# Quality of Care in Modern Contraceptive Service Delivery in the Public and Private Sector: A Cross Sectional Study in Indonesia

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Received: March 27, 2020Accepted: May 6, 2020Online Published: May 18, 2020doi:10.5539/gjhs.v12n7p102URL: https://doi.org/10.5539/gjhs.v12n7p102

## Abstract

The Government of Indonesia has established a set of program interventions to enhance the quality of family planning services. The program gives preferences to the acceptance of family planning services and the readiness of the supply side. This study is intended to better understand the extent to which the public and private sectors deliver quality family planning services in 4 selected provinces within Indonesia. The six elements of quality of care (Bruce, 1990) were utilized as the study framework. The study confirmed that the mean of all six elements of quality of care are significant (alpha =0,05) in two out of the four study sites. From the clients' point of view, information on contraceptive choices was the most neglected aspect in the public health facilities, while 'follow up and a continuity mechanism' was most neglected in the private health facilities. The equity index showed a substantial difference in the overall quality of care between the two types of health facilities (public= 4.53 versus private= 5.34). As far as health providers are concerned, quality of care is still below the optimum standard. Emphasis should be given to formally shape the desired health provider behavior and find a way to create an 'after-sales-service' scheme. The concept of quality goals need to be mindful of program maturity across regions. Periodic monitoring and evaluation is required to ensure more client satisfaction which leading to more sustained use of modern contraceptives.

Keywords: quality of care, family planning, modern contraceptive

#### 1. Introduction

The law of the Republic of Indonesia number 17/2007 on the 2005-2025 National Long-Term Development Plan (*Rencana Pembangunan Jangka Panjang Nasional*/RPJPN) states that the ultimate goal of human resources development could be manifested, among others, within population management (Ministry of National Development Planning/National Development Planning Agency, 2005). A large population that is not complemented with high human development index will become a burden rather than an asset for development. In an attempt to offset Indonesia's capacity to improve its human resources, national population growth is expected to reach a replacement level (Total Fertility Rate/TFR= 2.1) by 2025. This value represents the average number of children a woman would need to have for the population to replace itself and the children who are born survive to childbearing age. Since the Global Statesmen in Population Award was awarded to former President Soeharto by the Population Institute in December 1988, Indonesia has embarked on a long continuous journey of population control that has lasted until today. Between 1971 and 1997 Indonesia successfully reduced its total fertility rate by almost half from on average of 5.61 to 2.78 births per Indonesian woman (Central Bureau of Statistics – BPS et al., 1992; BPS et al., 1995; BPS et al., 1998). However, during the period of 1997-2003 the pace of TFR reduction significantly decreased, resulting in a TFR that has remained stagnant for the last one and a half decades (Figure 1).

Scholars agree that the prevalence of contraceptive use is the most important factor that shapes the fertility level of a society (Bongaarts, 1987). This appears also to be relevant in the context of Indonesia where modern Contraceptive Prevalence Rate (mCPR) is acknowledged to be the best predictor of fertility level. As modern contraceptive uptake declines, the reduction in fertility rate also becomes less promising (Figure 1). The problem is even more acute with the fact that almost one third of contraceptive users discontinue use within the first 12 months (National Population and Family Planning Board – BKKBN et al., 2018).

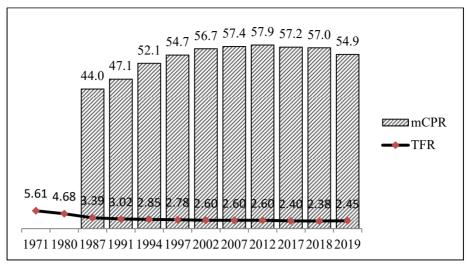


Figure 1. Trends of TFR and mCPR

Source: BPS et al., 1992, BPS et al., 1995, BPS et al., 1998, Statistics Indonesia et al., 2003, Statistics Indonesia et al., 2008, Statistics Indonesia et al., 2013, BKKBN et al., 2018, BKKBN 2019a and BKKBN, 2020

Many discussions have taken place with policymakers and program managers reflecting on the current setback of the family planning program in Indonesia. De-centralization of program implementation following the enactment of Law No. 22/1999 decentralizing to Local Government, as well as the integration of family planning into the National Health Insurance Program (NHIP) launched in 2014, have resulted in a fundamental transformation of family planning services. Decentralization has weakened the capacity of the districts to carry an organized family planning program. It receives less priority from the local governments as it is heavily associated with population control measure (Fathonah & Ardiana, 2018). The inclusion of family planning in the NHIP has brought changes in the operational mechanism of service delivery mainly in the aspect of the coverage, the benefit, the eligible health facilities, contraceptive distribution and service's payment arrangement (National Population and Family Planning Board, 2014). This ecosystem eventually puts the context in which family planning services are provided both in public and private health facilities.

The National Population and Family Planning Board (*Badan Kependudukan dan Keluarga Berencana Nasional*/BKKBN), the government body responsible for the population and family planning program (BKKBN, 2017) has incorporated indicators on family planning service quality in its 2015-2019 Strategic Plan. Those indicators are additional contraceptive users and increase in mCPR in selected disadvantaged areas as a result of increased access to services. These two indicators are programmatically constructed under three indicators including the provision of contraceptives, competent health care providers in providing counseling and performing medical procedure in a health facility and the provision of family planning services in remote areas.

Currently, comprehensive and detailed information on the quality of family planning service in Indonesia is limited. The indicators set above put more emphasis on the realm of supply-side readiness, and to some extent loses client's point of view. The established performance also fails to portray the difference, in the quality of care between public and private health facilities. This study therefore intends to fill the gap in quality of care information and provides insights about the extent the public and private sectors are able to deliver quality service to their clients. The study puts more value in health care provider's viewpoint and client satisfaction towards the service that they receive, and provides room for program managers to gain perception about some aspects of quality services.

#### 2. Methodology

#### 2.1 Conceptual Framework

The study utilizes the quality of care framework developed by Judith Bruce (Bruce, 1990). It demonstrates the interrelationship between three consecutive compartments program effort, elements in the service received and impact (Figure 2). The framework conceptualizes six elements of quality consisting of choice of methods, information given to users, technical competencies, interpersonal relations, follow up/continuity mechanism, and appropriate constellations of services.

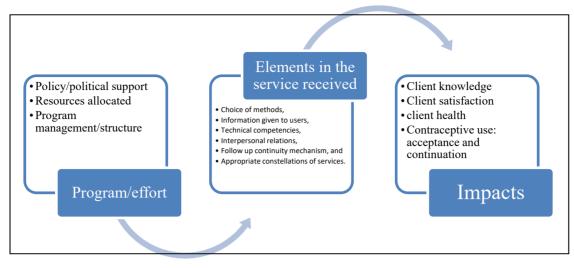


Figure 2. Quality of Care Framework

Source: Bruce, 1990

#### 2.2 Study Site

The study took place in four selected provinces East Nusa Tenggara, Maluku, East Java and West Sumatera during November and December 2018 (Figure 3). The selection of those provinces is designed purposively to represent the diversity of Indonesia in terms of socio-economic development (Table 1).

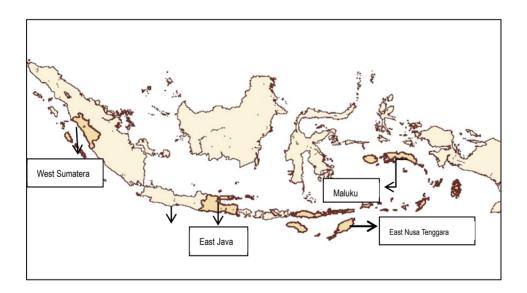


Figure 3. Study Site

Socio-economic indicators	Indonesia	East Nusa Tenggara	Maluku	East Java	West Sumatera
Mean Years of Schooling in Population aged 15 Years and above: 2018	8.58	7.7	9.78	7.93	9.10
Human Development Index by Province, 2017	70.81	63.73	68.19	70.27	71.24
Total Monthly Average Expenditure per Capita (rupiahs), 2018	1,124,717	704,754	965,837	1,218,079	1,148,630

Table 1. Socio-Economic Indicators of the Selected Provinces

Source: Statistics Indonesia, 2019.

