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Original Article

Assessing Timeliness and Affordability of care in Family Planning Services at Mansoura City

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1.ABSTRACT

Background and aim: Good quality care in Family Planning (FP) services helps individuals and couples to meet their reproductive health needs safely and effectively. Therefore, continuous assessment and improvement of the quality of family planning services could enhance family planning services utilization and outcomes. **Aim**: This study aimed to assess timeliness and affordability of care in family planning services at Mansoura city. **Subjects and Method**: A descriptive design was utilized with a convenient sample of health care providers (196). Setting: The study was carried out at fifty- six available maternal and child health centers in Mansoura city. Tools of data collection: One tool was utilized for data collection (A clinic self-assessment). **Results**: 92.9% of the studied family planning clinics provided single day long acting reversible contraception insertions, 87.5% of them sometimes follow quick start protocols of hormonal contraception. In addition, 98.2% of the studied family planning clinics not accepted Medicaid. Conclusion **and Recommendations**: The study concluded that family planning services in maternal child health care centers at Mansoura had low total quality of care level as providing services on time but with high cost. Urgent need for numerous quality enhancement measures to promote all quality elements in the studied maternal and child health centers. In addition to, emphasizing client's satisfaction as a high priority for better outcomes.

Keywords: Quality, Family planning services, Client satisfaction

2.Introduction:

Egyptian population is undergoing a tremendous growth with high fertility rate of 3.47 live births / woman in 2017. Currently, they representing **1.31%** of the worldwide population where they increased from 82,040,944 million in 2010 to 98,023,159 million in 2017 and the current population of Egypt is 102,334,404 based on United Nations estimation **(United Nations, Department of Economic and Social Affairs, Population Division, 2017; United Nations, Department of Economic and Social Affairs, Population Division, 2020).**

Furthermore, the Egyptian population growth rate (2.5%) is more than double compared to that of the world population (1.06%) in 2017. This in turn, can have a devastating effect on the country's sustainability. Consequently, the Egyptian government highlighted Reproductive Health as a national priority. Reproductive Health (RH) is crucial not just for individuals' health and life quality, but also it important for overall community health and progress **(Central Intelligence Agency [CIA], 2017; Sayed, Elgazar & Ibrahim, 2018).** Family Planning (FP) is the fundamental component of RH and an indicator of proper RH. It chiefly can help women in appropriate regulation of pregnancies as regards timing, spacing and limitation. Thus, supports the prevention of high risk or mistimed pregnancies that can negatively affect women and child health **(United Nations Population Fund [UNFPA], 2016).**

All over the globe, the United Nations estimated in 2020 that among married women the unmet FP need was found to be about 10.0 % in those who aged 15 to 49 years. Almost in distinguishable rate (13.0%) was shown in Egypt; according to Egypt Demographic Health Survey. The women with unmet FP need are at higher risk for getting accidental pregnancy with its concomitant negative consequences either undesirable birth or unsafe abortion which carries a massive risk for maternal mortality. The prevalence of unintentional pregnancy in Egypt has been displaying a mounting trend from 14.0% in 2008 to 16.0% in 2014 **(EDHS, 2014).**

Furthermore, EDHS, 2014 results showed that 59.0% of the Egyptian married women are now utilizing a contraceptive method. The most popular used method was IUD, followed by the pills and injectable. However, about 3 in 10 contraceptive users discontinue their adopted FP method within a year. The adverse effects and FP method failure are the most widely reported causes for method stoppage **(Ministry of Health and Population [Egypt], El-Zanaty and Associates [Egypt], and**

ICF International [Egypt], 2015; Khalifa, Abdelaziz, Metwally & Sakr, 2020). In addition, it was found that one of the chief causes for FP methods termination and the escalating rate of unmet FP need is the lack of clients' satisfaction with the services quality. This in turn, reflects the unacceptable quality level of FP services in Egypt which simply unable to match the women with their suitable FP method to achieve their fertility goals **(Metwally et al., 2015).**

Quality of services is a raising integral concern at both the international and national levels especially at RH and FP services, with the main objectives are to safeguard the clients' rights, attraction of more clients and ensure efficiency in services provision. Recently, Institute of Medicine (IOM) demarcated quality of care as the degree to which health care services advance the health outcomes in a way that is consistent with modern qualified knowledge. It also portrays that quality health care should have the following attributes: safe, client-centered, timely, effective, efficient, equitable and accessible to all population **(Sayed et al., 2018; Padmanabhan & Suresh, 2019).**

