

The Quality of Provided Services for Combined Contraceptive Pill Users

¹M. Kamalifard, ²H. Halimi Milani, ¹S. AllahverdiZadeh and H. Kushavar

¹Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

²Department of General Health, Faculty of Health and Nutrition,
 Tabriz University of Medical Sciences, Iran

Abstract: Family Planning (FP) saves lives through planned management of pregnancy. The Combined Oral Contraceptive (COC) pill has become an integral part of family planning choice in almost every country. We performed this study to assess the quality of services provided to combined contraceptive pill users. A descriptive study was performed over 100 health care providers of Tabriz healthy-therapeutic centers and 500 clients. The data was collected by interview form and observation of expected activities in 7 field including communication, education, consultation, examination, health record filling, follow up and accessibility of clients to family planning services. It is concluded from this study that the performance of service providers working in health units of healthy-therapeutic centers was not acceptable.

Key words: Family planning, oral contraceptive, health care providers, pill users, provided services

INTRODUCTION

Family Planning (FP) saves lives through planned management of pregnancy (Sharon, 2004). Healthy mothers produce healthy infants. Empirical evidence shows that spacing births 2 years apart reduces the risk of infant mortality (Bureau, 1992). FP also gives women the option of avoiding unwanted pregnancy, dangerous illegal abortions and unhealthy childbearing conditions.

Nearly one half of all pregnancies in the United States are unintended despite the availability of safe and effective contraceptives (Jennifer, 2003). The morbidity and mortality from unintended pregnancy are not insignificant. Still, it remains important to note that more than 500,000 women die each year from complications of child-bearing (Garcia, 2004). A significant portion of this mortality would be prevented by better knowledge of and access to oral contraceptives.

The Combined Oral Contraceptive (COC) pill has become an integral part of Family planning choice in almost every country since its introduction in 1960 in the United States (Garcia, 2004 and Regina, 2004). Currently available hormonal contraceptives are very effective, safe and available for most women (Potter, 1996). COCs are the most effective reversible method of contraception available; the first year pregnancy rate is less than 0.5% among perfect users and 3% among typical (married) users.

COCs have extraordinarily high contraceptive reliability, if taken meticulously. However, there is a

considerable difference between the very low contraceptive failure rates in clinical trials and the high failure rates in general use, caused by missed pills and factors which interfere with absorption (Abma *et al.*, 1997). Compliance can be optimized by good counseling, health education and effective packaging. Approximately half of U.S. women aged 15-24 who currently practice contraception use the pill and more than 80% of all women aged 15-44 have ever used the pill. A study showed that more than 98% of women 15-44 years of age who have ever had sexual intercourse with a male (sexually experienced women) have used at least one contraceptive method (Mosher *et al.*, 2004). The leading method of contraception was the oral contraceptive pill.

COCs have remarkable non-contraceptive health benefits. These include dramatic reductions in lifetime risk of ovarian and endometrial cancer, colorectal cancer, benign breast disease, uterine myomata (fibroids), endometriosis, acute episodes of pelvic inflammatory disease, benign ovarian cysts, toxic shock syndrome and androgenic skin conditions such as acne (Burkman *et al.*, 2004; Souza and Guillebaud, 2002; Ian and Gabor, 2003; Ian, 2000).

However, problems with uneven access, prescription requirements, conflicting information on the package instructions for initiating and continuing use and incorrect perceptions of excess risk of contraceptive products may lead women to use them less than effectively or not at all (Gardner and Miller, 2005).

Providers of COC services have an important role in improvement of users' knowledge about COCs side effects and advantages, presentation of user instructions and optimization of users' compliance.

We performed this study to assess the quality of services provided to combined contraceptive pill users via evaluation of quality fields (communication, consultation, education, health record filling and follow up). The results of this study will help the education programming to improve the quality of family planning services.

MATERIALS AND METHODS

A descriptive study was performed over health care providers of Tabriz healthy-therapeutic centers. Using randomized cluster sampling among 88 healthy-therapeutic centers (health bases and centers) of Tabriz, 44 centers were selected randomly including 100 health care providers. The data was collected from these 100 providers and 500 clients by an interview form and observation of expected activities in 7 field including communication with clients, education, consultation, examination, health record filling, follow up and accessibility of clients to family planning services.

The interview form was include: Eight questions about personal/social characteristics of health care providers; 6 questions about communication with clients; 37 questions about clients education; 13 questions about 13 visible behaviors of care providers in consultation with clients; 50 questions about visible behaviors of care providers in examination of clients; 6 questions about follow up; and 7 questions about access of clients to family planning services.

