of contraceptives are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives including planning, acceptance and storage starting from central, province, regency/city and First Level Health Facilities. The research used mixed method with quantitative and qualitative approach. Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencies, namely puskesmas, practicing doctor, pratama clinic and hospital type D pratama. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city was done by Province Government. The acceptance mechanism in the Province involves inventory officer whereas in the health facility is done by the Family Planning program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall, while Wonosobo contraceptive storage space is in accordance SOP (Standard Operating Procedure)

**Keyword:** acceptance, contraceptive, distribution, planning, storage

## Abstrak

Faskes yang bekerjasama dengan BPJS Kesehatan belum tersinkronisasi dengan Faskes yang teregister dalam K/0/KB. Kekosongan alat kontrasepsi, penumpukan alkon di gudang provinsi dan kabupaten, dan mekanisme distribusi alkon tidak lancar masih dijumpai dalam tiga tahun terakhir. Tujuan penelitian ini adalah mengidentifikasi permasalahan terkait dengan pengelolaan alkon yang meliputi perencanaan, penerimaan, dan penyimpanan mulai dari tingkat pusat, provinsi, kabupaten/kota dan Fasilitas Kesehatan Tingkat Pertama. Penelitian menggunakan mixed method dengan pendekatan kuantitatif dan kualitatif. Sampel diambil 30 fasilitas kesehatan tingkat pertama (FKTP) di masing-masing Kabupaten Jepara dan Wonosobo yaitu puskesmas, dokter praktek, klinik pratama dan rumah sakit tipe D pratama. Provinsi tidak pernah melakukan perencanaan karena kegiatan perencanaan alkon telah diatur oleh Pusat. Perencanaan kebutuhan alkon di Kabupaten/Kota dilakukan oleh Provinsi. Mekanisme penerimaan di Provinsi melibatkan PPHP (Panitia Penerima Hasil Pekerjaan) sedangkan di Faskes dilakukan oleh petugas pengelola program KB. Ruang penyimpanan alkon Jepara ditemukan data bahwa pencatatan monitoring suhu belum ada, adanya kelebihan stock jenis alkon suntik dan pil, tidak adanya termometer dalam ruang penyimpanan, AC tidak berfungsi, penyimpanan alkon hormonal dan non hormonal menjadi satu ruangan dan tidak ada jarak antara pallet dengan tembok, sedangkan ruang penyimpanan alkon Wonosobo sudah sesuai SOP.

**Comment [MA1]:** Write abstracts briefly and clearly. Abstract cannot be more than 200 words. Show novelty from research.

Kata Kunci: alkon, perencanaan, penerimaan, distribusi, penyimpanan

## Introduction

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (BKKBN, 2015).

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Family planning services are part of promotive-preventive efforts.(BKKBN 2011)

The family planning program aimed to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN 2015)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. (Bawing et al. 2017) It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (Health, 2013, BKKBN, 2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of fasces provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility.

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K/0/KB.(Kementerian Kesehatan Republik Indonesia 2014)

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. (Purwaningsih 2012) The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training

**Comment [MA2]:** Add commas between institutions / names and years in all of reference



Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility. (Oktriyo 2016) (Paramita Boni Lestari 2017)

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN. (Panjaitan & Goenawi 2014)

## Method

This research used mixed method with quantitative and qualitative approach. Selection technique of sample of district / city was done purposively considering high vacuum of contraception device. Each of the selected regencies / cities were Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that were puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection used smartphones (ODK program) while the qualitative data was done with in-depth interviews.

**Comment [MA3]:** the method is better written in detail so the reader can know the steps in the research

## Results

### The mechanism of contraceptive planning

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

**Comment [MA4]:** the results and discussion are written in one section

**Comment [MA5]:** Without subsection

The planning of contraceptives in regency/city differs from province. Regency/City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. (Purwaningsih 2012) For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1. Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 2. Planning based on the source of contraceptives in health facilities**

Planning Variable	Regency/City			
	Wonosobo		Jepara	
Sumber alat kontrasepsi	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

#### **Acceptance Mechanisms of Contraceptives**

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the

provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day. (Panjaitan & Goenawi 2014)

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencys is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse.(Oktriyanto 2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 3. Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1
<b>Contraceptives received are damaged / expired</b>		
Ever	25	10
Never	2	15

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 4. The duration and type of contraceptives with stock void**

Variable Length of Time and Type of Empty Contraception	Kabupaten/Kota	
	Wonosobo	Jepara
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-

>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>		
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

### Storage of contraceptives

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.

**Table 5. Observation warehouse**

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
<b>1.</b>	<b>Condition of storage space</b>						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water seepage	V	-	V	-	V	-
	c. There is a working AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
<b>2.</b>	<b>Placement of contraceptives</b>						

a. Apart from insecticides	V	-	V	-	V	-
b. Apart from chemicals and other hazards	V	-	V	-	V	-
c. Shielded from direct sunlight	V	-	V	-	V	-
d. FEFO and FIFO systems are in place	V	-	V	-	V	-
e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
(If any)						
<b>3. Room temperature at observation</b>	24 °C		26 °C		24 °C	

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature <25 C.

## Discussion

### Planning Mechanisms of contraception

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN. (BKKBN 2017)

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. (Astuti 2015) There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing age data in Central Java and Province achievements in the previous year (new FP participants, need for active family planning).

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency /

City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

#### **Acceptance Mechanisms of Contraceptives**

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN and BKKBN (BKKBN, 2017) According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

At the time of receipt, it is necessary to consider the quantity, quality and requirements of alokon and BHP received in accordance with the receipt documents set forth in the proceedings of acceptance of alokon. (Indonesia, 2014) Acceptance of contraceptives in Jepara and Wonosobo districts is essentially the same, but sometimes contraceptives taken by the material Treasurer to the province, or sometimes also through the process of dropping from the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also

check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event.

The next process of goods goes into the warehouse. In the receipt of goods here there is no committee of recipients of goods, goods are only accepted by the material treasurer. Recording still uses a lot of manual systems. Not yet synchronized information system tiered between Health facilities, OPD Regency, Province related to demand and acceptance. Incoming and outgoing contraceptives in both the provinces, district OPDs, and updated health facilities can be found online. This is because there are several regencies/cities recording contraceptive devices between online and offline systems (manual) is not the same.(Dieleman et al. 2018)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through the acceptor of contraceptives/family planning program manager. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility.(Glasier & Gebbie 2005)

### **Storage Mechanisms of Contraceptives**

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. (Rakhi & Sumathi 2011) Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. (Mukasa et al. 2017) Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used. Storage of contraceptives in Jepara warehouse is not much different from province.

The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.

Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruangan KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## **Conclusion**

The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.

Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.



The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.

Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.

In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.

Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall.

Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

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# Study of Contraceptive Management on National Health Insurance era in Central Java

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## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered. The empty stock, the accumulation of contraceptives, and the mechanism of non-current distribution are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives (planning, acceptance and storage). The research used mixed method (quantitative and qualitative approach). Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencys. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city was done by Province Government. The acceptance mechanism in the Province involves inventory officer whereas in the health facility is done by the Family Planning program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall , while Wonosobo contraceptive storage space is in accordance Standard Operating Procedure.