Significance of the study

Giving that Egypt suffers from higher population growth rate (2.5%) and higher fertility rate (3.47 live births / woman); high quality FP services is a necessity for helping the country in ensuring its sustainability **(United Nations, Department of Economic and Social Affairs, Population Division, 2017).**Moreover, with the increasing focus on clients centered health care, client's satisfaction with FP services become an essential outcome indicator of service quality. This in turn, motivates clients for contraceptive utilization and ensuring continuity where higher contraceptives discontinuation rate (3 in every 10 women) was found to be a chief obstacle for Egypt improvement. In addition, it aids in reducing the escalating trend of unplanned pregnancy in Egypt **(Sayed et al., 2018).**

Egypt has a wide range of public, non-governmental organizations and private facilities for providing health care services. The government of Egypt has prioritized reproductive, maternal, newborn and child health interventions as a main part of its strategy **(WHO, 2015).** In spite of availability, accessibility and affordability of public services in Egypt, it may not to be enough to increase the utilization of public health services if actual or perceived quality is low**(Rehman, Janjua & Shahzad, 2015).**

Health care system in Egypt has to put the Sustainable Development Goals (SDGs) (2030) on the top priorities for achieving optimal maternal health **(UNICEF, 2016).** Evaluation of family planning services can inform health care providers about where to focus interventions that can reduce maternal and fetal mortality and to improve women's outcomes **(United Nations Population Fund [UNFPA], 2016).**

Study Aim

The current study aimed to assess timeliness and affordability of care in family planning services at EL-Mansoura city, El-Dakahlia, Egypt.

Research questions

I. What is the timeliness of providing Family planning services at Mansoura city?

II. What is the affordability of providing Family planning services at Mansoura city?

Theortical Definitions

- Quick start protocols for contraception initiation: refers to the initiation of contraception on the day of the visit.
- The term Medicaid: refers to a public health insurance program that provides health care coverage to low-income families and individuals in USA.

3. Method

Study Design

A descriptive cross sectional design was utilized to accomplish the study's aim.

Study Setting

This study was carried out at fifty- six FP clinics including forty health units , fifteen health offices, affiliated to the Ministry of Health, El-Dakahlia Governorate and one fertility center affiliated to Mansoura university hospitals in the fifty- six available maternal and child health care centers (MCH) in Mansoura city.

Subjects:

A convenient sample of health care providers (196) at fifty- six FP clinics was enrolled in the study.

Tools of data collection:

One **tool** was utilized:

Tool I: A Clinic Self – Assessment from Oregon Preventive Reproductive Health Advisory Council **(OPRHAC), 2017).**It was adopted and consisted of four domains with total score 98 to measure the following:

***Domain I*: related to **Access;** it includes the following data: Timeliness of care, Affordability/ cost and special populations/diversity. Scoring **system:** Each item will take a score from 0,1and 2.**

Total score: 42

Domain II: related to **Service provision;** it includes the following data: assess for pregnancy intentions, counseling and education, condoms and vasectomy services, Services for youth, services for postpartum and / or breast feeding, contraceptive supplies, Contraceptive procedures patient support for contraception management. **Scoring system:** Each item will take a score from 0,1and 2**. Total score:** 44

Domain III*:** related to **Community collaborations with other providers;** it includes the following data: linkages to contraception services, linkages to social services and linkages to primary care and / or chronic disease care management services. **Scoring system:** ***Each item will take a score from 0,1and 2**. Total score:** 8

***Domain IV*:** related to **Evaluation of patient experience with contraception services**: it includes the following data: Evaluation of patient experience. **Scoring system:** Each item will take a score from 0,1and 2**. Total score:** 4

Validity of the tool

Before using the tool, three experts in the field of obstetrics and gynecology nursing checked its validity.

Reliability

The clinic self-assessment tool reliability was tested and found to be good to high with a Cronbach's (alpha) value of 0.887.

Pilot Study

A bout five MCH centers (10 percent of the targeted sample size) in the previously mentioned setting .The pilot study was used to assess the tool's questions and statements for clarity and applicability, as well as the tool's feasibility, objectivity, and consistency, as well as to identify ambiguity in the study tool and check that the questions had the intended meaning. It also made it easier to estimate how long it will take to complete the tool. The results of pilot study did not include in the sample size (5 places). This stage lasted one month (June 2019).

Field work

After taking written consent from the Health Management in Mansoura city and participants, data collection lasted 6 months (from July 2019 to the end of December 2019). The researcher attended the MCH centers for three days weekly from 9 a.m. to 1 p.m. The researcher introduced herself and clarified the purpose of the study.