The form was filled by interview with care providers and contraceptive pill users, observation of behaviors of care providers and assessment of health records.

The data were analyzed by WIN/SPSS10 statistical software. We used descriptive statistics for quality determination in any of fields, whereas the statistical methods used for determination of relation between personal/social characteristics and any fields of family planning services were unidirectional variance test, comparison of mean values, Scheffe Tukey, Independent samples t-test, Pearson test and multivariate Backward regression.

Limitations: The insight of studied health staff about family planning programs and the level of their professional satisfaction can affect the quality of their care services as well as the study results and the control of this issue is impossible.

RESULTS AND DISCUSSION

The most of our studied cases (30%) are belong to age group of 25-29 years. The mean age of them was 32.14 years. The most of them (87%) were married, of which the most (35.6%) had one child. The majority of cases (49%) had Baccalaureate (BS) Degree of science. Fifty six percents were official employee. The minimum number of them (36%) had the service record of less than 4 years; the maximum number (66%) had Baccalaureate (BS) Degree in midwifery. Fifty five percents were staff of healthy-therapeutic centers.

The Independent sample t-test showed that there was significant relation between mean score of care providers with the Associate of Sciences Degree (or lower scientific degrees) ($n=16$) and those with academic degrees of Baccalaureate (BS) (or higher scientific degrees) ($p<0.05$).

The unidirectional variance test (Tukey, Scheffe) showed that regarding mean score of care presentation, in field of clients education, health record filling and consultation, the difference between conventional personnel and official staff was significant ($p<0.05$). Also, there was significant difference between total score of care provided by conventional personnel and official staff ($p<0.05$).

Regarding the mean score of service presentation, in field of client education, health record filling and follow up, there was significant relation between staff of health centers with staff of health bases ($p<0.05$). Also, the relation between total score of services provided with staff of health centers with staff of health bases was significant ($p<0.05$).

The Pearson correlation test showed that regarding the relation between personal/social characteristics of care providers with quality of their services, only the relation between the record of service and quality of their provided services was significant ($p<0.05$); so that, the record of service was reversely related with quality of provided services.

In general, the majority of couples desire to have children, though many delay this stage until they have established themselves in a relationship and a career. To embark on many years of contraception, not knowing what effect this can have on the ability to conceive can cause concern (Hassan and Killick, 2004). Young women may approach contraception with an ambivalent attitude because of this underlying desire to guarantee and prove their fertility. Also for those using contraception to space their pregnancies, the impact on later fertility is a key determinant of their contraceptive behavior and represents an essential part of the contraceptive counseling.

The efficacy and safety of various contraceptive methods may be viewed as a spectrum extending from contraceptive failure to impaired fertility (Calderoni and Coupey, 2005). Contraceptive failure may reflect a high fecundity of the couple or a reduced efficacy of the contraceptive method or may reflect the couples inadequate contraceptive knowledge, their fear of side-effects or their belief that they are less fecund to the extent of using unreliable methods for contraception or using effective methods inconsistently.

Combined OCPs, delivering both estrogen and a progestin simultaneously, are among the most effective, widely used hormonal contraceptive options. They also have the best noncontraceptive benefit profile for young women of all hormonal contraceptive options (Marla *et al.*, 2004). COCs are the most effective reversible method of contraception available with the first year pregnancy rate of less than 0.5% among perfect users and 3% among typical (married) users (Poter *et al.*, 1996).

Still problems with uneven access, prescription requirements, conflicting information on the package instructions for initiating and continuing use and incorrect perceptions of excess risk of contraceptive pills may lead women to use them less than effectively or not at all.

In considering how oral contraceptives might be made safer, recommendations are made for improved availability and effective use. These include expanding the numbers and types of providers; reconsidering the need for prescription; revising labels to reflect the safety of the current formulations and communicating the safety of the current formulations (Gardner and Miller, 2005; Marla *et al.*, 2004).

As Iran is included among the most successful developing countries in family planning, clarification and expression of the ideas and needs of women receiving the services not only have a great positive impact on national policies but also may be of interest to other nations (Nakhaee and Mirahmadizadeh, 2005).

Our study showed that the quality of provided services, in field of communication, was almost very well and the insufficiencies were mainly due to not giving confidence to clients about confidentiality of health record information.

A review (RamaRao and Mohanam, 2003) suggests that interventions that improve client-provider interactions show the greatest promise. Good quality of care results in such positive outcomes as clients' satisfaction, increased knowledge, and more effective and longer use of contraceptives.