Note: 1 USD \$ (March, 2018) = Rp.13.890.

#### 2.3 Sampling Procedure

The sampling method in this study utilizes non probability sampling with purposive technique. The collected data and information do not represent figures on provincial and national scale. The result is applicable to the sub population under the unit of analysis as proxy measures. It is noteworthy that a sizeable amount of the sample is eligible for appropriate data analysis.

#### 2.4 Methods

Study analysis was constructed based on 2 (two) frameworks using a combination of qualitative and quantitative methods. The qualitative method gathered data and information from desk review and in-depth interview of key stakeholders and health care providers. The desk review aimed to explore the policy and strategy for implementing a high-quality family planning program, related targets and the current accomplishments. In-depth interviews were conducted to gain insight on programs implementation relevant to the 34 respondents from the Provincial Family Planning Office (PFPO), Provincial Health Office (PHO), District Family Planning Office (DFPO) and District Health Office (DHO), health care providers are those working in the public and private health facilities which were purposively selected. The inclusion criteria of the selected health facilities are those already registered in the BKKBN networks and sub networks as well as having 30 family planning services at minimum per week for the last month prior to the interview. The in-depth interviews were conducted with 59 and 34 health workers from public and private facilities respectively (see Table 2).

The quantitative method used two different techniques i.e descriptive and inferential analysis. The descriptive analysis was performed through face to face interviews by using a structured questionnaire with clients (see Appendix A). The development of the questionnaire refers to the manual on quick investigation of quality (Measure Evaluation, 2016). The inclusion criteria of clients are married women age 15-49 years old who just received family planning services from the health facility. The services included are switching current method and for new or revisiting acceptors. Women aged under 15 and above 49 years old, having only health consultation and contraceptive removal are defined as the exclusion criteria. Face to face interviews conducted with 278 clients from government facilities and 204 clients accessing private delivery points (see Table 2). The proportion and the sample size were determined by the successful interviews by the time the study had taken place for data collection. Married women were interviewed immediately after receiving health services (exit interview) to prevent any possible recall bias. Inferential analysis was only conducted on clients. Client's standpoint on the quality of care is expressed in the six elements of quality of care.

	Source of Servi	ice						
	Public Sector				Private Se			
Province	Health Facility	Number of Health Care Providers	Number Married Women	of	Health Facility	Number of Health Care Providers	Number of Married Women	Number of stakeholders
East Nusa	Hospital	3	0		Private Midwife	4	14	. 9
Tenggara	Community Health Center	13	106		Clinic	3	0	
Maluku	Hospital	3	5		Private Midwife	5	62	. 8
Maluku	Community Health Center	13	55		Clinic	5	0	0
	Hospital	2	0		Hospital	1	20	
East Java	Community Health Center	10	56		Private Midwife	5	29	9
					Clinic	2	15	
West	Hospital	6	4		Private Midwife	8	64	. 8
Sumatera	Community Health Center	9	52		Clinic	1	0	0
Total Stakeholde rs								34
Total Health Care Providers	59				34			
Total married women	278				204			

Table 2. Unit of Analysis by Source of Service in Four Selected Provinces

The inferential analysis attempts to test the hypothesis of the elements using mean difference and general linear regression model. The mean differences consist of the mean of importance or expectation and mean of consistency or reality. Each of the means were valued using a Likert scale ranging from "1" as being very unimportant to "5" as being very important for the importance/expectation mean. For the mean of consistency/reality "1" was defined as being very inappropriate and "5" was defined as being very appropriate (Table 3). The analysis values do not represent the corresponding population in the study areas as they only provide a cross-sectional insight to a given characteristic and time. The selected respondents were not identified through a probability sampling design.

	1	1 5 5	
Importance/expectation	Scale	<b>Consistency/reality</b>	Scale
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4
Very important	5	Very appropriate	5

Table 3. Likert Scale for the Mean of Importance/Expectation and Consistency/Reality

Statistical method was also employed to calculate a quality-of-care index using a general linear regression model on all independent variables simultaneously [not done as a stepwise procedure] for the six elements of quality of care in the public and private sector as well as overall satisfaction as the dependent variable. Standardized regression [beta] was used as the coefficient explaining the correlation between the six elements of quality of care and overall satisfaction. The study adopted the Brand equity estimation and positioned the six elements of quality of care as attributes. The highest value of each attribute does not necessarily indicate the highest value for equity (WMB & Associates, 2019).

The coefficients used in this analysis were interpreted as variables and overall satisfaction levels based on the following formulas:

$$\hat{Y}_i = a_1 X_{1i} + a_2 X_{2i} + a_3 X_{3i} + \dots + a_k X_{ki} + e$$

with i respectively =  $1, 2, 3, \dots$  n

Where:

 $\hat{Y}_i$  = Dependent Variable Y

X = Independent Variables

k = Number of Independent Variables

#### 2.5 Index

Table 5 lists the index with each number representing the relative "weight" between the beta coefficient of the six elements and the overall beta coefficient based on the entire response set. The index is the ratio between the beta of each attribute [element] in each health sector [public and private] and the overall beta for that attribute. Each health facility type was weighted using General Linear Regression (see Appendices B, C, & D). The weight of each element in each sector was compared to the overall weight of each element. For example, interpersonal relationship in the public sector was calculated by dividing the weight of interpersonal relationship with the total weight of the corresponding element in the public sector (0.15/1.13=1.22). Only the significant index is applicable for index quantification.

The next step is quantifying the mean of the client's level of satisfaction in the public and private sector and mapping it according to the total index of each sector (see Appendix E).

#### 2.5.1 Data Management

For qualitative analysis, in-depth interviews were conducted by the assigned researchers who were divided into two groups in accordance to the chosen provinces. The duration of the data collection as about 1 week. The results of the data and information were put in the interview transcript and matrix analysis.

Quantitative data collection was executed by a team for each province for two weeks. The team consisted of a supervisor and enumerators. They were trained by the researchers for three days to be understand their job descriptions and to be ensure appropriate interview technique, role play interviews and data validation. The supervisor might ask enumerators to re-interview if necessary.

#### 2.6 Research Permit

The study received a permit from the Head of Research and Development Department, National Population and Family Planning Board (*Badan Kependudukan dan Keluarga Berencana Nasional*/BKKBN) Number 3325/I/KU.01.04/H4/2018 dated 29 October 2018 using funding support that has been approved for the 2018 fiscal year.

#### 3. Result

#### 3.1 Qualitative Analysis

#### 3.1.1 Desk Review

In order to increase mCPR to 61.1 percent and at the same time reduce unmet need by 10.14 per cent in 2018, the Government of Indonesia had set a target of 965,000 additional contraceptive users and to expand the family planning program coverage by 48 percent in 122 remote areas (BKKBN, 2017). Additional users is defined as the difference between current and previous-year additional users divided by the targeted additional users of the current year. Among the 2018 target, the Government is able to maintain 90 percent of participation in contraceptive use (872,097 contraceptive users) plus expand and intensify access to 89 municipalities (BKKBN, 2019b& 2019c). This accomplishment is mostly due to the 36,272 high- performing health facilities out of the 53,342 health facilities that are equipped with skilled health care providers to perform health promotion and counseling (BKKBN, 2019d). At the same time, contraceptive provision and availability of at least one doctor or one midwife as competent health care providers in every health facilities stocks and 20.2 percent are staffed with trained providers respectively (BKKBN, 2019e & 2019f).

