Acceptability of Sayana Press in Postnatal Patients – An Experience at Tertiary Care Hospital

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Abstract

Objective: To ascertain the acceptability of Sayana Press in postnatal patients of Gynae of Tertiary Care Lahore.

Material and Methods: A cross-sectional quantitative research was conducted from 01-07-2022 to 31-12-2022 (6months). One hundred and six postnatal patients of Gynae Unit I, of Services Hospital Lahore, were selected after informed consent and ethical approval from IRB. Socio demographic and clinical data like age, parity, socioeconomic status, educational status and occupation were noted. Then subcutaneous Sayana Press injection was given and each patient was followed for 3 months at which the acceptability was noted in each woman as described in operational definition. A pre designed proforma was used to collect data.

Results: The mean age of the participants was determined to be 29.5+3.39 years, with 42.5% falling into the 31–45-year age group and the remaining 57.5% falling into the 15–30-year age group. Out of 106 females, 32.1% (n=34) were poor, 53.8% (n=57) were middle and 14.2% (n=15) were in upper class. Out of 106 females, 4.7% (n=5) were illiterate, 8.5% (n=9) were primary, 38.1% (n=41) were middle, 31.1% (n=33) were matric and 17.0% (18) were graduate. Out of 106 females, 57.8% (n=61) were housewife, 0.9% (n=1) were filed worker and 41.5% (n=44) were working woman. Out of 106 females, 23.6% (n=25) lived in rural area and 76.4% (n=81) lived in urban areas. Out of 106 females, 78.3% (n=83) accepted Sayana press.

Conclusion: We concluded that Sayana press is acceptable and convenient among most study participants.

Keywords: Sayana press, Acceptability, Injectable

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Introduction:

Many countries are currently facing the rapid population growth crisis. More than 95 per cent of the world's population lives in developing countries. One significant public health issue facing developing countries is the high population burden.[1] Therefore, the voluntary control of fertility is of utmost importance to the modern society. Family planning services and products are available at many public and private facilities. Male condoms and pills, along with injectable are among the most popular modern contraceptive method currently in use.[2] However, injectable contraceptives are more difficult to access because a trained healthcare worker must administer it with a needle and syringe. Contraceptive choices are also influenced by individual preferences, societal standards, gender preferences, women's education, whether they live in an urban or rural area, and if family planning is seen as acceptable.[3] Health professionals working in facilities usually give injectable contraceptives, while community-based initiatives have been around since the 1970s in many nations.[4] A possible chance to increase access to injectables outside of clinic

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settings and towards home and self-injection is presented by the launch of Sayana® Press, a three-month injectable formulation of depot medroxyprogesterone acetate (DMPA).[5] Sayana Press is a subcutaneous formulation that comes in a single dose inside the UnijectTM injection device, in contrast to injectable contraceptives that are currently available on the market. Because the simple disposable single-use syringe makes it unnecessary to quantify dosages or give intramuscular injections, women may be able to administer the drug on their own at home.[6] In a study, acceptance rate of Sayana® Press was found to be 84%.[7] In another study, this rate was found to be 98%.[9] There is international data available, however very fewer local studies are carried out till date. An effective birth control regimen must be followed for 16–20 years of a woman's approximately 25 childbearing years in order to prevent the need for an abortion.[9] According to a study about 85% of women get pregnant after unprotected intercourse.[10] It is stated that if contraception is used consistently for avoiding unwanted pregnancy, maternal deaths would decline by 25–35%.[11-12] A survey in India suggested that abortions are responsible for 10–20% of all maternal deaths.[13]

The World Health Organisation (WHO) released a comprehensive list of medical requirements for 14 different forms of birth control in 2009.[14] The failure of any method is defined as percentage of users who get pregnant despite of its use in first year; the lower the failure rate, the efficient is the method. With ideal usage first-year failure rate of injectable progestin is 0.2% while using casually first failure rate is 6%.[14] When birth control methods used ideally, the failure rates stay below 1%, while with typical use, they fall within the range of 7% to 9%.[10,15,16]

Progestins and estrogen both block the hypothalamic-pituitary axis in CHCs.[17] Progestins work to prevent conception by thickening the cervical mucus and suppressing ovulation. It results in endometrial atrophy as well. By suppressing FSH and preventing the formation of an ovarian follicle, estrogens prevent pregnancy.[17] Reduced bleeding intervals (40–50%), irregular bleeding, breast soreness, mood fluctuations, and headaches are the side effects of CHCs. Additionally, they help treat polycystic ovarian syndrome and are linked to a lower risk of colon, endometrial, and ovarian cancer.[17] These are recognized as non-contraceptive benefits of these techniques.

