

## REAL NECESSITIES OF A CONTRACEPTION ALGORITHM IN CASES OF WOMEN SUFFERING FROM SCHIZOPHRENIA. SPECIAL NEEDS FOR FAMILY PLANNING

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**Keywords:** schizophrenia, female patient, sexual intercourse, contraception, motherhood, family planning, ethics.

**Abstract:** Schizophrenia has a devastating effect on patient lives all together with their families, changing dramatically the day by day life, affecting thinking, feelings, knowledge and modifying the patient's ability to adapt to society – establishing “boundaries” and “stigma” cause of desasperation, confusion or other symptoms. Objectives: This study wanted to the established an algorithm that concerns contraceptive methods specifically made for schizophrenic female patients according to their needs and to reality in which they live. Material and method: the study included 6200 patients at reproductive age that had been hospitalized in Socola Psychiatric unit during 2005 - 2010 and have been investigated by inquiry about age, provenience, marital status, education, number of children, knowledge and attitudes towards methods of contraception failure. Results The majority of the ones that knew about the contraception were from the urban area, age 30-35 having medium education, in a relationship or married. Unfortunately the help providers tend to neglect this “delicate subject” the fertility of schizophrenic patients being a real problem not only for the health care specialist but also costing highly the social assistance, their families, and their own children. Conclusions. While the Royal College of Obstetricians from Great Britain affirms that as a criteria for medical eligibility in using contraception in female schizophrenic patients it can be used any method as there are no longer contraindications for each specific case and under a correct counseling the best way is to solve ethical problems offering those patients the right access to family planning.

### INTRODUCTION

Schizophrenia has a devastating effect on patient lives all together with their families, changing dramatically the day by day life, affecting thinking, feelings, knowledge and modifying the patient's ability to adapt to society – establishing “boundaries” and “stigma” cause of desasperation, confusion or other symptoms. Never the less, the reproductive aspect for the mentally ill patients was never well done investigated considering that sexuality is a “tabu” subject for this kind of patients assuming that intimate relationships are prohibited (at least in hospital). Despite all this, the historical data and medical literature are showing exactly the contrary – a study that took place in 2007 at Indiana University, Georgia U.S.A. has revealed the difficulties that the female schizophrenic patient are having many occasions to engage to intimate relationships are concerned about pregnancies and diseases, or about the “morality” of having a relationship, feeling deeply the rejection while being “sexually refused” by the other person. (1)

Another study in Maryland by Ritscher, Coursei and Farrel shows that there are more female psychiatric patients sexually active than men.(2)

The 2<sup>nd</sup> World Congress of Women's Mental Health establish that female patient suffering from schizophrenia( that affects at least 1 percent from general population) and completing with perspectives over the facts about motherhood and its implications on child's safety, female's rights, children's rights and emotional safety of these children.

Most of all a child's safety implies his emotional safety, and mother's diagnostic should not be the only base to take this decision – most likely the right observation of mother and child interaction should be important.

Maternal abilities might be affected by having severe difficulties in appreciating the children's needs (basing or caressing), or his intention or mother's authority on older children. Much more these abilities might be transformed by disillusion judgments or psychotic symptoms asserted to schizophrenia.

It is hard to make a choice between the positive aspects of motherhood: pride motivation , feeling “important” and negative aspects: stress concerning the evolution of the psychiatric diseases losing custody or stopping the medication to stay awake witch makes the patients uncomfortable in seeking help when she has relapses. Financial problems, problems with the partner might complicate her situation and increases substances abuse due to poor education and psychiatric illness. Most sadly it is the fact the their children are developing health and mental problems and they have psychological difficulties as adults, partially explained by genetic heritage but also determined if the children grow somewhere else so the help their mother received should include not only psychiatric care but also family counseling, family planning, social assistance and help needing therapy unit for mother and child. (9)

## OBJECTIVES

This study were to established an algorithm that concerns contraceptive methods specifically made for schizophrenic female patients according to their needs and to reality in which they live.

## MATERIAL AND METHODS

The study included 6200 patients at reproductive age that had been hospitalized in Socola Psychiatric unit during 2005 - 2010 and have been investigated by inquiry about age, provenience, marital status, educations, number of children, knowledge and attitudes towards methods of contraception failure.