#### 3.1.2 In-Depth Interview

High-quality family planning service includes an impartial policy that is implemented in all aspects including deployment of competent providers, availability of various contraceptives and essential medical devices, constellation of appropriate health service, surveillance over family planning participation, as well as recording and reporting mechanism in both the public and private sector. In general, each level of administrative bureaucracy, at the provincial and district level, should employ an equal platform of partnership that engages the family planning office, health office and Indonesian Midwives Association (IBI). The Provincial Family Planning Office (PFPO) plays an important role in facilitating skill training on long-acting contraceptive method (intrauterine device (IUD)/implant insertion and removal including insertion of IUD postpartum), procurement and distribution of contraceptive logistics to the District Family Planning Office (DFPO), maintenance of family planning participation and mentoring of DFPO (BKKBN, 2014). In terms of contraceptive device, the PFPO provides 5 (five) commodities i.e. pill, 3-monthly injectable, condom, IUD and two-rod implant. The DFPO is responsible to distribute the contraceptives to all public and registered private health facilities. The PHO and DHO take part in a bigger health system of ensuring the quality of the health facility, as well as ensuring both public and private health facilities receive accreditation (Minister of Health Regulation number 46/2015 on Accreditation of Primary Health Care Facility and Minister of Health Regulation number 34/2017 on Accreditation of Hospital). The Head of Community Health Center and Midwife Coordinator function as a bridge between the directive policy and the necessity of health care providers to deliver the best quality service to clients.

The study shows that all health care providers in the public and private health facilities respect the right of clients to be presented with a wide range of contraceptive choices that suits their reproductive goals. During the process of counseling, it has been a common protocol that health care providers offer clients choices for pregnancy prevention. However, existing choices often appear to be limited due to a variety of factors, from disruption in logistics distribution from the DFPO to health facilities, client's preference mismatch, to other provider-driven and technical issues. Contraceptive stock out, particularly for IUDs and implant, is a common problem faced by public and private health facilities throughout the study site. One obstacle that was captured in West Sumatera was that the DFPO only provides the 3-monthly injectable while most clients favor the monthly injectable. More contraceptive variants are available in private health facilities as they are able to apply an 'out-of-pocket' payment mechanism for commodities that are not supplied by the government. Some public sector health care providers in West Sumatera tend to direct clients toward a particular contraceptive method, as seen from interviews:

"...but we direct them to use the non-hormonal method..." (public sector health care, East Nusa Tenggara).

"...usually we suggest that they use IUD ... " (public sector health care provider, East Nusa Tenggara).

"...the most important is IUD because it does not contain hormone..." (public sector health care provider, East Nusa Tenggara).

Midwives who working in public health facilities are often confronted with programmatic challenges that those in the private sector do not experience. Time management is an issue in the face of excessive work load. Midwives are required to perform double tasks as a health care provider in Community Health Center and in village health institutions. They are responsible to coordinate family planning service in Community Health Center and its network facilities and are in charge of ensuring the availability of contraceptives at each service delivery point.

Midwives also proactively pick up contraceptive supplies from DFPO warehouses, which should actually be delivered by the DFPO. In this regard, midwives said:

"The constraint is that we pick up the contraceptives using our own fund... (laugh) ... because there is no funding for logistics distribution from the DFPO to the community health center. We usually send a request, but we only use a motorcycle for the transportation, because there is no budget for transport" (midwife in a community health center, Maluku).

"We usually pick them up, we make a request to DFPO, the devices will be taken out of the warehouse, then we ourselves carry them here (community health center) ... ... Just say, we bring all contraceptives here, I gave some money to the driver, or I just rode a motorcycle ... "(midwife in a community health center, Maluku).

With regards to contraceptive supply chain, the DFPO is responsible to prevent the stock out of commodities in health facilities. The following comments were recorded:

"Probably the registration card is not updated... so far we think there are 96 health facilities registered in the system. Recently we are piloting an online report system...Ambon city just start the pilot this year and I am involved in the project, but when I opened the data there were only 72 registered health facilities....Next year when all health facilities are already in the system it would be okay" (DFPO, Ambon, Maluku).

"...contraceptive stock out last year was severe. If there is a stock out, we ask health care providers to direct clients to private midwives. This is done after family planning field workers failed to borrow contraceptive from other community health centers..." (DFPO, East Nusa Tenggara)".

In terms of information given to clients, it is noteworthy that family planning information can be conveyed to the community at two levels at the community level with the assistance of family planning field workers and in a health facility with the assistance of health care providers.

"...first information and education are given by those who are responsible for mobilizing the community to visit a health facility, then the community are counseled at the health facility....this is mobilized by family planning field workers. If potential users come to health facility without being mobilized, they are immediately counseled by midwives and if they agree, they will receive FP service" (PFPO, Maluku).

All health providers are aware of their duty to provide essential information to clients. Some are equipped with a decision-making job aide 9flip chart to help clients understand the information more easily. Counseling determines whether clients should receive service in a primary health facility, be referred to a hospital or undergo another counseling session. The information provided includes contraceptive choices and possible side effects. Below is a statement from a private midwife:

"... after that eer. I asked about their intention of coming here. If they want family planning service, which method would they like? There are several types, just choose one ... so we provide service based on their choice...what they want ... after the service, all of them returned home ...after that we set an appointment for them to return for the next service" (a health care provider in a private clinic, Maluku).

A common finding that the study recorded was that contraceptive users who return to public and private health facilities to continue using the contraceptive method receive no further counseling on the chosen method or other possible methods. Health care providers mention that the required information was already given to the clients during the first visit. One health care provider in a community health center and one private midwife said:

"... because the active users, just automatically connect to the previous visit... "...mostly they are repeat clients, so we immediately conduct an examination. Eee ... Does the client bring the small family planning card from the health center? We can see from that card their blood pressure, body weight, and we registered them in the registration book. When registration is complete, a health check-up is carried out immediately and we provide family planning service" (health care provider from a community health center, Maluku).

"...for clients who already use contraception, the information is not so detailed. If the client is new, we have to provide detailed information..." (a midwife from a private clinic, East Nusa Tenggara).

One profound demand that health care providers cite for ensuring quality family planning service is filling the gap in health care providers 'competence. One community health center in East Nusa Tenggara reports that none of their midwives had ever received training on family planning service. In a government hospital in West Sumatera, only 3 of their 14 midwives have had proper training. Opportunities for skill training are scarce so junior untrained midwives mostly receive guidance from more skilled midwives through an 'on-the-job training mechanism. To maintain their accreditation, health facilities in West Sumatera take the initiative to collaborate with the DHO, DFPO and PFPO and periodically organize momentum-based contraceptive services partly to provide mentorship opportunities between trained and untrained midwives.

"Do not disregard the implementation of a standard operating procedure, because in the future the accreditation process will be more complex and will be evaluated by a quality assurance team..." (midwife Coordinator in a community health center, West Sumatera).

"Family planning services in a community health center network, IUD and implant services must be performed by trained health workers. We who are trained are requested to coach the others..." (midwife Coordinator in a community health center, West Sumatera).

The situation is somewhat different within in private practice midwives who, in the absence of doctor's supervision, are required by regulation to obtain a certificate of competence for IUD/Implant insertion or removal. Midwives therefore voluntarily attend the training using their own fund. In East Java, 5 of the 6 (six) private midwives interviewed completed the training and are therefore allowed to provide services. In-depth interviews noted that the PFPO and the DFPO regard logistics supply to the private sector as a lower priority than that to the public sector. As a result, despite the ability to perform more advanced procedure, private midwives tend to limit contraceptive choices to pill and injectable.