The quality of provided services, in field of clients education, was almost moderate due to non contribution of males in family planning educational programs, non

presentation of adjuvant education devices to clients, non explanation of possible side effects and advantages, insufficient explanation of what to do when miss the pill(s), drug interactions, reverse of fertility, the method failure rate, non-presentation of condom for prevention from STDs and lack of consultation.

Kaufman *et al.* (1992) believes that although providers believe they inform women about method choices and side effects, women were poorly informed about the methods they selected. Not all providers who insert IUDs and distribute pills were knowledgeable about contraindications and side effects of the methods. Improvements in quality, especially in method mix, providers' level of knowledge and the quality and quantity of information provided to users will likely improve contraceptive continuation, client satisfaction and women's health.

There is a considerable difference between the very low contraceptive failure rates in clinical trials and the high failure rates in general use, caused by missed pills and factors which interfere with absorption. Compliance can be optimized by good counseling and presenting using instructions and health education (Ian, 2000).

In our study, the quality of provided services, in field of clients' examination, was almost poor due to inadequate attention to breast examination, blood pressure checking, gynecologic examination, refer to physician and requesting Pop smear.

According to the WHO recommendation, there are two prerequisites for the safe provision of COCs: Careful personal and family medical history, with particular attention to risk factors for venous and arterial cardiovascular disease and 2) an accurate blood pressure measurement. To this we would generally add an annual review with blood pressure measurement, breast check and pelvic examination with a cervical smear every second year (Ian, 2000; Speroff *et al.*, 2001).

The quality of provided services, in field of health record filling, was almost moderate. The defects were including: no registration of medical histories, Pop smear results, care method and consultation stages (Table 1 and 2).

The quality of provided services, in field of clients follow up, was almost moderate. The defects were including: no follow up of clients who did not present to take pill package or performing periodic examination in predetermined time and no report of cases requiring follow up to Hygiene Binders. Wong *et al.* (2002) insist on follow up of users of oral contraceptive pills to obviate their encountered problems.

Table 1: The quality of services provided in all fields to COC* users

| | Communication | Education | Consultation | Examination | Record filling | Follow up | Totalservices |
|-----------|---------------|-----------|--------------|-------------|----------------|-----------|---------------|
| Very Poor | | | | 3(13%) | | 1(1%) | |
| Poor | | 36(36%) | 5(20%) | 20(87%) | 20(20%) | 11(11%) | 42(42%) |
| Moderate | 1(1%) | 63(63%) | 7(28%) | | 28(28%) | 63(63%) | 40(40%) |
| Good | 12(12%) | 1(1%) | 12(48%) | | 48(48%) | 20(20%) | 18(18%) |
| Very good | 87(87%) | | 1(4%) | | 4(4%) | 5(5%) | |
| Total | 100(100%) | 100(100%) | 25(100%) | 23(100%) | 100(100%) | 100(100%) | 100(100%) |

*COC: Combined Oral Contraceptive pill

Table 2: The quality of services provided in field of accessibility of COC* users to health services (n = 500)

| Quality of accessibility | Number | (%) |
|--------------------------|--------|------|
| Moderate | 12 | 2.4 |
| Good | 37 | 7.4 |
| Very good | 451 | 90.2 |

*COC: Combined Oral Contraceptive pill

Regarding the all provided services, the quality was almost poor due to low awareness of health staff about importance and techniques of care, insufficient skills of them in fields of consultation, education, business of health centers in certain hours and low attention of health staff to important cases.

The information provided to clients may be incomplete or biased, the personnel providing it may be inadequately trained, information provided by different types of workers may be incoherent or conflicting, or information provision may be neglected once the method has been chosen. Great regional differences have been found in the technical competence of family planning workers. Physicians working in family planning are usually technically competent for the most common techniques but often lack adequate training in other methods (Diaz and Halbe, 1990).

The quality of clients accessibility to health services was almost well which is consistent with Williams *et al.* (2000) study results.

A study (Ali, 2001) in rural Egypt showed that facilities with smaller numbers of health personnel trained in family planning, a lack of access to facilities with female doctors and a lack of range of available methods are associated with a high risk of discontinuation of pill use for all reasons except desire for pregnancy.

Our study showed that care providers with academic degree of Associate of science (or lower than it), conventional personnel working on health centers have better performance in all fields of health care presentation especially health record filling and consultation; and record of service have little negative effect on score of quality of service presentation in field of follow up.