Contraception methods focused on psychiatric patient's are generally classified:

- According to gender female or male
- According to reversibility (temporary/ permanent)
- According to methods

We use Pearl index to define the real effectiveness of these methods:

$$\text{Pearl index} = \frac{\text{number of unwanted pregnancies (accidental)}}{\text{total number of exposures to pregnancies}} \times 1200$$

Results are expressed by number of failures per 100 women/year

Ideal qualities for a contraceptive method are:

1. More safety
2. Efficacy
3. Lack of secondary effects
4. Reversibility
5. Low price/free
6. Less needs for medical check up
7. Not depending on moment of sexual intercourse
8. Acceptability.

Taking in to account that none of all these contraceptive methods known until now have advantages and disadvantages and side effects applying for a certain method should be an individual option tightly connected to patient's motivation obtained by counseling.

Specific counseling includes talks that offer information and support on contraception methods and individual circumstances for the person that deeds contraception. It also includes accepting contraception and discussing methods, easy access to contraception, electing the real specific methods by assuming benefits and risks and enhancing the correct utilization.

Contraceptive methods are:

- a. Natural methods (coitus interrupts , abstinence)
- b. Barrier methods
- c. Hormonal methods
- d. Intrauterine device (IUD)
- e. Sterilization (10)

A short history about the creation of the pill is revealing the forgotten women behind it, the women who gave the founding to researcher Gregory Pincus. Catherine McCormick was a wealthy here who's husband died from schizophrenia and she decided to turn her attention to the birth control movement with Margaret Sanger. Margaret Sanger watched her mother die at a early age, witch was partly due to the stress of bearing 11 children. After her mother's death she has worked as a nurse in New York City and saw many women die from child birth and self-induced abortion. The horrors that she witnessed there caused here to devote much of here time to promoting birth control for women. She set up the first clinic in 1916 and founded The American Birth Control League in 1921. She had also envisioned a birth control pill that would be much easier to use than the diaphragm. Her exhaustive efforts paid off in 1960 when the pill was finally approved and sold on the market.

A) Natural contraceptive methods:

**Coitus interrupts:** is the most well known contraceptive method.

Advantages:

- Can be used any time
- No costs
- It doesn't interfere with antipsychotic medication

Disadvantages:

- Implies a strong motivation
- Needs a special male self control, and considering the sexual high risk behavior in case of women suffering of schizophrenia (multiple sexual partners engaging sex without sexual education, being abused ...) it is hard to believe that failure rate will be lower than in general population (12-25 pregnancies per 100 women per year)

**Periodical abstinence:** it is a method based on understanding of menstrual cycles phases and the right moment of ovulation

Advantages:

- No expenses
- It does not interfere with antipsychotic medication

Disadvantages:

- It is only indicated for the patient with regular menstrual cycles
- It needs a good understanding of the moment of the ovulation which is hard to be done with the patients in psychotic status; one of the most mentioned reasons to confirm lack of contraception being (“I didn’t know how it is used”)

**During the lactation period** natural contraception is hard to be used, the psychoses being enhanced by the postpartum period and also by social factors (loosing custody)

B) Barrier contraception: it represents the use of steroids hormones introduced in 1960 by Gregory Pincus, a biologist, fighting against Comstock Law (1873) the highest opponent against family planning.

C) Hormonal contraceptive methods

- Oral contraceptives:
  - Combined estroprogestative pill (COC)
  - Mini pills (only progestagen)
  - Monthly pill
- Injection contraception
- Implant contraception
- Vaginal ring contraception

1. COC

Advantages: during the premenstrual psychotic exacerbation or during the menstruation, the pill has a positive influence on the psychiatric disease evolution reducing psychotic symptoms and enhancing the treatment efficacy; it increases the concentration of Diazepam or other benzodiazepine in blood and is not recommended to the patients which are using this mild tranquilizing. In case of Fenitoin, Carbamazepin and Fenobarbital could accelerate the steroid metabolism causing failure to contraception. The best would be to use monophasical pill 21 days and then 7 days pause most of schizophrenes preferring to take the pill continuously to avoid the menstrual period during witch they feel “dirty” and “neglected”.