In the realm of interpersonal relation between health care providers and clients, most providers in the public and private health facilities follow the principles of good and effective counseling. They are knowledgeable about their role and are able to effectively communicate with their clients. Even though the family planning program has a target to provide more long-acting and permanent methods, health care providers are encouraged to implement client-focused counseling. As such a program manager will be able to confirm that the chosen method is based on an informed choice which is less likely to result in discontinued use.

"...we are not allowed to coerce clients because different clients mean different medical condition. That is it...we cannot...ee..push someone to use implant even though we aim to increase the use of long-acting reversible methods...health providers should provide service based on client's preference..." (PHO, Maluku).

The parameters used by health care providers with regards to interpersonal relation appear to be a combination of individual provider's competence and economic perspective as expressed by some providers:

"I know they're satisfied if they (red: client) return to our clinic with their friends...that is my standard...if they do not return to my clinic, I'll be miserable..." (health care provider in a private clinic, Maluku).

"...we have to behave nicely, if we are rude, they will not return for follow up. If we act friendly...they will return to us..." (coordinator of community health center, Maluku).

"...we have to please them, do not let them visit other places ..." (health provider in a public facility, Maluku).

In this regard, privacy remains a problem, particularly in public health facilities as family planning counseling is provided in the same room as maternal and child health care (East Java and Maluku).

Follow up on contraceptive users is implemented through a program that is designed to create a complementary relationship between public and private facilities. The program emphasizes a set of strategies that can prevent user discontinuation by enhancing the capacity of family planning field workers to provide information on contraceptives at the grassroots level, promoting long-acting methods through training and medical device provision, implementing a standard operating procedure with an emphasis on the importance of informed choice and strengthening collaboration for resource mobilization. Provinces employ various innovations to promote continued use of contraceptives. In East Java province the DHO, DFPO and the local community health center took time outside their regular working hours to visit the homes of postpartum mothers and pregnant women. The objective of the home visit is primarily to ensure the women practice exclusive breastfeeding, and do not experience significant side effects from their contraceptive use. The hope is also to help women who are not yet protected to then decide about contraception. This initiative is funded by the health operational fund of the local community health center.

Complementary relationship between public and private health facilities seems to be more directed toward strengthening the private facility's ability to meet client's preference for particular methods and to provide service at a time that is convenient for clients. In the context of appropriate constellation of services, family planning has been well integrated with maternal and child health care as well as with reproductive health service in the public and private sectors. In the public sector the approach is widely known as an integrated program while in private practice, services are integrated as a package of health services that must be provided by midwives. However, women who deliver in a public hospital often face barriers to receiving postpartum family planning service. They would either be requested to return to the hospital 40 days after they are discharged to receive the sterilization

procedure, or go to a community health center for IUD insertion. It is thought that this is a result of the national health insurance program (NHIP) policy of not covering the cost of sterilization procedure during a cesarean section or an IUD insertion post-placental delivery.

"Now postpartum family planning and delivery is counted as one package. Female sterilization must be separated from delivery care. If they are combined, it will not be paid by the program. If a woman wants IUD post-placental delivery, we usually suggest that she goes to a community health center..." (general practitioner in a public hospital, East Nusa Tenggara).

In East Java, health care providers provide flexible services in a response to client's need. Village-based midwives as part of the community health center's service network provide services in the evening since the majority of their clients are farmers who are free only in the evening.

#### 3.2 Quantitative Analysis

#### 3.2.1 Descriptive Analysis

Study respondents were largely housewives of various educational level (Figures 4 & 5). Out of all the respondents, those in East Java appeared to have a better social background. More than half are part of the labor force and attained higher educational levels. At the time of the interview, 80 percent of respondents were active contraceptive users while 20 percent were new users or method switchers. Switchers are defined as women who want to substitute their current contraceptive method with a more suitable one. In terms of respondents' knowledge on a wide range of contraceptive methods, the result for both single and multi-response answers was the same. Regarding top-of-mind, awareness, injectable remains as the method that users remember the most over other available choices (Figures 6 & 7). Male and female sterilization were the least known methods among Indonesian women.

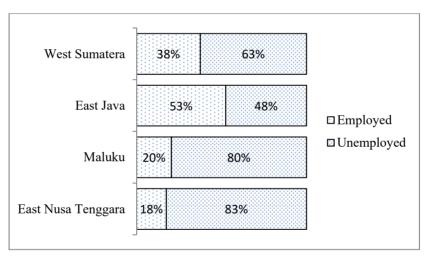


Figure 4. Respondents' Working Status

Source: Processed Data

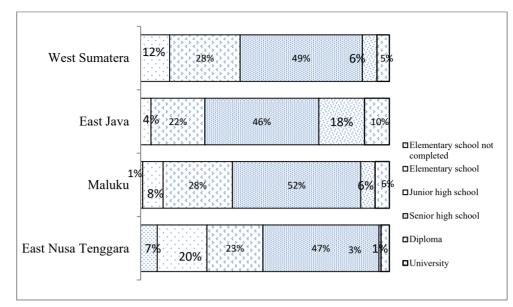
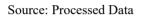


Figure 5. Respondents' Educational Level



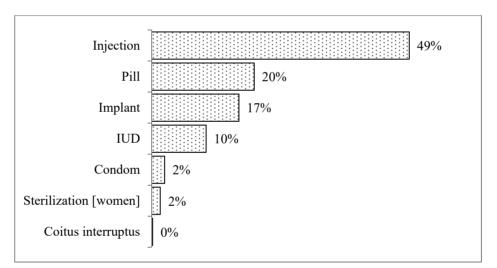
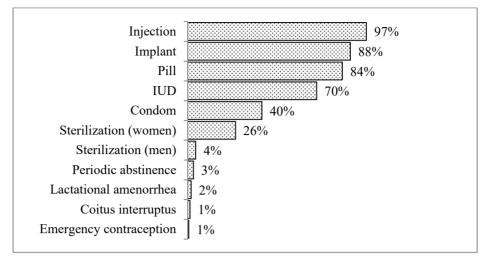
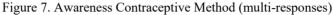


Figure 6. Top-of-Mind Contraceptive Method

Source: Processed Data





Source: Processed Data

#### 3.2.2 Inferential Analysis

Generally, respondents in three study provinces perceive family planning service in the private sector as better than the service provided in the public sector. An exception was in West Sumatera where respondents believed the public sector as more professional than the private sector in delivering quality services in all elements (Table 4). Respondents in East Nusa Tenggara believe public health facilities to be more qualified than private facilities in two elements follow up mechanism and family planning constellation. Family planning constellation was one element that respondents in Maluku believed to be better in the public sector. There remains a gap between services that are expected and services that are actually received for all elements in both public and private facilities. An exception was provider competency in private clinic in East Nusa Tenggara. It is noteworthy that in 3 of the 4 study provinces, with East Java as an exception, appropriate family planning constellation received the poorest feedback from Indonesian mothers (scale <3).

East Java was the province with the most satisfied respondents in terms of family planning service delivery in all types of facilities. The value of consistency was  $\geq$ 4. Interestingly, private clinics in East Java were able to exceed the expectation for follow up mechanism and appropriate family planning constellation. The pattern of expectation of clients is noticeable. Government and private health institutions in all four study provinces appear to expect provider's competence as the most important element to be fulfilled, or one that gives more value compared to others.