Progesterone only methods are available as pills, injections, implants, and intrauterine devices (IUDs). It poses less risk of VTE than CHC.[18] As compared to CHC, POPs use lower dosages of first-generation progestins. The side effects of POPs are unscheduled bleeding.[19] Patients should be prescribed with a non-hormonal method while taking certain medications, including antituberculosis, the antiretroviral, and certain anticonvulsants.[20] They can also use IUDs that also provide additional benefits; however, side effect profile is the same. These include DMPA, Implanon, Nexplanon, Mirena and Kyleena. There is a decline in unintended pregnancies and is attributed to an increase in the use of LARC.[21] As Sayana press is easily administered by the personal and does not require repeated doses, to look for its acceptance a study was carried out in Services hospital as no local studies are available.

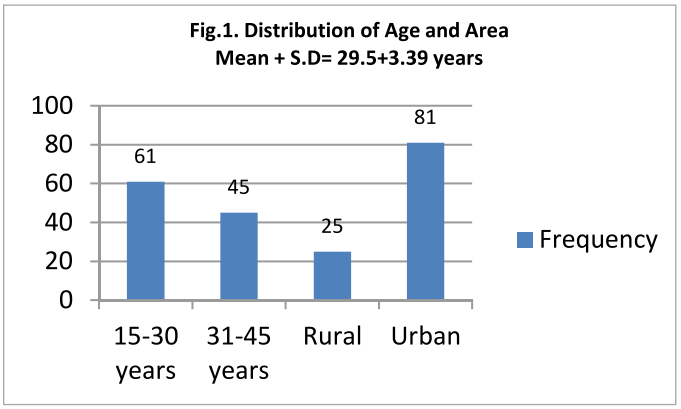
Materials and Methods

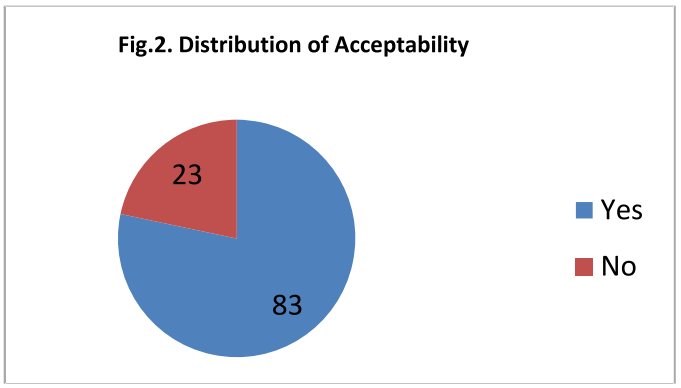
After approval from IRB, and taking informed consent, quantitative cross-sectional research consisting of total 106 postnatal patients of Gynae Unit I, of Services Hospital Lahore, were conducted for duration of 6 months from July to December 22. Socio demographic and clinical data like age, parity, socioeconomic status, educational status and occupation were noted. Then subcutaneous Sayana Press injection was given and each patient was followed for 3 months at which the acceptability was noted in each woman. All this data was noted in a pre-designed proforma. Data was analysed using SPSS 25. Age was presented as mean and standard deviation. Frequency & percentages were calculated for socioeconomic status, educational status, occupation, residential area, parity and acceptability (yes/no). Stratification was done for age, parity, socioeconomic status, educational status, occupation and place of living. Post-stratification chi square test was applied and p-value ≤ 0.05 was taken as significant