*Keyword: acceptance, contraceptive, distribution, planning, storage*

## Abstrak

Faskes yang bekerjasama dengan BPJS Kesehatan belum tersinkronisasi dengan Faskes yang teregister. Kekosongan alat kontrasepsi, penumpukan alkon, dan mekanisme distribusi yang tidak lancar masih dijumpai dalam tiga tahun terakhir. Tujuan penelitian ini adalah mengidentifikasi permasalahan terkait dengan pengelolaan alkon (perencanaan, penerimaan, dan penyimpanan). Penelitian menggunakan *mixed method* dengan pendekatan kuantitatif dan kualitatif. Sampel diambil 30 fasilitas kesehatan tingkat pertama (FKTP) di masing-masing Kabupaten Jepara dan Wonosobo. Provinsi tidak pernah melakukan perencanaan karena kegiatan perencanaan alkon telah diatur oleh Pusat. Perencanaan kebutuhan alkon di Kabupaten/Kota dilakukan oleh Provinsi. Mekanisme penerimaan di Provinsi melibatkan Panitia Penerima Hasil Pekerjaan sedangkan di Faskes dilakukan oleh petugas pengelola program KB. Ruang penyimpanan alkon Jepara ditemukan data bahwa pencatatan monitoring suhu belum ada, adanya kelebihan stock jenis alkon suntik dan pil, tidak adanya termometer dalam ruang penyimpanan, AC tidak berfungsi, penyimpanan alkon hormonal dan non hormonal menjadi satu ruangan dan tidak ada jarak antara pallet dengan tembok, sedangkan ruang penyimpanan alkon Wonosobo sudah sesuai SOP.

Kata Kunci: alkon, perencanaan, penerimaan, distribusi, penyimpanan

## Introduction

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (BKKBN,2015)

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Family planning services are part of promotive-preventive efforts.(BKKBN,2011)

The family planning program aimed to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN,2015)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. (Bawing et al.,2017) It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (BKKBN,2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of fasces provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility.

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K/0/KB.(Kementerian Kesehatan Republik Indonesia,2014)

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. (Purwaningsih,2012) The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice

of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility. (Oktriyo,2016) (Paramita Boni Lestari,2017)

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN.(Panjaitan & Goenawi,2014)

## **Method**

This research used mixed method with quantitative and qualitative approach. Selection technique of sample of district / city was done purposively considering high vacuum of contraception device. Each of the selected regencies / cities were Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that were puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection used smartphones (ODK program) while the qualitative data was done with in-depth interviews. In-depth interviews were conducted by researchers with targeted contraceptive managers from the Central BKKBN, Provincial BKKBN, district family planning officers, and First-Level Health Facilities. Observations were carried out in the warehouse for storage of contraception both at the provincial, district and health facilities.

The enumerator is tasked with collecting forms in the form of monthly reports F / II / KB Clinic for each health facility visited during January 2016 to June 2017 (18 months) for photocopying. The photocopied form was submitted by the enumerator to the research team for analysis regarding the occurrence of emptiness or excess or participation in family planning at the Health Center.

The type of instrument used is 6 forms. Form 1 was asked to the manager of the family planning program at the provincial level (Province BKKBN), form 2 was asked to the manager of the family planning program at the district level, form 3 was asked to the Head of the District / City Health Office, form 4 was asked to the officers at the first level health facility (quantitative data collection), form 5 is asked to first-level health facility officials (qualitative data collection), form 6 is asked to the provincial

and district / city contraceptive warehouse staff. Matrix 1 and matrix 2 are the matrix of the results of calculations F / II / KB

## Results and Discussion

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city differs from province. Regency/City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. (Purwaningsih,2012) For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1. Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 2. Planning based on the source of contraceptives in health facilities**

Planning Variable	Regency/City			
	Wonosobo		Jepara	
Sumber alat kontrasepsi	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most

contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day. (Panjaitan & Goenawi, 2014)

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencies is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse. (Oktriyanto, 2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 3. Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1
<b>Contraceptives received are damaged / expired</b>		
Ever	25	10
Never	2	15

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 4. The duration and type of contraceptives with stock void**

<b>Variable Length of Time and Type of Empty Contraception</b>	<b>Kabupaten/Kota</b>	
	<b>Wonosobo</b>	<b>Jepara</b>
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>	25	25
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.



**Table 5. Observation warehouse**

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
<b>1.</b>	<b>Condition of storage space</b>						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water seepage	V	-	V	-	V	-
	c. There is a working AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
<b>2.</b>	<b>Placement of contraceptives</b>						
	a. Apart from insecticides	V	-	V	-	V	-
	b. Apart from chemicals and other hazards	V	-	V	-	V	-
	c. Shielded from direct sunlight	V	-	V	-	V	-
	d. FEFO and FIFO systems are in place	V	-	V	-	V	-
	e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
	(If any)						
<b>3.</b>	<b>Room temperature at observation</b>	24 °C		26 °C		24 °C	

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature <25 C.

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN.

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All

needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. (Astuti,2015) There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing age data in Central Java and Province achievements in the previous year (new FP participants, need for active family planning).

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency / City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN. According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

At the time of receipt, it is necessary to consider the quantity, quality and requirements of alokon and BHP received in accordance with the receipt documents set forth in the proceedings of acceptance of alokon. (Indonesia,2014). Acceptance of contraceptives in Jepara and Wonosobo districts is essentially the same, but sometimes contraceptives taken by the material Treasurer to the province, or sometimes also through the process of dropping from the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event.(Anwar,2011)

The next process of goods goes into the warehouse. In the receipt of goods here there is no committee of recipients of goods, goods are only accepted by the material treasurer. Recording still uses a lot of manual systems. Not yet synchronized information system tiered between Health facilities, OPD Regency, Province related to demand and acceptance. Incoming and outgoing contraceptives in both the provinces, district OPDs, and updated health facilities can be found online. This is because there are several regencies/cities recording contraceptive devices between online and offline systems (manual) is not the same.(Dieleman et al. 2018). The design of a warehouse information system will improve accuracy, efficiency and effectiveness.(SuryantoTommi,2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through the acceptor of contraceptives/family planning program manager. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility.(Glasier & Gebbie,2005)

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. (Rakhi & Sumathi,2011) Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. (Mukasa et al.,2017) Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess

stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used.

Storage of contraceptives in Jepara warehouse is not much different from province. The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.

Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruang KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## **Conclusion**

The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.

Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.

The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.

Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.

In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.

Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall. Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

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# Study of Contraceptive Management on National Health Insurance era in Central Java

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## Abstract

Health facilities in cooperation with BPJS have not been synchronized with health facilities registered. The empty stock, the accumulation of contraceptives, and the mechanism of non-current distribution are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives (planning, acceptance and storage). The research used mixed method (quantitative and qualitative approach). Samples were taken by 30 first-level health facilities in Jepara and Wonosobo regencys. The province never did the planning because contraceptive planning activities have been regulated by the Central Government. Planning of contraceptive requirement in regency/city was done by Province Government. The acceptance mechanism in the Province involves inventory officer whereas in the health facility is done by the Family Planning program manager. The storage space of contraceptive in Jepara found that the record of temperature monitoring is not available, the excess stock of contraceptive injection and pill, the absence of thermometer in the storage room, the air conditioning is not working, the storage of hormonal and non hormonal contraceptive into one room and there is no distance between pallet and the wall , while Wonosobo contraceptive storage space is in accordance Standard Operating Procedure.