		EAST NU			JSA TENGGARA			MALUKU					
No	Quality of Care Element	Gove	rnment		Pri	vate	2	Gover	rnment		Pr	ivate	
		Mean [INTEREST]	Mean [CONSISTENCY]	Sig	Mean [INTEREST]	Mean [CONSISTENCY]	Sig	Mean [INTEREST]	Mean [CONSISTENCY]	Sig	Mean [INTEREST]	Mean [CONSISTENCY]	Sig
1	Choice of methods	4.05	3.47	0.00	4.07	3.86	0.19	4.60	3.67	0.00	4.60	3.89	0.00
2	Information given to users	4.21	3.82	0.00	4.14	3.86	0.04	4.60	3.95	0.00	4.71	4.15	0.00
3	Technical competencies	4.35	4.07	0.00	4.07	4.07	1.00	4.75	4.30	0.00	4.81	4.47	0.00
4	Interpersonal relations	4.18	4.00	0.00	4.00	4.07	0.34	4.78	4.38	0.00	4.82	4.40	0.00
5	Follow up/continuity mechanism	4.03	3.56	0.00	3.86	3.29	0.01	4.43	3.48	0.00	4.61	3.48	0.00
6	Approapriate constelations of services	3.67	2.43	0.00	3.57	2.00	0.00	4.58	3.23	0.00	4.69	2.76	0.00
		E/		EAST JAVA							MATERA		
No	Quality of Care Element	Gove Mean [INTEREST]	Inment Mean [CONSISTENCY]	Sig		Mean [CONSISTENCY	Sig	Gover Mean [INTEREST	nment Mean [CONSISTENCY	Sig	Mean	Mean [CONSISTENCY]	Sig
1	Choice of methods	4.25	4.07	0.01	4.39	4.34	0.41	4.46	4.09	0.00	4.31	3.72	0.00
2	Information given to users	4.21	4.02	0.00	4.53	4.41	0.06	4.59	3.95	0.00	4.47	3.73	0.00
3	Technical competencies	4.21	4.11	0.03	4.47	4.31	0.02	4.71	4.46	0.00	4.70	4.31	0.00
4	Interpersonal relations	4.18	4.07	0.01	4.45	4.41	0.37	4.54	4.32	0.00	4.45	4.13	0.00
5	Follow up/continuity mechanism	4.14	4.00	0.04	4.34	4.38	0.57	4.54	4.20	0.00	4.39	3.97	0.00
6	Approapriate constelations of services	4.20	4.04	0.01	4.27	4.30	0.72	4.23	3.52	0.00	3.67	2.73	0.00

#### Table 4. Significance Test on Quality of Care in Modern Contraceptives Service Delivery

Source: Processed Data [aplha = 0.05]

According to contraceptive users, the quality of care provided in private health facilities is better compared to that in public health facilities. It is evidenced in the quality-of-care index between these two types of health facilities (4.53 versus 5.34) and the overall client satisfaction score (4.27 versus 4.45) (Table 5). The most challenging aspect that public health facilities will need to overcome is the limited choice of methods that they offer to users as they received a value of -0.1. Public facilities are also more likely to be associated with poor health provider competencies with an index of 0.22. Despite these, public health facilities are to be commended for having developed a client follow up mechanism that is more effective than that in private hospitals and clinics. Choice of methods and provider's competence were two elements that were superior in the private sector. Private health care providers' competence had an index of 1.78 compared to merely 0.22 for public doctors or midwives. Appropriate constellation of family planning services received a similar reaction in these two types of facilities and has been well documented that the element is regarded irrelevant in the context of quality of care.

Elements -	Health facility				
	Public sector	Private sector			
Choice of methods	-0.10	2.38			
Information given to users	1.13	0.64			
Technical competence	0.22	1.78			
Interpersonal relations (client to health provider)	1.22	0.45			
Follow up mechanism/continuity mechanism	2.06	0.09			
Appropriate constellation of services	NS	NS			
Index sum /Index Score	4.53	5.34			
Overall satisfaction [mean]	4.27	4.45			

Table 5. Quality-of-Care Index in Likert Scale Analyzed as Interval Overall and by Sector [Clients' level of satisfaction by health facility]

Source: Processed Data [alpha = 0.1].

NS: Not Significant

#### 4. Discussion

The family planning program in Indonesia has had a long journey to instill the value of a small, happy and

prosperous family as a norm and a way of life. This Government's propaganda that was created in 1970s still persists until today, and is still relevant to be broadcast throughout the country. Indonesia succeeded, though far below the expectation, to downsize the ideal family size of 15-to 49-year-old women from 3.1 in 1991 (BPS et al., 1992) to the present 2.7 (BKKBN et al., 2018). More effort will be needed to shape the desirable norms. At the same time these efforts need to be complemented with supply-side readiness. Considering the geographic condition of Indonesia and the uneven distribution of population across eleven thousand inhabited islands, access to family planning service still prove to be a challenge in some areas. Like two sides of a coin, quality of care improvement will need to be accompanied with a growth in service delivery points.

The government has fully considered these two aspects by focusing its attention to the achievement of some related indicators in 2018. Competent providers and distribution of contraceptives are two indicators that have the largest effect on quality of care. Data show that five thousand health facilities do not have an appropriate stock of contraceptive logistics and more health facilities suffer less skilled from incompetent health care providers. Similarly, health care providers gave a lower score to medical training than to contraceptive availability. Challenges in supply chain management might partly rest on the issue of 'formal framework rather than organizational capacity' (Ardiana, Ekoriano, & Fathonah, 2019). Decentralization that devolves the authority for family planning service delivery to the local government has resulted in a situation that is very different from the previous vertically-arranged program. Transfer of central-level budget to districts/municipalities to finance the transportation of commodities from DFPO's warehouse to health facilities appears inadequate to prevent stock out. Health financing reform with its established system creates more confusion for DFPO in planning resupply quantity. The DHO, DFPO and NHIP's purchaser of health services needs to collaboratively and regularly map and update eligible health facilities as reference for contraceptives provision. Imperfect collaboration, and to some extent, defects in the government internal business process might occur in certain districts/municipalities. In the absence of logistics distribution from DFPO, health facilities can proactively request for contraceptives, but the response from health facilities vary. In the case of Uganda, barriers to family planning quality are more likely due to organizational matters (Mugisha & Reynolds, 2008).

Quality of care is a concept that has multiple dimensions. Due to data constraint, the study measured quality of care using the Bruce framework, even though there is guidance on quality of care from WHO and human rights standards (WHO, 2017). One limitation of the study is that it is unable to link the social characteristic of respondents, particularly adolescents and potential users, family planning budget, client and provider retention, community trust, crisis setting as well as accountability to the context of a broader quality of care. In a study from Mexico, empiric evidence noted that adolescents or other vulnerable sub-population are more likely to be stigmatized when seeking family planning services (Darney et al., 2016).

The inaccessibility of a wide range of contraceptives compounded by the lack of competent health care providers has ultimately limited the contraceptive choices offered to clients. This creates a circumstance in which clients are most vulnerable to passively receive any available method or otherwise remain unprotected. Proper medical screening and reproductive goal consideration to use contraception are the most sacrificed subjects in this situation, which appears to be more frequently found in the public sector. Since public health facilities are required to fully implement NHIP, they only receive contraceptive logistics from the DFPO. Any disruption in commodities resupply from the PFPO to the DFPO will therefore jeopardize the stock availability and service continuity at service delivery points (BKKBN, 2011). Private health facilities, on the contrary, may implement at least three schemes of family planning financing i.e. through NHIP, private insurance or 'out-of-pocket payment' schemes. Two supply chain frameworks either from the DFPO for NHIP beneficiaries or through a private distribution channel applied for the latter two schemes enable private health facilities to provide a wider choice of methods.