CONCLUSION

It is concluded from this study that the performance of service providers working in health units of healthy-

therapeutic centers was not acceptable. Therefore, regarding the current growing population and important role of health service providers in improvement of quality of cares provided to OCP users, it is recommended that these services to be improved by development of re-education programs for care providers and continuous evaluation of them during service presentation.

REFERENCES

- Abma JC. *et al.*, 1997 Fertility, family planning and women's health: New data from the 1995 National Survey of Family Growth, Vital and Health Statistic, Series 23.
- Ali MM., 2001 Quality of care and contraceptive pill discontinuation in rural Egypt. *J. Biosoc. Sci.*, 33: 161-72.
- Bureau PRB., 1992 Family planning saves lives. *Integration*, 34: 18-25.
- Burkman R, JJ. Schlesselman and M. Zieman, 2004. Safety concerns and health benefits associated with oral contraception. *Am. J. Obstet. Gynecol.*, 190: 5-22.
- Calderoni ME. and SM. Coupey, 2005 Combined hormonal contraception. *Adoles. Med. Clin.*, 16: 517-37.
- Diaz J. and H. Halbe, 1990 Quality of care in family planning clinical services in Latin America. *Profamilia*, 6: 16-30.
- D'Souza RE. and J. Guillebaud, 2002 Risks and benefits of oral contraceptive pills. *Best Pract Res. Clin. Obstet. Gynaecol.*, 16: 133-54.
- Fraser IS., 2000 Benefits and Risks of Steroidal Contraception. In: Salamonsen LA, Ed. *Hormones and women's health: The reproductive years.* Amsterdam: Harwood Acad. Pub., pp: 161-171.
- Garcia CR., 2004 Development of the pill. *Ann. N.Y. Acad. Sci.*, 1038: 223-6.
- Gardner J. and L. Miller, 2005 Promoting the safety and use of hormonal contraceptives. *J. Womens Health (Larchmt)*, 14: 53-60.
- Hassan M.A.M. and S.R. Killick, 2004 Is previous use of hormonal contraception associated with a detrimental effect on subsequent fecundity? *Human Reprod.*, 19: 344-351.

- Ian S. Fraser and T. Gabor Kovacs, 2003 The efficacy of non-contraceptive uses for hormonal contraceptives. *Med. J. Aus.*, 178: 621-623.
- Ian S. Fraser, 2000 Forty years of combined oral contraception: The evolution of a revolution. *Med. J. Aus.*, 173: 541-544.
- Jennifer K, W. Carolyn and M. Chelsea *et al.*, 2003 Partner Influence on Early Discontinuation of the Pill In a Predominantly Hispanic Population. *Persp. Sexual Reprod. Health*, 35: 256-260.
- Kaufman J, Z. Zhang and X. Qiao, *et al.*, 1992 The quality of family planning services in rural China. *Stud. Fam. Plann.*, 23: 73-84.
- Marla E, H. Linda and E. Renee *et al.*, 2004 Parents' Beliefs About Condoms and Oral Contraceptives: Are They Medically Accurate? *Persp. Sexual Reprod. Health*, 36: 50-57.
- Mosher WD., GM. Martinez and A. Chandra *et al.*, 2004 Use of contraception and use of family planning services in the United States: 1982-2002. *Adv. Data*, 10: 1-36.
- Nakhaee N. and AR. Mirahmadizadeh, 2005 Iranian women's perceptions of family-planning services quality: A client-satisfaction. *Eur. J. Contracept. Reprod. Health Care*, 10: 192-198.
- Potter L., D. Oakley and E. de Leon-Wong *et al.*, 1996. Measuring compliance among oral contraceptive users. *Fam. Plann. Perspect.*, 28: 154-158.
- Regina K, MH. Frans and M. Nandita *et al.*, 2004. Effectiveness and acceptability of progestogens in combined oral contraceptives-a systematic review. *Reprod. Health*, 1: 1.
- Sharon M, H. Lisa and M. Janice *et al.*, 2004 Contraception. *BMC Women's Health*, 4: S25.
- Speroff L., D. Philip and D. Arne, 2001 A clinical guide for contraception (3rd Edn.), Philadelphia, Williams and Wilkins pp: 46-58.
- Williams T, AJ. Schutt and Y. Cuca, 2000 Measuring family planning service quality through client satisfaction exit interviews. *Int. Fam. Plann. Prespect.*, 26: 63-71.
- Wong DL., SE. Perry and MJ. Hockenber, 2002 Maternal-child nursing care. (2nd Edn.), Mosby, St. Luis, pp: 63-71.