**Keyword:** *acceptance, contraceptive, distribution, planning, storage*

## Abstrak

Faskes yang bekerjasama dengan BPJS Kesehatan belum tersinkronisasi dengan Faskes yang teregister. Kekosongan alat kontrasepsi, penumpukan alkon, dan mekanisme distribusi yang tidak lancar masih dijumpai dalam tiga tahun terakhir. Tujuan penelitian ini adalah mengidentifikasi permasalahan terkait dengan pengelolaan alkon (perencanaan, penerimaan, dan penyimpanan). Penelitian menggunakan *mixed method* dengan pendekatan kuantitatif dan kualitatif. Sampel diambil 30 fasilitas kesehatan tingkat pertama (FKTP) di masing-masing Kabupaten Jepara dan Wonosobo. Provinsi tidak pernah melakukan perencanaan karena kegiatan perencanaan alkon telah diatur oleh Pusat. Perencanaan kebutuhan alkon di Kabupaten/Kota dilakukan oleh Provinsi. Mekanisme penerimaan di Provinsi melibatkan Panitia Penerima Hasil Pekerjaan sedangkan di Faskes dilakukan oleh petugas pengelola program KB. Ruang penyimpanan alkon Jepara ditemukan data bahwa pencatatan monitoring suhu belum ada, adanya kelebihan stock jenis alkon suntik dan pil, tidak adanya termometer dalam ruang penyimpanan, AC tidak berfungsi, penyimpanan alkon hormonal dan non hormonal menjadi satu ruangan dan tidak ada jarak antara pallet dengan tembok, sedangkan ruang penyimpanan alkon Wonosobo sudah sesuai SOP.

**Kata Kunci:** alkon, perencanaan, penerimaan, distribusi, penyimpanan

## Introduction

Health insurance is a guarantee of health protection for participants to benefit health care and protection in meeting basic health needs provided to everyone who has paid contributions or fees paid by the government (BKKBN,2015)

Every resident of Indonesia is obliged to become a participant of JKN in order to cross subsidize so that the financial barrier in society in reaching health service can be eliminated. JKN is also intended to realize quality control and cost control in health services, strengthen primary health care and its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and impact on reducing the number of sick people and the number of people treated so that health financing more efficient. Family planning services are part of promotive-preventive efforts.(BKKBN,2011)

The family planning program aimed to control fertility that requires a quality method of contraception to improve sexual and reproductive health. In the implementation process is influenced by the resources of the implementation of KB programs, the community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN,2015)

The policy and provision of contraceptive services support facilities include the provision of adequate contraceptives in every health facility and network. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set out in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non contraceptives of national population and family planning programs. (Bawing et al.,2017) It was published three years before the JKN program was implemented in Indonesia.

Based on the regulation of the Minister of Health of the Republic of Indonesia number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but borne by BKKBN. According to the regulation of BKKBN head number 185 / PER / E1 / 2014 it is mentioned that contraceptives provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, intrauterine devices (BKKBN,2015). In the Head Regulation it is submitted that the program contraceptive tool is distributed to the first and advanced levels of fasces provided that having a Cooperation Agreement (MCC) with BPJS Health registered in the BKKBN SIM through the registration card of KB health facility.

Based on the results of research conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance" found that the data between health facilities that cooperate with BPJS Health has not been synchronized with health facilities registered in K/0/KB.(Kementerian Kesehatan Republik Indonesia,2014)

In the management of contraceptives program provided by the government in the last 3 years still encountered various problems such as a vacuum of contraceptives (stock out), the buildup of contraceptives in the warehouse of provinces and regencies, and the mechanism of distribution of contraceptives that are not smooth. (Purwaningsih,2012) The results of the assessment of the supply chain of the family planning program conducted by the JSI Research and Training Institute in cooperation with BKKBN in 11 regencies / cities by 2016 found that 45 percent of the sample of health service facilities had a vacuum of contraceptives, at least one of the contraceptives provided by BKKBN so that can not provide a choice



of all methods that should be offered. There are 29 health care facilities having a stock out for injecting methods and 21 percent having a stock out for implant methods.

The condition of the vacuum of the contraceptives above according to the findings of JSI Research and Training Institute is due to several things including: delays in procurement processes at the Central level, weaknesses on inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) so that the calculation of the number of contraceptives that must be supplied is not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurs due to the absence of stock records or improper stock recording at the facility. (Oktriyanto,2016) (Paramita Boni Lestari,2017)

The problem is not separated from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security as well as recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every level of the region. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level to the First Level Health Facility (FKTP). Data on the results of this study is very necessary in the management of contraceptives in the current era of JKN.(Panjaitan & Goenawi,2014)

## **Method**

This research used mixed method with quantitative and qualitative approach. Selection technique of sample of district / city was done purposively considering high vacuum of contraception device. Each of the selected regencies / cities were Jepara Regency and Wonosobo Regency. Each District / City subsequently taken 30 first-level health facilities (FKTP) that were puskesmas, doctor practice, clinic pratama and hospital type D pratama. Quantitative data collection used smartphones (ODK program) while the qualitative data was done with in-depth interviews. In-depth interviews were conducted by researchers with targeted contraceptive managers from the Central BKKBN, Provincial BKKBN, district family planning officers, and First-Level Health Facilities. Observations were carried out in the warehouse for storage of contraception both at the provincial, district and health facilities.

The enumerator is tasked with collecting forms in the form of monthly reports F / II / KB Clinic for each health facility visited during January 2016 to June 2017 (18 months) for photocopying. The photocopied form was submitted by the enumerator to the research team for analysis regarding the occurrence of emptiness or excess or participation in family planning at the Health Center.

The type of instrument used is 6 forms. Form 1 was asked to the manager of the family planning program at the provincial level (Province BKKBN), form 2 was asked to the manager of the family planning program at the district level, form 3 was asked to the Head of the District / City Health Office, form 4 was asked to the officers at the first level health facility (quantitative data collection), form 5 is asked to first-level health facility officials (qualitative data collection), form 6 is asked to the provincial

and district / city contraceptive warehouse staff. Matrix 1 and matrix 2 are the matrix of the results of calculations F / II / KB

## Results and Discussion

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city differs from province. Regency/ City request based on need. There are 5-10 regencies / cities planning their own procurement of contraceptives using APBD funds. (Purwaningsih,2012) For planning the need of contraception tool in Wonosobo district to do planning for contraception tool for one year, planning of this requirement in planning part and area of KB, for subag planning to arrange data base of planning while KB field compile contraception needs by using formula of calculation based on formula is on Perka BKKBN No. 287 by calculating minimum requirement and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Regency/City of Wonosobo and Jepara.