Continuous contraceptive use is an important factor in determining the quality of services given. Once clients are well informed about possible side effect and ways to manage them, sustained use of contraceptive may be more likely. However, specific information about side effects and their management is rarely obtained by Indonesian women who receive family planning services. Side effects were communicated to only 44 per cent of women, and an even lower percentage of women (34 per cent) were taught how to manage the side effects (BKKBN et al., 2018). Indonesian women accessing contraceptive services from private health facilities appear to be lacking from obtaining essential messages. Having no such information, they are vulnerable to believe any myth of misconception and are more likely to end up with discontinuing the method as shown in Nigeria, Kenya and Senegal (Gueye et al., 2015). Other critical view with respect to information provision is the information should be provided as part of a 'client-centered family planning counseling', not a physician-centered consultation (Assaf, Wang & Mallick, 2017). This latter approach might be associated with service-related factors, and to some extent relates to economic interests to promote a product (Pant & Pandey, 2018).

Despite a wider choice of methods in the private sector, the competence of health care providers is not necessarily higher and users do not always receive more information as indicated above. It demonstrates that the choices offered to clients are those that required neither sophisticated medical skill nor further detailed information. The latest Indonesian Demographic and Health Survey (IDHS) (BKKBN et al., 2018) recorded that injectables disproportionately occupy almost two third of modern and traditional methods (68%) and are mostly accessed through the private sector. It is the top of mind method for clients. For other methods i.e. female sterilization and implant, clients choose to receive the service in a public health facility, which simply indicates that public health facilities are more likely to employ more professional health care providers and have more security in terms of health insurance scheme than private health facilities. Other explainable factors may also be at play such as method-related bias since health providers are likely to work for both sectors at one time. Common positive bias toward injectable and pill, and negative bias toward IUD are commonly found (Solo & Festin, 2019). Positive bias is a perception that the method is relatively easy to administer and demands more frequent visit, while the reverse counts as negative bias. One driving force of this positive bias is a heavy workload as shown in Iran (Mahan et al., 2008).

The majority of doctors and midwives are not capable to provide family planning services unless they have a certificate of competence through a training that is received after graduating from their school. This is primarily relevant for long-acting contraceptive methods i.e. IUD/implant and sterilization procedure. The Government of Indonesia provided an intensive medical training for health care providers between 2009 and 2014, but the training was not followed by post-training skill retention interventions (Ekoriano, Nasution, Kasmiyati, 2012). The requirement of performing 5 (five) IUD or implant insertion/removal as practice during the first year after the training was implemented in very few provinces. The situation is similar in both the public and the private sectors. The underlying factors include inappropriate inclusion criteria of trainees, unavailability of contraceptives and necessary medical devices, poor demand and to some extent lack of provider's confidence.

Clients accessing family planning services in the public sector have less barrier to build an interpersonal relationship with health care providers compared to their counterpart. This psychological bond acts as affective content allowing two-way communication and question-answer between clients and providers. It is rather unexpected as health providers working in the public health sector carry more burdens as opposed to those in the private sector. The reason might rest on a clearer job description of the health providers as government employee in addition to having a more structured supervision compared to private settings. Good interpersonal relations during family planning counselling promotes sustained contraceptive use and the adoption of highly or moderately effective methods (Dehlendorf et al., 2016). Women receiving high quality of family planning counselling are more likely to initiate the use of modern contraceptive in Uttar Pradesh (Dehingia, 2019).

In contrast with the private sector, the public sector demonstrated more ability to build a mechanism of continuity. Community health centers in particular, are equipped with better resources. The Government of Indonesia gives more weight to capacity strengthening of the community health center, including developing a fund between the Central to Local Government (Ministry of Health, 2015a). Community health centers are required to put more attention to the aspect of health promotion, including family planning, even though the number and distribution of health promotion manpower remains to be a challenge. The Minister of Health Regulation states that community health centers have a network of facilities, sub-community health center and village-based midwives. This financial support and systematic infrastructure attributable to public services position them to better demonstrate follow up mechanism than that of private sectors. It is worth noting as well that continuity also depends on other variables such as accessibility to service delivery point, the method practiced and family support (Thobani et al., 2019).

The constellation of family planning program in Indonesia has experienced a metamorphosis. As a continuation of the Safe Motherhood Initiative, family planning was put as the third pillar in the Making Pregnancy Safer (MPS) Initiative under Indonesia Health 2010 (Bappenas et al., 2013). The strategy was to enable women to prevent unwanted pregnancies through family planning. In the following years, the approach has widened to incorporate family planning into an essential reproductive health package. The package integrated four main programs as a 'one-stop service' i.e. maternal and child health; family planning; sexually transmitted infection prevention and adolescent reproductive health (Ministry of Health, 2015b). Recently family planning was included as one indicator out of the 12 indicators in the Healthy Indonesia Program through a Family Approach (*Program Indonesia Sehat melalui Pendekatan Keluarga*) (Ministry of Health, 2016). As such the Government expects to maintain the health of Indonesian people using family as a strategic entry point. Various approaches were designed with an aim to deliver better services to the community, but the approach is not yet satisfactory as women might expect far reaching inclusive services. A cross sectional study in Mozambique on the time and place that clients

consider to be most convenient suggests that family planning constellation still adopts a 'one size fits all' approach. Services are delivered without considering several different approaches that might be required by the community (Galle, 2018).

The study also discovered a large variability in client's perspective toward quality of care's elements across selected provinces. Among the four study provinces, the public and private health facilities in East Java had the highest performance. Data showed that Indonesian women hardly acquire the appropriate constellation of family planning services in both public and private sectors. East Java, again, had a higher-than-expected performance of the private sector. A different picture is seen in the United States where women favor getting family planning services from a community health center due to multiple services that are provided in one site (Susan et al., 2015). The choice is made regardless of the limited choice that the health center offers. This also demonstrates significantly higher use of injectable compared to other health settings. In the early stage of the family planning program implementation (1969-1974) in Indonesia, the program was introduced in 6 (six) selected provinces in Java, including East Java (National Family Planning Coordinating Board/BKKBN, 1982). These provinces were considered to be the most populous provinces that required an earlier birth control policy. East Java was already in an advanced stage of demographic transition compared to other provinces in Java such as Jakarta, Yogyakarta and Bali (Adioetomo, 2018). These provinces already reached fertility at replacement level, accompanied with other gainful indicators such as low infant mortality rate, high Human Development Index as well as an elevated economic growth.

Over all, clients are more satisfied receiving family planning services from the private clinics rather than from public facilities. The two highest values expressed by the women over the services in clinics are availability of various contraceptive choices and the technical competence of the health providers. Systematic review on quality of care in Africa have illustrated common agreement on the consistency of private facilities to maintain contraceptive supplies. But other women in different setting report a likelihood of private facilities to intentionally harm unaware clients by providing expired stock (Tessema et al., 2016). The fraudulent behavior might be based on loose supervision of stock inventory in the clinics. In terms of high appreciation on private health provider competence from Indonesian women, social marketing has partly influenced the desirable perception. In Indonesia it is strongly promoted by the Indonesian Midwives Association as it symbolizes the highest standard care of private midwives (Indonesian Association Midwives, 2015).

One consequence of inadequate quality of care is a high rate of contraceptive discontinuation. The current discontinuation rate in Indonesia is 29 per cent which is dominated by pill users (BKKBN et al., 2018). This can be explained by the method's characteristic where users control the use of contraceptive. Users easily discontinue use when they experience uncomfortable side effects, or other health concerns or desire to become pregnant. Further analysis on demographic variables in Indonesia shows that younger women, women with no living children or just one child, and women who space their pregnancies are more likely to discontinue the use of a particular contraceptive (Samosir, Ayke & Aninditya, 2019). Reasons for this might be because younger women are less experienced, women with lower parity are less likely to limit births as they have less pressure to avoid an unintended pregnancy in comparison with their counterparts.