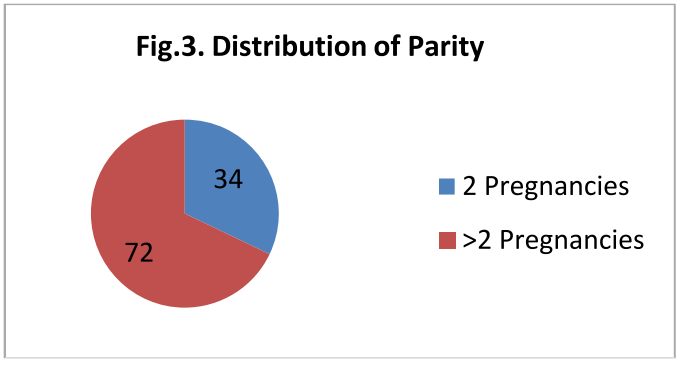
Results

106 postnatal patients fulfilling inclusion criteria were selected to analyse the frequency of acceptability of Sayana press. After the patients' ages were distributed, it was found that, of the 106 females, 47.5% (n = 61) belonged to the 15–30 age group and 42.5% (n = 45) to the 31–45 age group. The mean age was determined to be 29.5 + 3.39 years. (Fig.1) Distribution of socioeconomic status was done which showed that out of 106 females, 32.1% (n=34) were poor, 53.8% (n=57) were middle and 14.2% (n=15) were in upper class. Distribution of educational status was done which showed

that out of 106 females, 4.7% (n=5) were illiterate, 8.5% (n=9) were primary, 38.1% (n=41) were middle, 31.1% (n=33) were matric and 17.0% (18) were graduate. Distribution of place of living was done which showed that out of 106 females, 23.6% (n=25) lived in rural area and 76.4% (n=81) lived in urban areas. (Fig.1) The study showed that 83 (78.3%) accepted Sayana press and 23(21.6%) denied using it. (Fig.2) Results revealed that 72(67.9%) of the selected population had parity of more than 2 and 34 (32%) had a parity of less than 2. (Fig.3).







Discussion

2011 saw the introduction of Sayana® Press, a potentially beneficial new solution that might improve contraception acceptance, particularly at every level among nations with limited resources.[22] The product is a subcutaneous version of medroxyprogesterone acetate (DMPA-IM), an intramuscular depot injectable contraception that is supplied in prefilled UnijectTM injection systems.[23] Sayana® Press has the capacity to notably enhance contraceptive utilization for women seeking a discreet, reversible, and efficient method globally.[24] The straightforward usage of Sayana® Press opens up the prospect of transitioning responsibilities from clinically trained medical worker to local distributor and facilitates self-injection.[25] A WHO consultation panel acknowledged that lay health professionals can utilize a "compact, auto-disposable device" such as UnijectTM.[26] In current research, out of 106 females,78.3% accepted Sayana press. In comparison to study done by Bertrand et.al. 8435 women in total accepted a form of contraception from the DBCs: 26% accepted Cycle Beads, 23% chose Sayana® Press, and 52% accepted pills.[2] This study showed that individuals who chose Sayana® Press, had not used any family planning method, had a high degree of acceptability, which is compatible with initial pilot studies of Sayana® Press in other Sub-Saharan African countries. In our study the acceptability to Sayana press was higher. The approach was seen by supporters as distinct, efficient, and simple to use. The worries with Sayana® Press were not unique to this method; rather, they were similar to worries about other methods (anxiety of adverse effects, like return to fertility, efficacy, and protection) same as in our study.[26] A study by Cover et al. comprised 380 healthy adult females who gave their consent to test self-injection and to use injectable contraception. 98% of the 380 self-injectors demonstrated competency after training. Following that, 5 women stopped taking medication, and 7 women lost follow-up, leaving 368 participants for the follow-up study. Of them, 88% demonstrated proficiency at the time of instruction and three months afterward.[8] In our study the competence was not measured though. The limitations of the study were that it was confined to one hospital and multicenter research would probably teel a broader view of the response by society. These are the data of women presenting to hospital; however, such options should be provided to women that are unable to come to hospital or use distant facilities.

Conclusion

In current study, we determine the frequency of acceptability of Sayana press in postnatal patients of gynae unit 1 of services hospital, Lahore. We found that out of 106 females, 78.3% (n=83) accepted Sayana press. Therefore we concluded that Sayana press is practicle

and acceptable among most study participants in the study.

Conflict of Interest: **None**

Funding Source: **None**

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Authors Contribution

IM: Conceptualization of Project
MR: Data Collection
MR: Literature Search
MM: Statistical Analysis
QM: Drafting, Revision
KK: Writing of Manuscript