**Table 1. Planning of contraceptives based on routine needs at health facilities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara health facility	f	f
The calculation is done by the OPD KB Regency/City	3	2
The calculation is done by the health facility itself	23	9
Combination of 1 and 2	1	14

**Table 2. Planning based on the source of contraceptives in health facilities**

Planning Variable	Regency/City			
	Wonosobo		Jepara	
Sumber alat kontrasepsi	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Buy themselves	2	25	2	23
Other sources	-	27	-	25

The calculation of routine contraceptive needs planning in Wonosobo Regency is mostly done by own health facility, while for Jepara regency calculation is done by combination calculation by OPD KB regency/city and by own health facility. In addition to the calculations with the combination, health facilities in Jepara Regency also have their own calculations.

While for planning based on source of contraception in Wonosobo regency and Jepara regency mostly sourced from OPD-KB Regency / City. Although most

contraceptives are obtained from OPD-KB Regency / City but there are still health facilities that buy their own contraceptives.

The revenue mechanism in the Province involves the PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. Generally the damage is not up to 10%. After the goods acceptance process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day. (Panjaitan & Goenawi, 2014)

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. Different in the city / regency level that the acceptance mechanism can be through distributors / partners to the committee acceptance OPD KB regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencies is in principle the same, contraceptive devices are sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event. The next process of goods goes into the warehouse. (Oktriyanto, 2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through contraceptive receivers. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center / clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility. According to the results of contraceptive checks, so far the acceptance of contraceptives in Wonosobo and Jepara regencies has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance acceptance in Regency / City

**Table 3. Compliance admittance of contraceptives in regencies/cities**

Planning Variable	Regency/City	
	Wonosobo	Jepara
<b>Accurate acceptance of contraceptives</b>	f	f
According to the needs	26	24
Not as needed	1	1
<b>Contraceptives received are damaged / expired</b>		
Ever	25	10
Never	2	15

Although acceptance of contraceptives is considered appropriate but there is still a vacuum of some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and up.

**Table 4. The duration and type of contraceptives with stock void**

Variable Length of Time and Type of Empty Contraception	Kabupaten/Kota	
	Wonosobo	Jepara
<b>The duration and type of IUD contraceptives with stock void</b>	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of implant contraceptives with stock void</b>		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
<b>The duration and type of injection contraceptives with stock void</b>	25	25
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
<b>The duration and type of pills contraceptives with stock void</b>		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
<b>The duration and type of condom contraceptives with stock void</b>		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

Storage of contraceptives is done in order to maintain and secure the existing contraceptives. With the appropriate storage standardization of storage will maintain the quality of contraceptives so as to minimize the failure of contraception.

**Table 5. Observation warehouse**

No	Observation warehouse	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
<b>1.</b>	<b>Condition of storage space</b>						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water seepage	V	-	V	-	V	-
	c. There is a working AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
<b>2.</b>	<b>Placement of contraceptives</b>						
	a. Apart from insecticides	V	-	V	-	V	-
	b. Apart from chemicals and other hazards	V	-	V	-	V	-
	c. Shielded from direct sunlight	V	-	V	-	V	-
	d. FEFO and FIFO systems are in place	V	-	V	-	V	-
	e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
	(If any)						
<b>3.</b>	<b>Room temperature at observation</b>	24 °C		26 °C		24 °C	

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse of contraceptives is administered by a material treasurer who has a pharmaceutical background. So the warehouse human resources have a good knowledge about the standard of storage of contraceptives. The mechanism of contraceptive storage measures after the contraception is received in the next warehouse all contraceptives are placed on a wooden pallet. Contraceptives will be arranged with contraceptive arrangements showing the expiry date of contraceptives in the storage of contraceptives using FEFO (First Expired First Out) system means that previously expired goods are placed front-dip to be issued first. There is a special treatment for hormonal contraceptives, these contraceptives will be stored in a cool room or air conditioned room with a temperature <25 C.

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non contraceptive tool planning / contraceptives planning that the contraceptive needs planning is done at each level to be proposed at the level above, ie the province will make the contraceptive needs planning and submitted to the center, OPD KB Regency/City make a plan and will be submitted to the province and so on. The planning of family planning services at the central level is prepared nationally and based on situational analysis including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN.

But the reality is that planning is top-down planning, not bottom-up planning. As a result, the province has never done the planning needs of contraceptives. All

needs are supported by the Center. So far, the province has never been asked to plan. All contraceptive planning is already regulated by the center. Either from the number of contraceptives, the types of contraceptives are all determined by the Center. As a result, existing contraceptives in warehouse is not suitable with the needs. (Astuti,2015) There are some contraceptives that stocknya excess and there are shortcomings. Central BKKBN makes planning for Provinces based on existing potential couples of childbearing age data in Central Java and Province achievements in the previous year (new FP participants, need for active family planning).

Furthermore, for planning needs of contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency / City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not do planning needs of contraceptives for one year because it was done planning by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, but the results will change after being able to drop from the center. So sometimes can not control the required amount.

Plans made also relate to the existing inventory in the Provincial warehouse. Such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo carries out the planning needs of contraceptives for one year. Planning of this requirement in planning section and field of KB, for planning subag arrange planning base data whereas KB field compile contraception needs by using formula of calculation based on formula existed in Perka BKKBN no. 287 by calculating minimum requirement and maximal requirement. However, the number of contraceptives sent also depends on the supply of the Provincial Warehouse. If there are excessive contraceptive methods in the Province, the Regency/City will get dropping contraceptives, even if the type of contraceptives Regency/City does not request. There are several contraceptives also provided independently by health facilities. This is because the syringe on the contraceptive device that is dropping from the Center, feels less comfortable on the acceptors.

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative, analysis, proposal and drafting of rensi by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive services supporting facilities in BKKBN. According to the head of BKKBN in terms of acceptance of contraceptives, there PPHP who will receive contraceptives, check the condition of contraception. For provincial BKKBN the revenue mechanism in the Province involves PPHP (Receiving Committee). PPHP is involved since 2016. In receipt, random checking is done. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment. Recording is done manually. Not possible if found damage outside the random sample, recording damage is still done. After the goods receipt process is completed, the goods are sent to the provincial warehouse. The process of receiving goods from PPHP to the warehouse maximum lasts for 1 day.