#### 5. Conclusion

From the clients' perspective, one main finding of the study is that overall private health facilities provide better quality of care than public health facilities. The highest value of private health facilities is their ability to provide information on method choices, while considerable effort is needed to improve the follow up mechanism. The public sector, on the other hand, is mostly appreciated for its continuity program to sustain the participation of contraceptive users. They are however least likely to provide information on other possible contraceptive methods. Emphasis should therefore be given to formally shape desired health care providers' behavior and find a way to create an 'after-sales-service' scheme, particularly services provided by the private sector.

The study also confirms that geographic and social differences as well as program maturity influence the quality of care. East Java province as the first province to implement the family planning program and has better social and health outcomes, proves to be most accountable in providing quality services compared to the other three study provinces. Structural issues that were identified demand more collaborative efforts of key stakeholders to continuously improve quality of care. Re-setting the quality platform is necessary to be able to develop a more sensitive policy in an inclusive manner. Program theory could be put into a consideration as a tool to bridge explanations of program interventions and its impacts (Jones & Rosenberg, 2018). The study also calls for further research and more comprehensive measurement on quality of care to define the contribution of commercial and community-based services in the overall service.

#### Acknowledgments

The authors would like to express a sincere gratitude to National Population and Family Planning Board (BKKBN) especially to Hasto Wardoyo, the Chairman of BKKBN, Siti Fathonah as the Head of Planning Bureau and Zahrofa Hermiwahyoeni as Head of Research on Family Planning and Family Welfare for their valuable guidance. Special thanks to colleagues from Research on Family Planning and Family Welfare Department for their priceless contribution: T.Y Prihyugiarto, Diah Puspitasari, Desy Nuri Fajarningtyas, Sari Kistiana, Resti Pujihasvuty, Mardiana Puspitasari, Sri Lilestina, Margareth Maya, Oktriyanto, Aditya Ramadhony, Hilma Amrullah, Ancha Sitorus, Najib and Viya Yanti Mala. High appreciation is extended to program managers in BKKBN for their fruitful discussion and feedbacks, and to health providers and Indonesian women for allocating their precious time to discuss and to share their expectation for a quality family planning program. The authors also want to demonstrate grateful feeling to Rob Ainslie, senior technical advisor, John Hopkins Center for Communication Program in Indonesia for his precious comments on the paper.

#### **Competing Interests Statement**

The authors declare that there are no competing or potential conflicts of interest.

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# Appendixes Appendix A Questionnaire

		QUESTIONNAIRE NUMBER
	Strategic Study Project	
	QUESTIONNAIRE – Q&C	
	Client	
BKKON	2018 - v.05	

	1.	EAST NUSA TENGGARA	2. MALUKU	3. EAST JAVA	4. WEST SUMATRA
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## IDENTITY

Name of interviewer	:
Name of health facility	:
Contact number	:

# **SECTION 1 : SCREENING**

# INTERVIEW WITH SELECTED RESPONDENT

S1. Did you recently obtain family planning services?

Yes	1	CONTINUE TO S2!
No	2	STOP INTERVIEW!

S2. Does your family or close family member work at one of the below institutions or work as one of the below professions?

District Population and Family Planning Office	1	
Family Planning Field Worker	2	
Cadre	3	STOP INTERVIEW!
Head of family planning sub district	4	
National Population and Family Planning Board	5	
None	6	CONTINUE INTERVIEW!

S3. For the purpose of data grouping, how old are you (mention her/his name)?

Age: years old	
Date of birth: Day	monthyear
S4. Gender :	
Male	1
Female	2
S5. Employment of re	espondent : Are you currently?
Unemplayed	1
Employed (Please	specify) 2

S6. Education level: What is	the highest degree or leve	el of school you have completed?

Elementary school not completed	1	
Elementary school	2	
Junior high school	3	
Senior high school	4	
Diploma	5	
University	6	
S7. Resident: Where do you live?		
Urban	1	
Rural	2	
S8. Type of client visit to health facilities : W	hat is the purpose of your curr	ent visit?
Revisit	1	
First visit	2	
Visit to change method of contraceptive	3	
S9. Place of health facilities: Where did you of	obtain family planning service?	2
Hospital	1	
Community health center	2	
Midwife independent practice	3	
Private midwife practice	4	
24 hours clinic	5	
Others(please specify!)	6	

I hereby declare that this interview is TRUE AND IN ACCORDANCE with the INSTRUCTIONS given at the briefing. If I have violated it, I am willing to pay compensation in accordance with applicable regulations.	<u>Signature of</u> <u>Interviewer :</u>	<u>Checked by</u> <u>Supervisor:</u>
I HAVE PROMISED MYSELF TO ALWAYS PROVIDE VALID AND TRUE DATA, BECAUSE FOR ME TO WORK HONESTLY IS WORSHIP.		

# **SECTION 2: AWARENESS**

Q1. According your opinion, what types of contraceptive do you know?

TOM (S)		Un-Aided (S/M)	
Female sterilization	1	Female sterilization	1
Male Sterilization	2	Male Sterilization	2
Implant	3	Implant	3
Intra Uterine Device (IUD)	4	Intra Uterine Device (IUD)	4
Condom	5	Condom	5
Lactational Amenorrhea Method (LAM)	6	Lactational Amenorrhea Method (LAM)	6

Periodic abstinence	7	Periodic abstinence	7
Interrupted Intercourse	8	Interrupted Intercourse	8
Emergency contraception	9	Emergency contraception	9
Pill	10	Pill	10
Injection	11	Injection	11
Others (Please specify)	12	Others (Please specify)	12

Note: S (Single answer), M (Multiple answer)

## Q2. What type of contraception are you using now?

Note: Client has just received family planning service!!

Contraceptive methods	Code
Female sterilization	1
Male Sterilization	2
Implant	3
Intra Uterine Device (IUD)	4
Condom	5
Lactational Amenorrhea Method (LAM)	6
Periodic abstinence	7
Interrupted intercourse	8
Emergency contraceptive	9
Pill	10
Injection	11
Others (Please specify)	12

Q3. From various service points / contraceptive services, where are the family planning services that you know?

## Do not read the answer! The answer can be more than one!

**INTERVIEWER !!** Mention spontaneously, do not aid!

TOM (S)		Un-Aided (S/M)	
Hospital	1	Hospital	1
Community Health Center	2	Community Health Center	2
Auxiliary Community Health Center	3	Auxiliary Community Health Center	3
Midwife independent practice	4	Midwife independent practice	4
Private midwife practice	5	Private midwife practice	5
Clinic	6	Clinic	6
Pharmacy	7	Pharmacy	7
Sub-district hall	8	Sub-district hall	8
Center of family welfare	9	Center of family welfare	9
Others (please specify)	10	Others (please specify)	10

Note: S (Single answer), M (Multiple answer)

Q4. When you come to this health facility with the aim of getting family planning services, how did the staff or administrative officers (other than the provider) treat you?

Very bad	1
Not good	2
Good enough	3
Good	4
Very good	5

Q5. Why did you choose this health facility for obtaining family planning services? Probing!!

Reason:

Q6. Who provided your current contraceptive method		
Doctor	1	
Midwife	2	
Family Planning's Field Worker	3	
Others(please specify)	4	

# **SECTION 3: QUALITY OF CARE**

INTERVIEWER: Tell the respondent, we will talk about family planning services.

Q7. When you come to this health facility for family planning services, did the provider greet you?

Yes	1	
No	2	

Q8. When you obtained family planning services from the provider, were you informed about the types of contraceptive methods?