The researcher evaluated the family planning clinics to assess the current situation of family planning services and check areas for improvement through explaining the tool be used and completed by a team of staff members who were involved in the delivery of reproductive health services within the clinic to ensure all staff roles were represented. Examples include clinicians, medical assistants, administrative and billing staff at Mansoura city. The researcher gathered data until the end of data collection period.

Data analysis:

The results of data analysis and presentation were presented as descriptive results in the form of frequency and percentage. Statistical significance was set at $p<0.05$

Ethical Considerations

- A written consent was taken from the health care providers after taking a written permission from the Faculty of Nursing, Mansoura University's Research Ethics Committee and taking an official letter from the head of the Mansoura city's Health Management after clarifying the aim of the study.
- All participants were given their right to withdraw voluntarily, their privacy, and their confidentiality. The study's findings will be made available to the public, and everyone will benefit.

Limitations of the study:

- This review was not intended to be a systematic review to summarize all possible methods of quality assessment.

4. Results

Table 1: presents timeliness of care among the studied family planning clinics **(n=56).** It is found that most of the studied family planning clinics (92.9%) provide single day long acting reversible contraception insertions. The higher percentages (87.5%) of them sometimes follow protocols of hormonal contraception. 73.2% of the clinics have third next available appointment. In addition, 82.1% of the studied family planning clinics have routinely offer urgent care for contraception concerns and more than three-quarters of them (76.8%) sometimes scheduling staff regarding contraception visits.

Table 2: reveals that affordability/cost of care among the studied family planning clinics **(n=56).** Shows that that most of the studied family planning clinics (98.2%, 92.9%, 89.3%) have not accept Medicaid, accepted uninsured patients and payment plans and offered sliding fee for contraception services respectively. Concerning

patient assistance programs, the results revealed that 87.5% have sometimes able. In addition, 96.4% of the studied family planning clinics always require some payment to contraception services and less than three quarters (73.2%) accept broad range of commercial insurance.

Table (1): Distribution of the studied family planning clinics (n=56) according to their timeliness of care.

Clinicians provide contraception, including single day Long-acting reversible contraception insertions		
provide	4	7.1
routinely provide	52	**92.9**
Clinicians follow "quick start" protocols for initiation of hormonal contraception		
follow some of the time		
routinely follow	49	**87.5**
	7	12.5
Clinic scheduling staff assess for urgency of need regarding contraception visits		
do not assess		
some of the time	5	8.9
routinely assess	43	**76.8**
	8	14.3
Third next available appointment is available within two business days (specialty care standard) for routine visits.		
sometimes available	15	26.8
routinely available	41	**73.2**
Clinic offers urgent care for contraception concerns.		
Limited	2	3.6
sometimes able	46	**82.1**
routinely able	8	14..3

Table (2): Distribution of the studied family planning clinics (n=56). according to their affordability/cost.

Clinic accepts Medicaid.		
does not accept	55	**98.2**
less than 30%	1	1.8
Clinic accepts uninsured patients and accepts payment plans.		
does not accept	4	7.1
accepts all patients	52	**92.9**
Clinic offers sliding fee for contraception services.		
does not have	3	5.4
to a nominal fee	50	**89.3**
slides to zero	3	5.4
Clinic accepts broad range of commercial insurance with in-house billing capacity.		
does not accept		
accepts limited number	14	25
accepts broad range	41	**73.2**
	1	1.8
Clinic helps with applications for patient assistance programs.		
unable	5	8.9
sometimes able	49	**87.5**
routinely able	2	3.6
Access to contraception services never denied based on inability to pay.		
always requires some payment	54	**96.4**
sometimes able to offer services to those unable to pay	2	3.6

5. Discussion

The present study was implemented to assess timeliness and affordability of care in family planning services at Mansoura city, Dakahlia, Egypt. The current study results answered the study questions and found that family planning services in maternal and child health care centers at Mansoura provided services on time with high cost.

Regarding to timeliness of care that is the first element of accessibility of FP services, the present study revealed that most of the studied FP clinics had routinely provide single day long-acting reversible contraception insertions and the majority had sometimes followed quick start protocols for initiation of hormonal contraception.