At the time of receipt, it is necessary to consider the quantity, quality and requirements of alokon and BHP received in accordance with the receipt documents set forth in the proceedings of acceptance of alokon. (Indonesia,2014). Acceptance of contraceptives in Jepara and Wonosobo districts is essentially the same, but sometimes contraceptives taken by the material Treasurer to the province, or sometimes also through the process of dropping from the province. When contraceptives are taken directly to the province, then those who receive direct material treasurer. When the goods are dropped, the material treasurer will also check the administrative requirements, check the condition of the contraceptives, both the quantity and the condition of the contraceptives then confirm to the superior of the material treasurer and make the news of the event.(Anwar,2011)

The next process of goods goes into the warehouse. In the receipt of goods here there is no committee of recipients of goods, goods are only accepted by the material treasurer. Recording still uses a lot of manual systems. Not yet synchronized information system tiered between Health facilities, OPD Regency, Province related to demand and acceptance. Incoming and outgoing contraceptives in both the provinces, district OPDs, and updated health facilities can be found online. This is because there are several regencies/cities recording contraceptive devices between online and offline systems (manual) is not the same.(Dieleman et al. 2018). The design of a warehouse information system will improve accuracy, efficiency and effectiveness.(SuryantoTommi,2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency is through the acceptor of contraceptives/family planning program manager. Recipient officers will perform examination of contraceptives both in quality and quantity. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic. Similarly, what happened in Wonosobo regency. Inspection of administrative completeness is also done by program manager officer / management officer of contraception device in health facility.(Glasier & Gebbie,2005)

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non contraceptive tools of KKB programs. Where the provisions of contraception are arranged on pallets with height of arrangement not more than 2 meter, distance between pallet and wall of jakar between palette is 30 cm. The composition of contraceptives should indicate the identity of the contraceptive device / contraceptive, so that the batch number mark, the year of production and the expiration time of the contraceptive will be clearly visible from the side or front. (Rakhi & Sumathi,2011) Then for contraceptives that are near expiry must be placed in front or arranged at the top so issued first. There is standardization of room temperature for IUD, condoms and maximum 25 celcius pills, injection and maximum implant 15 until 25 celcius.

Injections of contraceptives and implants require a cooler room temperature then placed into one. To maintain the quality of contraception lamps used lighting is incandescent. But there is still a lack of a daily record of daily temperature monitoring so that the room temperature was never recorded. (Mukasa et al.,2017) Recording of room temperature is important to be done so that the quality of contraception is maintained. Then the condition of the warehouse is currently experiencing excess

stock of contraceptive and injectable contraceptive pill as the contraceptive tool arrangement not according to SOP, if supposed contraception tool arranged with high arrangement not more than 2 meter in fact arrangement already exceed 2 meter then there is contraception device not placed on pallet hal this is because the existing pallet is all used.

Storage of contraceptives in Jepara warehouse is not much different from province. The mechanism of storage of contraceptives in Jepara warehouse there are some that have been in accordance SOP but there are still things that have not complied with the SOP, among other conditions of storage space of contraceptives that no thermometer so there is no daily temperature record. Other things air conditioning in the storage room does not work, but the room was injecting contraceptives and implants. Storage of contraceptives both hormonal and non hormonal into one room so that contraceptive devices-contraceptives are not able to be prepared according to SOP. Then the distance between the pallet and the wall there is no distance, even contraceptives attached to the wall. All of these conditions are certainly not in accordance with the SOP in contraceptive preparation.

Wonosobo regency in contraceptive storage is much better than in the province and in Jepara District, the storage is done already meet the contraceptive equipment storage SOP, based on the observation found that contraceptives placed on the pallet, contraceptives protected from sunlight for implants and injection placed in one room with a minimum temperature of 25 c. has a temperature gauge and a daily temperature monitoring book. For security doors equipped with iron tralis. The storage system used is the FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non contraceptive devices based on expiration limit, if contraceptives and non contraceptives which expiration limits earlier must be issued early.

Storage places of contraceptives in health facilities vary. There is a store of contraceptives in the room KIA KB services with consideration of the convenience of service to acceptor KB, because with contraceptives stored in ruang KIA then akseptor not preoccupied with the queue. But there is also a store of contraception in the medicine warehouse. Appropriate Perka BKKBN No. 286 on guidance on the execution of penrimaan, storage and distribution of contraceptive and non contraceptive devices of KKB program, in principle in contraceptive storage must pay attention to cleanliness means that storage space must be cleaned from anything that can expedite / damaged (dust, chemicals, and non used contraceptives) Furthermore hormonal contraception in its storage should pay attention to maximum room temperature 25 degree celcius. Storage of contraceptives in place of family planning services provide ease of service but quality aspect of contraception also must be considered. If the room is able to meet the quality standards of storage is certainly not a problem, but if the contrary conditions contraception will be no longer qualified.

## **Conclusion**

The mechanism of planning of contraceptives available at the provincial level is done from top to bottom where the province has never done the planning because the contraceptive planning activities have been regulated by the Center, causing the existence of non-conformity with the existing stock.



Planning needs of contraceptives in districts / cities conducted by the Province. Calculation of contraceptive needs is done by using PPM (Community Demand Estimates) and RKA done by KB field. While the planning on the scope of health facilities is done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center the results received are not appropriate as well as the number of contraceptives shipped also depends on the existing stock in the provincial warehouse. Therefore sometimes can not control the needs.

The revenue mechanism in the Province involves the PPHP (Receiving Committee). The examination is done randomly. PPHP will record the status of receipt of goods, whether the goods are in good condition or there are notes. Record of damaged goods by mentioning the batch number of the goods and the origin of the damage, which is accompanied by a photo attachment.

Acceptance mechanism Contraceptives in health facilities are carried out by contraceptives/program managers. While the examination of administrative completeness is done by the family planning program manager at the health center/clinic.

In general, the storage of contraceptives in the provincial warehouse already meets the SOP. But for the monitoring of temperature monitoring is still not there and there are excess stock types of contraceptive and pill injection so that the contraceptive arrangement is not appropriate SOP.

Storage of contraceptives in Jepara warehouse still not suitable SOP, among others, there is no thermometer in storage room, AC not working, storage of hormonal and non hormonal contraception into one room and no distance between pallet with wall.

Storage of contraceptives in warehouse of Wonosobo Regency is in accordance with SOP. The storage system used is the FEFO system.

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## Study of Contraceptive Management in National Health Insurance Era at Central Java

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### Abstract

Healthcare facilities partners of BPJS have not been synchronized with registered health-care facilities. Empty stock of contraceptives, excessive storage of contraceptives, and disruption in distribution chain are still seen in the last three years. The purpose of this study was to identify issues related to the management of contraceptives (planning, acceptance and storage). The research used mixed method (quantitative and qualitative approach). The samples were 30 first-level healthcare facilities in Jepara and Wonosobo regencies. There was no planning at provincial level because contraceptive planning activities was regulated by the central health office. Planning of contraceptive requirement at regency/city level was conducted by provincial health office. The acceptance mechanism in the Province involved inventory officer while at health facilities it was performed by Family Planning program manager. Observation of storage rooms for contraceptive in Jepara found that there was no temperature recording device, excess stock of contraceptive injections and pills, absence of thermometer in the storage room, non-functional air conditioning, no separation between storage of hormonal and non-hormonal contraceptive, and there was no distance between pallet and the wall. Meanwhile, contraceptive storage space in Wonosobo has met the Standard Operating Procedure (SOP).

### Introduction

Health insurance is a guarantee of health protection for participants to improve health care and to meet the basic health needs, and is provided to everyone who has paid contributions or fees required by the government (BKKBN,2015)

Every residents of Indonesia is required to become a participant of JKN in order to cross subsidize so that the financial barrier to healthcare services in the society can be eliminated. JKN was also intended to realize quality control and cost control in health services, strengthen primary health care and

its referral system, and prioritize promotive-preventive efforts. Effective promotive-preventive efforts will reduce the incidence of disease and reduce healthcare costs. Family planning (KB) services are part of promotive-preventive efforts.(BKKBN, 2011)

The family planning program's goal is to control fertility that requires a quality contraception method to improve sexual and reproductive health. Its implementation is influenced by availability of resources, community's perspective on reproductive health and KB services, and the use of contraceptives. (BKKBN,2015)

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The policy and provision of contraceptive services support facilities include the provision of adequate contraceptive tools in every healthcare facilities and networks. Increased assurance of the availability of contraceptives through the procurement and distribution of contraceptives has been set in the Regulation of BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptives and non-contraceptives of national population and family planning programs. (Bawing et al.,2017) It was published three years before the JKN program was implemented in Indonesia.