Yes	1, continue to Q9
No	2, continue to Q10

Q9. If yes, what explanation did the provider (midwife / doctor) give during family planning services? If not, do probing! proceed to Q10!

Q10. Were you actively involved in the discussions and did you choose the contraception that is most appropriate to your needs?

1 2

Yes No Q11. Did you accept / agree your current contraceptive method being provided by the provider?

1 2

Yes			
No			

Q12. How do you scale health provider's information during family planning counselling between the importance/expectation and the consistency/reality?

Importance/expectation	code	Consistency/reality	code
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4
Very important	5	Very appropriate	5

Q13. Check Q2, if the respondent chooses code 4, then ask when you received an IUD insertion, did you observe no one other than the provider in the room? If not go directly to Q14

Yes	1
No	2

Q14. By the time the provider provided family planning service, were you informed that the explanation you gave was confidential?

Yes	1, continue to Q15
No	2, continue to Q16

Q15. If yes, were you sure the provider would keep the information confidentialt?

Yes	1
No	2

Q16. Did the provider ask about the number of children that you want and when do you want to have another child?

Yes	1
No	2

Q17. When you obtained family planning counseling from the provider, did the provider discuss all contraceptive methods that might be most appropriate for you?

Yes	1
No	2

Q18. How do you scale health provider's information regarding contraceptive choices that most appropriate for you during family planning counselling between the importance/expectation and the consistency/reality?

Importance/expectation	code	Consistency/reality	code
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3

Important	4	Appropriate	4
Very important	5	Very appropriate	5

Q19. Please specify (if any) various contraceptive methods informed by the provider during counselling ?

Contraceptive methods	code
Female sterilization	1
Male sterilization	2
Implant	3
Intra Uterine Device (IUD)	4
Condom	5
Lactational Amenorrhea Method (LAM)	6
Periodic abstinence	7
Interuppted intercourse	8
Emergency contraceptive	9
Pill	10
Injection	11
Others (Please specify)	12

Q20. Did the provider explain that contraception could also prevent HIV/AIDS infection?

Yes	1	
No	2	
Q21. Did the provider inform	you about condom double protection?	
Yes	1	
No	2	
Q22. When you obtained fan	ily planning services, were you treated with full respect and c	lignity?
Yes	1, continue to Q23	
No	2, continue to Q24	

Q23. If yes, please specify how the provider treated you?

Q24. How do you scale health provider's attitude in providing contraceptive service between the importance/expectation and the consistency/reality?

Importance/expectation	code	Consistency/reality	code
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4

Very important	5	Very appropriate	5
----------------	---	------------------	---

Q25. When you discussed with the provider about the use of certain contraceptive, did the provider pay attention to your information about the most appropriate contraceptive method for you and your needs?

Yes	1
No	2

Q26. Did you obtain accurate information from the provider, such as how to use contraception, its side effects, and complications from all contraceptive methods?

Yes	1
No	2

Q27. How do you scale health provider's information on how to use contraceptives, its side effects and complications from all contraceptive methods between the importance/expectation and the consistency/reality?

Importance/expectation	code	code Consistency/reality	
Very unimportant	1	1 Very inappropriate	
Unimportant	2	2 Inappropriate	
Important enough	3 Appropriate enough		3
Important	4 Appropriate		4
Very important	5	Very appropriate	5

Q28. Did you obtain information about time to return to the health facility for revisit?

Yes	1
No	2

Q29. How do you scale health provider's competency in providing family planning services between the importance/expectation and the consistency/reality?

Importance/expectation	code	code Consistency/reality	
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4
Very important	5	Very appropriate	5

Q30. Were you informed by the provider to maintain the use of the chosen contraceptive method?

Yes	1, continue to Q31	
No	2, continue to O32	

Q31. If yes, please specify the information provided by the provider?

Importance/expectation	code	Consistency/reality	code
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4
Very important	5	Very appropriate	5

Q32. How do you scale health provider's information on the continuity of the chosen contraceptive method between the importance/expectation and the consistency/reality?

Q33. During the provision of family planning services, did provider check your reproductive organs or ask

(if any) complaints related to your reproductive organs?

Explanation: Services can be provided such as screening and diagnosis of possible reproductive tract infections, sexually transmitted infections, or others

Yes 1 2

No

Q34. How do you scale health provider's additional services include screening and diagnosis of reproductive tract infections, sexually transmitted infections, or others between the importance/expectation and the consistency/reality?

Importance/expectation	code	code Consistency/reality	
Very unimportant	1	Very inappropriate	1
Unimportant	2	Inappropriate	2
Important enough	3	Appropriate enough	3
Important	4	Appropriate	4
Very important	5	Very appropriate	5

Q35. How long was family planning counseling provided?

.....minutes

Q36. Did it take too long for you to be served in this health facility?

Note: The time is calculated since respondent's registration until she/he obtained family planningservices Yes 1 2 No

Q37. How long is the waiting time for family planning services?

.....minutes

Q38. Were you informed by the provider about what you should and should not do following the services?

1 Yes 2 No

Q39. Were you informed by the provider when to re-visit this health facility?

Yes	1
No	2

Q40. How satisfy do you measure the overall family planning services provided by the provider in this health facility?

Very dissatisfied	1
Dissatisfied	2
Quite satisfied	3
Satisfied	4
Very satisfied	5

Signature of the respondent	
(Respondent has been interviewed)	

# Appendix B

## **Overall Parameter Beta**

Variables	Std. Error	Standardized Coefficients	t	Sig.
		Beta		
(Constant)	0.26		7.29	0.00
Choice of methods	0.04	0.09	1.74	0.08
Information given to users	0.05	0.17	3.47	0.00
Technical competencies	0.05	0.15	3.02	0.00
Interpersonal relations	0.06	0.13	2.66	0.01
Follow up/continuity mechanism	0.04	0.09	1.89	0.06
Appropriate constellations of services	0.03	-0.04	-0.89	0.37

Dependent Variable: Overall, how satisfied are you with family planning services?

Significant at 95% level

# Appendix C

# Client response to government service

Variables	Std. Error	Standardized Coefficients	t	Sig.
		Beta		
(Constant)	0.36		5.43	0.00
Choice of methods	0.06	-0.01	-0.14	0.89
Information given to users	0.06	0.20	3.08	0.00
Technical competencies	0.07	0.03	0.49	0.62
Interpersonal relations	0.08	0.15	2.47	0.01
Follow up/ continuity mechanism	0.05	0.18	2.81	0.01
Appropriate constellations of services	0.04	0.00	0.06	0.95

Dependent Variable: Overall, how satisfied are you with family planning services?

Significant at 95% level.

# Appendix D

# Client response to private service

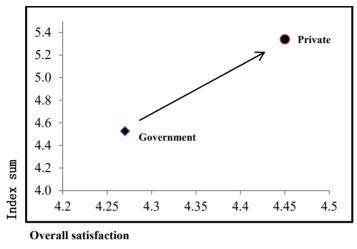
Variables	Std. Error	Standardized Coefficients	t	Sig.
		Beta		
(Constant)	0.37		5.26	0.00
Choice of methods	0.07	0.20	2.43	0.02
Information given to users	0.07	0.11	1.38	0.17
Technical competencies	0.08	0.26	3.52	0.00
Interpersonal relations	0.08	0.06	0.79	0.43
Follow up continuity mechanism	0.05	0.01	0.11	0.91
Appropriate constellations of services	0.05	-0.05	-0.66	0.51

Dependent Variable: Overall, how satisfied are you with family planning services?

Significant at 95% level

#### Appendix E

Equity, linear model mapping on an overall satisfaction versus total index between government and private sector



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