In the same line of these findings, **Aligne et al., (2020)** reported in their study about impact of the Rochester LARC Initiative on adolescents' utilization of LARC that adolescent long-acting reversible contraceptive use increased significantly more in Rochester than in the nation as a whole**.**

Bornstein et al., 2018) results are contradicting with the study results. They reported in their study about access to long-acting reversible contraception among US publicly funded health centers that variation in LARC access remains among publicly funded health centers in particular, health departments and rural health centers have relatively low LARC provision.

As well an American study done by **Morgan et al., (2019)** on health care provider attitudes about the safety of quick start initiation of LARC for adolescents in Atlanta, Georgia reported that approximately two-thirds of providers considered quick start initiation of LARC for adolescents safe.

As regard urgency of care, the current study revealed that more than three-quarters of the studied FP clinics had sometimes scheduling staff regarding contraception visits and the majority of them had sometimes offer urgent care for contraception concerns.

In the same line of these findings, an Egyptian study in Assiut Government done by **Mohamed, Mohamed & Arief, (2017)** on women satisfaction with FP services reported that more than half of the studied FP clinics had adequate staff number. While, **Sayed et al., (2018)** reported in their study about quality of family planning services in maternal and child health care centers in Damanhour city that all of the studied FP clinics had low staff number.

About the third next available appointment for routine visit, the current study revealed that nearly three quarters of studied FP services had routinely available. On the same line an Ethiopian study in Hossana town done by **Argago, Hajito & Kitila, (2015)** who studied Clients satisfaction with family planning services and associated factors among family planning users in public health facilities proved that the clients were satisfied with structure quality of FP services particularly accessibility in terms of convenient working hours.

Also, an Egyptian study in Port Said Government done by **Nasr and Hassan, (2016).** They explored that the great majority of the respondents were satisfied with structure quality items specifically accessibility and availability of FP services.

On the other hand, a cross-sectional study conducted by **Mpunga et al., (2017)** to determine the availability and quality of FP services within health facilities throughout the Democratic Republic of Congo (DRC) reported that availability and quality of FP services in health facilities in the (DRC) remain low with inequitable distribution of services throughout the country.

Concerning affordability/cost that is the second element of accessibility of FP services, the present study revealed that most of the studied FP clinics not accepted Medicaid and always required some payment for access to contraception services. According to the best of the researcher's knowledge, this was the first thesis that discussed these findings.

Wagstaff et al., (2016) results are contradicting with the study results. They reported that everyone irrespective of their ability to pay gets the health services they need and that nobody suffers undue financial hardship because of receiving care as well **Bellows, Ali & Mir, (2020)** they studied vouchers for right-based, voluntary FP stated that to meet the FP 2020 and Sustainable Development Goals (SDGs), significant investments are required by countries and donors in priority areas including sustainable financing, reaching all adolescents, expanding availability of services to the poorest and hard-to-reach populations and improving the quality and increasing the range of methods available.

Moreover, **Eckert, (2020)** found that Medicaid is the largest single payer of maternity care in US. As such, this program has a significant role to play in improving maternal health and

helping to eliminate preventable maternal mortality.

As regard uninsured patients and payment plans, the current study revealed that most of the studied FP clinics accepted all patients with applications for patient assistance programs however, less than three- quarters of the studied FP clinics accepted limited number of commercial insurance and the most offered sliding fee for contraception services.

In the same line of these findings, **White, Portz, Whitfield & Nathan, (2020)** who studied Women's post abortion contraceptive preferences and access to family planning services in Mississippi explored that women cited cost or lack of insurance coverage and difficulties scheduling appointments with community clinicians as reasons for not using their preferred method.

Nasr and Hassan, (2016) results are contradicting with the study results. They explored that the great majority of the respondents were satisfied with structure quality items specifically accessibility and cost of FP services as well **Sayed et al., (2018)** they proved that the most common reported reasons for selecting the FP clinics among the studied clients were accessibility and lower cost.

6. Conclusion

Based on the present study findings, it is concluded that none of the studied FP clinics had high total quality of care level. The most of the studied FP clinics routinely provided LARC methods mainly IUD with higher percentage followed quick start protocols for initiation of hormonal contraception. Additionally, the present study findings highlighted that the most of clinics didn't accept Medicaid and required some payment.

7. Recommendation:

The following recommendations are made in light of the current study's findings:

1. The findings suggest: The ministry of health should put primary health care centers especially FP clinics as a priority through setting up of service total quality development strategies.
2. Proper utilization of mass media (Radio and TV) for increasing public awareness about the importance of achieving full FP Care package.
3. More efforts are needed to reassess the **cost** of FP services.

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9.Conflicts of interest:

The authors declare that there is no conflict of interest.

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