Based on the Minister of Health of the Republic of Indonesia regulation number 71 of 2013 on health services on national health insurance (JKN) in Article 19 mentioned that contraceptives are not covered by BPJS Health but the cost is covered by BKKBN. According to the BKKBN chief regulation number 185 / PER / E1 / 2014 it is mentioned that the contraceptive tools provided by BKKBN for JKN participants are condoms, combined pills, 3 monthly injections, implants, and intrauterine devices (BKKBN,2015). The contraceptive tools are distributed to the first level and more advanced healthcare facilities, as long as they have a Cooperation Agreement (MCC) with BPJS Health and registered in the BKKBN SIM through the registration card of KB health facility.

Based on the results of studies conducted by Puslitbang KB and KS in 2015 in 4 provinces (Lampung, West Java, Central Kalimantan and East Nusa Tenggara) on "Study of Implementation of Family Planning Services in National Health Insurance", the data between healthcare facilities partners of BPJS Health has not been synchronized with healthcare facilities registered in K/0/KB.(Kementerian Kesehatan Republik Indonesia,2014)

There are also problems in the management of contraceptives program provided by the government in the last 3 years such as a vacuum of contraceptives (stock out), the excess supply of contraceptives in the warehouse of provinces and regencies, and the disturbed distribution chain. (Purwaningsih,2012) The results of the assessment of the supply chain of the family planning program conducted by the JSI

Research and Training Institute in cooperation with BKKBN in 11 regencies / cities at 2016 found that 45% of the sampled healthcare service facilities had a vacuum of contraceptives for at least one of the contraceptives provided by BKKBN and hence could not provide all of the available methods to the community. There are 29 health care facilities out of stock for injections and 21% out of stock for implants.

The vacuum of contraceptives, according to the findings of JSI Research and Training Institute, was caused by several conditions including: delays in procurement processes at Central level, weaknesses in inventory management, weaknesses in Logistics Information System Management (LMIS), weaknesses in transport and distribution systems, inadequate storage of contraceptives, and lack of coordination, communication and human resource accountability. Weakness in inventory management in the form of contraceptive distribution system based on the target service (push system) occurred because the calculated number of contraceptives need was not responsive to the changing pattern of consumption. Meanwhile, the weakness in Logistics Information System Management (LMIS) occurred due to the absence of stock recording or improper stock recording at the facility. (Oktriyanto,2016) (Paramita Boni Lestari,2017)

The problems are not separate from the mechanism of acceptance, storage and distribution / distribution of goods including maintenance and security, as well as recording and reporting of contraceptives. The mechanism is a series of activities in an effort to maintain the continuity of the availability of contraceptive tools to support the operation of family planning programs at every levels. Based on the description above, it is necessary to identify problems related to the management of contraceptives, including planning, acceptance and storage starting from the central, provincial, district / city level down to the First Level Health Facility (FKTP). Data on the results of this study is necessary to improve the management of contraceptives in JKN era.(Panjaitan & Goenawi, 2014).

## Method

This research used mixed method with

quantitative and qualitative approach. Selection of district / city samples was done purposively considering the high vacuum of contraception device. The selected regencies / cities were Jepara Regency and Wonosobo Regency. From District / City, 30 first-level health facilities (FKTP) (including public health center, private doctor practice, primary level clinics and type D hospitals) were taken. Quantitative data collection was conducted via smartphones (ODK program) while the qualitative data was obtained from in-depth interviews. In-depth interviews were conducted by researchers to targeted contraceptive managers from the Central BKKBN, Provincial BKKBN, district family planning officers, and First-Level Healthcare Facilities. The contraception storage rooms at provincial, district and primary healthcare facilities were observed.

The enumerator was tasked with collecting forms in the form of monthly reports F / II / KB Clinic from each healthcare facility visited during January 2016 to June 2017 (18 months) for photocopying. The photocopied form was submitted by the enumerator was subsequently analyzed for the occurrence of empty stock or excess stock or participation in family planning at the Healthcare Centers.

The instrument used was 6 forms. Form 1 was filled by managers of the family planning program at the provincial level (Province BKKBN), form 2 was filled by managers of the

family planning program at the district level, form 3 was filled by Head of the District / City Health Office, form 4 was filled by officers at the first level health facility (quantitative data collection), form 5 was filled by first-level health facility officials (qualitative data collection), form 6 was filled by the provincial and district / city contraceptive warehouse staff. Matrix 1 and matrix 2 are the matrix of the results of calculations F / II / KB.

## Results and Discussion

Planning needs of contraceptives in Central Java Province has never been planned. All needs have been arranged and supported by the Center. Provinces were never asked to plan. Both the number and types of contraceptives have been determined by the Center. As for the number and types of contraceptives given by the center based on the potential data available in Central Java, the achievements in the previous year for new KB participants, and how much the need for active family planning participants should be continued. For details, the provincial planning does not know clearly because the planning party does not participate in the planning process.

The planning of contraceptives in regency/city was different from province level. Regency/City requested based on needs. There are 5-10 regencies / cities that planned their own contraceptives procurement using APBD funds (Purwaningsih, 2012). Contraception

Table 1. Planning of contraceptives based on routine needs at healthcare facilities

Planning Variable	Regency/City	
	Wonosobo	Jepara
Planning of routine contraception needs at Wonosobo Jepara healthcare facilities	f	F
The calculation was done by OPD KB Regency/City	3	2
The calculation was done by the health facility itself	23	9
Combination of 1 and 2	1	14

Table 2. Planning based on the source of contraceptives in healthcare facilities

Planning Variable	Regency/City			
	Wonosobo		Jepara	
Contraceptive tools source	Yes	No	Yes	No
OPD-KB Regency/City	27	-	25	-
Public Health Office Regency/City	-	27	-	25
Self-procurement (facility's budget)	2	25	2	23
Other sources	-	27	-	25

tool needs plan in Wonosobo district was conducted for one year, planning of this requirement in planning part and area of KB, planning section then arranged the database while KB field compiled contraception needs using the formula on Perka BKKBN No. 287 which is calculating the minimum and maximal requirement. The following is contraceptive planning based on routine need and source of contraception in health facility of Wonosobo and Jepara Regencies.

The calculation of routine contraceptive needs planning in Wonosobo Regency was mostly conducted by the healthcare facilities themselves, while for Jepara regency the calculation was done by combined calculation by OPD KB regency/city and by the healthcare facilities themselves.

For planning based on source of contraception, both in Wonosobo regency and Jepara regency the largest source was OPD-KB Regency / City. Although most contraceptives were obtained from OPD-KB Regency / City, there were healthcare facilities that procured their own contraceptive tools.