Disadvantages: lack of compliance (patient and partner – as in condom use) ; needs of correct administration – the same hour day by day, correct information (hard to obtain because their lack of interest and also because special services do not include special needs)

2. Injection contraception

Advantages:

- does not need special compliance
- have higher efficacy compare to COC (there is no forgotten pill)
- check up at a long period of time

Disadvantage:

- vaginal bleeding
- menstrual hygiene difficult to keep
- discomfort and fear

3. Implants

Advantages:

- high acceptability
- lack of toxicity

Disadvantage:

- genital bleeding
- needs to be administered by special person

4. Vaginal rings

Disadvantages:

- genital bleeding

- lack of compliance for a patient that has occasional sexual contacts
- difficulty of utilization

D) Intrauterine device

Disadvantages:

- needs of special anamnesis and gynecological examination
- risks of multiple sexual partners
- occasional sexual intercourse
- BTS
- inflammation
- chronic abdominal pain

E) Sterilization: is a legal act in many states while in Romania there are no specifications intern of informed consent. A difficult choice regarding patient's decisional autonomy might be taken under negotiation, adequate counseling and informed consent. No one should be sterilized without understanding all the risk and finalities becoming from this action.

## RESULTS AND DISCUSSIONS

### Epidemiological distribution:

- 52% were from urban environment while 48% from country;
- 33% have been given birth to 1 child; 24% to 2 children; 11% more than 3 children; 22% no children;
- 46% were married; 22% in a relationship; 22% single,
- 13% have been to gynecologist to ask for a contraceptive method while 87% never been.

From the married group 62% were using coitus broken/periodical abstinence, while 33% had IUD, 5% using hormonal contraceptives. From the ones being in a relationship/occasional sex only 7% have been using condoms, 72% using natural contraception. From the single group witch reported occasionally sexual intercourse – no contraception mostly, occasionally condom use 6% or coitus interrupts 12%, no other use or other methods.

Most of all, the prevalence of birth shows without any doubt that schizophrenic women are sexually active: 143 births/ 1000 schizophrenic patients during 5 years are expressing the fact that most likely there is a possibility that any sexual contact might end up in pregnancy, the conclusion is that sexual contact are quite frequent even for hospitalized patients.

The sexual freedom launched in 1960 and the changes that appeared in psychiatrically practice have been “reflected” in so many opportunities for carnality in time of our days. Leaving the hospitals and being in a community, offered higher possibilities to have sexual intercourse: 52% of patients have been sexually active during last months and 62% last year (Calgary, Canada). The same results have been obtained in New York City: 45% of female schizophrenic patients being sexually active during the last 6 months.(3)

Considering all these facts it was decided that the pattern of sexual behavior for the schizophrenic female patients is to be engaged in occasional intercourse having unprotected sex, with multiple partners (witch increases the risk for transmitting BTS) and implies a multitude of risk factors as: social circumstance, substance abuse, differences concerning the sexual practices between women and men.

Even initially was accepted that in schizophrenia the sexual impulse is intensified at the debut of the disease and that is decreasing during the evolution of the disease the real surprise was revelation that these patients are constantly sexual active during the psychiatric illness, never minding the hospitalization through witch they have been having the same sexual behavior .

The concern regarding “homosexuality” – have been postponed since DS IV sharpen the criteria for diagnosing schizophrenia, the supposed sexuality being just an assumption of social all-time realities.

While medication is mostly responsible for the – institution and by reducing symptoms and increasing life quality and adapting the patients to community life it is also responsible for increased opportunities for sexual contact.

Medication also influences the libido having effects that are on over not so investigated as the risk for BTS (there has not been studied yet the effect of psychiatric medication on genital infection – ex. Candida as in antibiotics or contraceptives).(4)

During psychiatric treatment for schizophrenia it was proved that it occurs hiperprolactinemia witch is the cause for different symptoms that include not only amenorrhea and also galactoreea. (5,6)

Strong antipsychotics (ex.: Flufenazina, Haloperidol, Risperidona) are associated with high growth of prolactinemia which concludes in high risk for osteoporosis and breast cancer – unfortunately an accurate study on the influence regarding the sexual function cannot be mentioned, 52% of treated patients are relating sexual dysfunction when asked, female patients aparing more affected than men. (7)

There is an obvious relationship between unprotected sex, substance dependence and having a psychiatric disease – endemically superposed with the one of syphilis, reflected in the increased number of the sexual partners and the decreased use of the condoms (Chiasson et all, 1981, Sussen et all, 1995) witch confirms reality that sex is often used in change for drugs to this specific category of patients.