The receiving mechanism in the Province involved the PPHP (Receiving Committee). PPHP has been involved since 2016. Upon receiving the goods, random checking was done. PPHP will record the status of goods received, whether they were in good condition or not. Record of damaged goods was compiled by stating the batch number and the origin of the damage with a photograph attached. Recording was done manually. If there were damages outside the random sample, damage recording was still performed. Generally, the damaged goods percentage was lower than 10%. After the acceptance process is completed,

the goods were sent to provincial warehouse. The process of goods acceptance from PPHP to the warehouse lasts for 1 day at most. (Panjaitan & Goenawi, 2014)

The acceptance of contraception at the provincial level comes from the central BKKBN without going through a third party. However, in the city / regency level, the acceptance mechanism can be done through distributors / partners to the committee acceptance OPD KB of the regency / city. Acceptance of contraceptives in Jepara and Wonosobo regencies was generally similar, contraceptive devices were sometimes taken by the material Treasurer to the province, or sometimes also through the dropping process of the province. When contraceptives were taken directly to the province, it will be received directly by material treasurer. When the goods were dropped, the material treasurer will also check the administrative requirements, condition of the contraceptives (both quantity and quality of the contraceptives) and then confirm to the superior of the material treasurer and make a report of the event. The goods were then stored inside the warehouse. (Oktriyanto, 2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency was through contraceptive receivers. Recipient officers will re-examine the quality and quantity of contraceptives, meanwhile the examination of administrative completeness was done by the family planning program manager at the health center / clinic. Similar process also took place in Wonosobo regency. Inspection of administrative completeness was also performed by program manager officer / management officer of contraception device in health facilities. According to the

Table 3. Compliance admittance of contraceptives in regencies/cities

Planning Variable	Regency/City	
	Wonosobo	Jepara
Accurate acceptance of contraceptives	f	f
According to the needs	26	24
Not as needed	1	1
Contraceptives received are damaged / expired		
Occurred at least once	25	10
Never occurred	2	15

results of contraceptive checks, the acceptance of contraceptives in Wonosobo and Jepara regencies has been largely in accordance with the needs. This can be seen from table 1.3 of contraceptive acceptance in Regency / City

Although acceptance of contraceptives is considered appropriate but there were still stock void for some types of contraceptives and contraceptives with broken / expired conditions between January 1, 2016 and June 2017.

Storage of contraceptives was performed in such a way in order to maintain and secure the existing contraceptives. With the appropriate storage standardization, the quality of contraceptives can be maintained so as to minimize contraceptive failure.

Central Java Provincial contraceptive equipment warehouse is located separately with the representative office of BKKBN province. The warehouse was managed by a material

treasurer with pharmaceutical background and hence had an adequate knowledge about the standard contraceptives storage. All contraceptives were placed on a wooden pallet for storage. Contraceptives will be arranged to show their expiry date and was stored using FEFO (First Expired First Out) system, meaning that goods that will expire fastest will be placed at the front to be issued first. There was a special treatment for hormonal contraceptives, which will be stored in a cool room or air conditioned room with a temperature of <25o C.

Based on Head of BKKBN Regulation no. 287 / PER / B3 / 2011 on guidance on the implementation of contraceptive and non-contraceptive tool planning / contraceptives planning, contraceptive needs planning conducted at each level must be proposed to the level above, ie contraceptive needs planning at the province level will be submitted to the

Table 4. The duration and type of contraceptives with stock void

Variable Length of Time and Type of Stock Void Contraception	Regency/City	
	Wonosobo	Jepara
The duration and type of IUD contraceptives with stock void	f	f
Not empty	25	25
1 month	2	-
2 months	-	-
3 months	-	-
>3 months	-	-
The duration and type of implant contraceptives with stock void		
Not empty	25	25
1 month	1	-
2 months	-	-
3 months	-	-
>3 months	1	-
The duration and type of injection contraceptives with stock void	25	25
Not empty	24	22
1 month	2	2
2 months	-	-
3 months	-	-
>3 months	1	1
The duration and type of pills contraceptives with stock void		
Not empty	27	25
1 month	-	-
2 months	-	-
3 months	-	-
>3 months	-	-
The duration and type of condom contraceptives with stock void		
Not empty	22	25
1 month	-	-
2 months	1	-
3 months	2	-
>3 months	2	-

Table 5. Observation of warehouses

No	Observation of warehouses	Provincial warehouse		Jepara Regency		Wonosobo Regency	
		Yes	No	Yes	No	Yes	No
1.	Condition of storage space						
	a. Clean	V	-	V	-	V	-
	b. Dry and free from water leaks	V	-	V	-	V	-
	c. There is a functioning AC	V	-	-	V	V	-
	d. There is a functioning fan	V	-	V	-	V	-
	e. There is adequate ventilation	V	-	V	-	V	-
	f. There is a temperature monitor (space thermometer)	V	-	-	V	V	-
	g. There is a daily temperature monitoring recorder		V	-	V	V	-
	h. There is a stock card of contraceptives	V	-	V	-	V	-
2.	Placement of contraceptives						
	a. Separated from insecticides	V	-	V	-	V	-
	b. Separated from chemicals and other hazards	V	-	V	-	V	-
	c. Protected from direct sunlight	V	-	V	-	V	-
	d. FEFO and FIFO systems are in place	V	-	V	-	V	-
	e. Expired/damaged contraceptives are separated	-	-	-	-	-	-
3.	Room temperature at observation	24 °C		26 °C		24 °C	

center, OPD KB Regency/City made a plan which will be submitted to the province, etc. The planning of family planning services at the central level is prepared nationally and based on situational analysis, including proposals from provinces and outcomes of family planning services in previous years, regional and global agreements and objectives that are in line with the objectives of the health and family planning RPJMN.

However, in reality, the planning is top-down planning, not bottom-up planning. As a result, the province has never planned contraceptives needs. All needs were supported by the Center. Thus far, the province has never been asked to plan. All contraceptive needs planning was already regulated by the center, including the number and types of contraceptives. As a result, the supply contraceptives in warehouses is not suitable with the actual regional needs (Astuti,2015). There are some contraceptives with excess stock and some with empty stock. Central BKKBN made the plan for Provinces based on existing potential couples of childbearing age data in Central Java and Province's achievements in the previous year (new FP participants, need for active family planning).

Furthermore, for planning needs of

contraceptives in regency / city is calculated by Province. Calculation of formula for need of contraception of Regency / City based on PPM (Community Demand Estimation) and RKA done by KB field. Planning of contraceptive needs in health facility is done by KB department based on number of acceptors of PA and PUS in their region. Health facilities themselves do not plan contraceptives needs for one year because it was planned by OPD KB. Although the lower structure of both health facilities and District Family Planning OPD plan earlier, the results will change after the goods were dropped from the center, hence it can be difficult to control the required amount at times.

Plans made was also related to the existing inventory in the Provincial warehouse, such as planning needs of contraception in Wonosobo district. The planning section of contraceptives in Wonosobo planned the contraceptives needs for one year. Planning of this level required the involvement of the planning section to arrange the planning base data and KB section to compile contraception needs by using the formula in Perka BKKBN no. 287 to calculate the minimum requirement and maximal requirement. However, the number of contraceptives sent also depended on the supply of the Provincial Warehouse.

If there were excessive contraceptive tools in the Province, the Regency/City will receive dropping contraceptives, even if it was not the types of contraceptives requested by the Regency/City. There are several contraceptives provided independently by healthcare facilities. This was because the syringe on the contraceptive device that was dropped from the Center, were disliked by the acceptors.

BKKBN activities in the preparation phase include mapping by requesting proposals for provincial needs through the Provincial BKKBN Representative; analysis, proposal and drafting of action plan by taking into account the proposals of the Provincial BKKBN Representative and the availability of contraceptive service supporting facilities in BKKBN. According to the head of BKKBN, in terms of acceptance of contraceptives, PPHP will receive contraceptives and check its condition. For provincial BKKBN, the receiving mechanism at Province level involved PPHP (Receiving Committee). PPHP has been involved since 2016. Upon receiving the goods, random checking was done. PPHP will record the status of goods received, whether they were in good condition or not. Record of damaged goods was compiled by stating the batch number and the origin of the damage with a photograph attached. Recording was done manually. If there were damages outside the random sample, damage recording was still performed. Generally, the damaged goods percentage was lower than 10%. After the acceptance process is completed, the goods were sent to provincial warehouse. The process of goods acceptance from PPHP to the warehouse lasts for 1 day at most.

Upon receiving the goods, it is necessary to examine the quantity, quality and requirements of contraceptive tools and whether the BHP received was in accordance to the receipt documents set forth in the proceedings of contraceptive tools acceptance. (Indonesia,2014). Acceptance of contraceptives in Jepara and Wonosobo districts were similar; however, at times the contraceptives were taken by the material Treasurer to the province, or sometimes through the process of dropping from the province. When contraceptives were taken directly to the province, it will be received

directly by material treasurer. When the goods were dropped, the material treasurer will also check the administrative requirements, condition of the contraceptives (both quantity and quality of the contraceptives) and then confirm to the superior of the material treasurer and make a report of the event.(Anwar,2011)

The good were subsequently stored inside the warehouse. There was no separate committee to receive the goods; it was only received by the material treasurer. Recording was still performed manually and not synchronized healthcare facilities, OPD Regency and the Province related to demand and acceptance. Information about contraceptives availability in both provinces, district OPDs, and updated health facilities can be found online. This is because there were several regencies/cities with differences in the result between manual and online recording system.(Dieleman et al. 2018). Warehouse information system will improve the accuracy, efficiency and effectiveness. (SuryantoTommi,2016)

Acceptance mechanism of contraceptives in health facilities in Jepara regency was through contraceptive receivers. Recipient officers will re-examine the quality and quantity of contraceptives, meanwhile the examination of administrative completeness was done by the family planning program manager at the health center / clinic. Similar process also took place in Wonosobo regency. Inspection of administrative completeness was also performed by program manager officer / management officer of contraception device in health facilities.(Glasier & Gebbie,2005)

In general, the storage of contraceptives in provincial warehouses meets SOPs as set forth in Perka BKKBN number 286 / PER / B3 / 2011 on guidelines on the implementation of acceptance, storage and distribution of contraceptive and non-contraceptive tools of KKB programs. The contraception tools should be arranged on pallets not more than 2 meters tall, distance between pallet and wall of jakar is 30 cm. The arrangement of contraceptives should visibly show the identity of the goods such as the batch number mark, the year of production and the expiry date. (Rakhi & Sumathi,2011). Contraceptives that will expire fastest should be placed at the front or at the top

so that they will be issued first. The standard room temperature for IUD and condoms is maximum 25° C whereas for pills, injection and implant maximum 15°- 25° C.

Injection contraceptives and implants require a cooler room temperature, hence they can be stored together. To maintain the quality of contraception, the lamps used is incandescent. However, there was no daily record of store room's temperature (Mukasa et al.,2017). Recording of room temperature is important in order to ensure the quality of contraception tools. The warehouse was experiencing excess stock of contraceptives, and injectable contraceptive pill was not arranged according to SOP such as exceeding the maximum height requirement and not placing the goods on pallet because all of the pallets were used.

Storage of contraceptives in Jepara warehouse was not much different from the province. There were several conditions that did not comply with the SOP such as no thermometer (and hence no daily temperature record), air conditioning in the storage room for injection and implants did not work, hormonal and non-hormonal contraceptives were stored together, no distance between pallet and the wall and some contraceptives were even attached to the wall.

Wonosobo regency had a better contraceptive storage compared to those at the province and Jepara District. The storage largely met the contraceptive equipment storage SOP. Contraceptives were placed on pallets, protected from sunlight, implants and injection were stored in one room with a minimum temperature of 25°C, had a temperature gauge and daily temperature monitoring book. For security, doors were equipped with iron tralis. The storage system used FEFO system. FEFO system (First Expire First Out) is a process of expenditure of contraceptives and non-contraceptive devices based on expiry date, contraceptives which expire earlier must be issued first.

Storage places of contraceptives in health facilities varied widely. Several facilities stored some of their contraceptives inside KIA room where KB services took place in order to facilitate KB service to acceptors. However, there

was also a separate storage of contraception in the medicine warehouse. According to Perka BKKBN No. 286 on guidance on the execution of acceptance, storage and distribution of contraceptive and non-contraceptive devices of KKB program, cleanliness must be maintained, which means that storage space must be cleaned from anything that can cause damage (dust, chemicals, and unused contraceptives). Hormonal contraception must be stored in a maximum room temperature of 25°C. Contraceptives must be stored in such a way to ease family planning service without undermining contraception quality.

### Conclusions

The mechanism of planning of contraceptives was conducted from top to bottom. The province has never done any planning because the center already conducted the planning, causing the existence of non-conformity with the existing stock.

Planning needs of contraceptives in districts / cities was conducted by the Province. Calculation of contraceptive needs was done using PPM (Community Demand Estimates) and RKA conducted by KB field. Planning at health facilities level was done by FPD based on the number of acceptors PA and PUS. However, after receiving dropping from the center, the amount received were not appropriate because it also depended on the existing stock in the provincial warehouse. Therefore, such planning was still not enough to control the needs.

The acceptance mechanism in the Province involved the PPHP (Receiving Committee). The examination was performed randomly. PPHP will record the status of received goods. Damaged goods were recorded by stating the batch number of the goods and the origin of the damage, with a photograph attached.

Acceptance of contraceptives in health facilities were carried out by contraceptives/program managers while the examination of administrative completeness was conducted by the family planning program manager at the health center/clinic.

In general, the storage of contraceptives in the provincial warehouse already met the SOP. However, there was no temperature monitoring and there were excess stock types

of pills and injections and the contraceptive arrangement did not met the SOP.

Storage of contraceptives in Jepara warehouse did not met the SOP such as no thermometer in storage room, non-functional AC, hormonal and non-hormonal contraception were stored in one room and no distance between pallet and the wall.

Storage of contraceptives in warehouse of Wonosobo Regency has met the SOP. The storage system used is the FEFO system.

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