Increased alcohol use is associated to their sexual behavior although not well studied; alcohol is acting as a desinhibant, this fact having a specific importance to female patients suffering more than men from alcohol dependence (Wetermeyer 1996) (6)

The realities we have exposed are reflecting the needs for family planning for mentally ill women, many of whom do not use contraception and are a high risk for unwanted pregnancies taking an adequate sexual history is the 1<sup>st</sup> step in assessing patient needs for family planning services. Patient education, including instruction about physiological processes and contraceptive methods or assertiveness training is the most important component of these services. Offering family planning services in the mental health center has many advantages including better communication between mental health care providers’ needs and enhanced opportunities for the integrating family planning with other programs such as parenting classes, substance abuse treatment and services for preventing sexually transmitted disease. (7)

The family planning knowledge’s attitudes and practices in women with schizophrenic spectrum disorders is based on three hypotheses about family as compared to demographically comparable non-mentally ill control women: that they (1) report at least as much unprotected intercourse while not desiring pregnancy; (2) have less knowledge about contraception: and (3) perceive more, and different, obstacles to obtaining or using birth control. A semi structured Family Planning Interview was administered to subjects (n=44) with Research Diagnostic Criteria diagnoses of schizophrenia and schizoaffective disorder and not to non-mentally ill control subjects (n=50). The participants had high rates of unprotected intercourse, as did non-mentally ill controls. They had significantly less reproductive and contraceptive knowledge than the control subjects, and were more likely to perceive birth control was that they did not expect to have sex, while that given by non-mentally ill subjects related to side-effects of birth control. Important obstacles to family planning in women with schizophrenia could benefit form long-

acting, reversible contraception, many may be aware of those options and/or may find them difficult to obtain. Integrating family planning with mental health care might better address the unique needs of this population.

A semi-structured interview was used to gather data in testing the three hypotheses about family planning in women with schizophrenic spectrum disorders, as compared to demographically comparable non-mentally-ill control women: 1) that they report at least as much unprotected intercourse while not desiring pregnancy; 2) that they have less knowledge about contraception; and 3) that they perceive more, and different, obstacles in obtaining or using birth control. A total of 44 women with Research Criteria diagnosed of schizophrenia and schizoaffective disorder, and 50 non-mentally-ill control subjects were administered with the Family Planning Interview. The interview elicited detailed information about sexuality, pregnancy history, education and communication about family planning, and birth control knowledge, practices and attitudes. Results revealed that the participants had high rates of unprotected intercourse, as did non-mentally-ill controls. They had significantly less reproductive and contraceptive knowledge than the control subjects, and were more likely to perceive birth control as difficult to obtain. The reason most commonly endorsed by the psychotic disorders had to do with not expecting to have sex, and not thinking about birth control while having sex. It also provides support for the hypothesis that difficulty planning ahead was a major obstacle to the use of birth control methods. These findings underscore the importance of gearing family planning programs to the particular needs of mentally ill women.(8)

The result of these risky sexual behavior and variable responsibility is motherhood, a high demanding situation; if there is a consent about what it means to be “a bad parent” there is not a certain definition about the real meaning of a “good parent” – being a parent is a complex and exposure job and for these cases all the help provided by the social services is mostly needed.

But experience during childhood create difficulties in adulthood, these mothers tend to be reluctant in receiving help from others meanwhile the social health providers tend to ignore their role as a parent considering that this problem belongs to Social Services.

A study made by Haldberg University using video cameras to evaluate the interaction between 30 mothers suffering from schizophrenia and their children revealed that mothers were suffering from deficit attention and are severely affected by negative symptoms (absences and paranoia) that can influence the natural born maternal sensitivity and intuitive competence. The maternal reactions to new born demands are extremely low.

On the other hand the University of Toronto showed of that 50% of schizophrenic patients are becoming mothers that are half of the number to those who experienced motherhood in mentally healthy population. One third of these patients are losing custody in favor of family member, ex partners, social assistance services or even adoption. Very few are maintaining the custody which is a hard to take decision for the social workers, whom need to take in to account not only the mother’s rights to bread her own child but also the children’s right to be next to his own mother.

## CONCLUSIONS

The majority of the ones that knew about the contraception were from the urban area, age 30-35 having medium education, in a relationship or married. Unfortunately the help providers tend to neglect this “delicate subject” the fertility of schizophrenic patients being a real problem not only for the health care specialist but also costing highly the social assistance, their families,

and their own children. While the Royal College of Obstetricians from Great Britain affirms that as a criteria for medical eligibility in using contraception in female schizophrenic patients it can be used any method as there are no longer contraindications for each specific case and under a correct counseling (11) the best way is to solve ethical problems offering those patients the right access to family planning.

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