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FAMILY PLANNING AT MARGINS: CONTRACEPTIVE UTILIZATION AND REPRODUCTIVE HEALTH DYNAMICS IN GILGIT, PAKISTAN (2020–2025) — THE STRATEGIC ROLE OF GYNECOLOGISTS AS KEY CLINICAL STAKEHOLDERS

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Abstract

In Gilgit and similar low-resource regions of Pakistan, various social, economic and cultural factors remain a key influence on contraceptive usage. To improve reproductive health and family planning, it is important to understand adoption and use of contraceptives. This study reviewed records kept by hand at the Family Planning center in Shaheed Saif ur Rehman Government Teaching Hospital/ M&CH Complex in Gilgit from January 2020 to April 2025. According to data, the use of LARCs, especially Jadelle implants and IUCDs, soared from 67 users in 2020 to 803 in 2024. Jadelle, a new way of providing contraception, is favored by many because it is highly effective and minimally affects female anatomy. Both injectable contraceptives and condoms were still preferred, although their popularity shifted from time to time. Even though contraceptives are more available, people still have difficulties starting due to cultural and money issues. In this situation, the gynaecologist is an essential stakeholder who helps pick the best contraception based on each patient's health. This research points out that integrating gynecological guidance and family planning support with better access is important to tackle social and financial hurdles which helps women decide on birth control wisely and support good health.

INTRODUCTION

The importance of family planning and reproductive health for public health is especially significant in areas like Gilgit, Pakistan. Although there have been advances in making contraceptives available to more people worldwide, several low-resource settings are still confronted by problems that make the effective and regular use of contraception difficult(Ajayi et al., 2018; Bhatt et al., 2021). These obstacles are related to social and cultural norms, economic hardships,

poor health service facilities and inadequate clinical counseling (Elia Mosha, 2017; Stats et al., 2020). It is important for gynecologists to be knowledgeable about both the regular use of contraception and the specific factors that affect its safety and suitability to give tailored family planning services to patients locally (Bibi et al., 2023; Bornstein et al., 2021).

The data used in this study was collected from official medical records at , family planning centre in Shaheed

ISSN: 3007-1208 & 3007-1216

Volume 3, Issue 6, 2025

Saif ur Rehman Government Teaching Hospital/M&CH Complex Gilgit, for a period of five years from 2020 to April 2025. An important factor is that the data is still managed through the traditional way; using book keeping system, because electronic health information systems are limited in peripheral areas of Pakistan . Although the records are not digital, they still offer enough information to observe trends in contraceptive use and clients' age, gender and continuous participation in different contraceptive methods over the long run. The analysis covers insights through a gynecological perspective , pointing out how reproductive health behaviors are influenced by the low-resource situation of culturally unique communities.

Gynecologists need to weigh the actions, effectiveness, possible effects and proper use of each method while counseling and treating patients. Long-acting reversible contraceptives (LARCs), including intrauterine devices (IUCDs) and Jadelle implants, are highly effective and many continue to use them for a long time. However, treatment is only possible through proper insertion and close follow-up which is difficult for people in areas with inadequate access to healthcare (Jabeen et al., 2020; Naz et al., 2024). Injections, oral tablets and condoms can be used with different requirements in access, patient involvement and health professional involvement. People in Gilgit choose their contraception based on a mix of personal decision, what doctors suggest, the availability and the culture around using contraceptives.

With the help of detailed data, this study points out the rising methods of contraception in Gilgit and reveals the contraceptive options that can be used more frequently and for longer periods. These trends help health-care practitioners and health program planners realize where the services can fall short and help to improve counseling plans on contraceptive methods (Hossain et al., 2024; Kapoor, 1995). In addition, integrating expert gynecology opinion with cultural understanding in family planning can aid in improving the health of women (Memon et al., 2024). The research helps fill an important gap in regionspecific reproductive health data by looking at repeat, clinically significant records that were collected under resource-limited conditions. Through a gynecological lens, it adds important details to epidemiological and demographic studies about contraceptive methods in

clinical situations. The results are used to assist healthcare providers, policy makers and experts in public health to develop and apply family planning programs that consider both the research and the specific setting (Kapoor, 1995; Nsubuga et al., 2016). Consequently, this work supports patient-focused gynecology and contributes to effective family planning in Gilgit. It provides support for providing more contraceptives, making them accepted by everyone and ensuring their effective use by women in this region of Pakistan.

Material and Methods

Secondary data from January 2020 to April 2025 at the family Planning centre, Shaheed Saif ur Rehman Government Teaching Hospital/ M&CH Complex Gilgit, Pakistan, was used during this retrospective observational study. For every contraceptive method offered, the manual records included the number of first-time users and those returning for additional supplies of Inj. Depo-Provera, Inj. Sayana Press, Oral Pills, Mini Pills, Condoms, Intrauterine Contraceptive Devices (IUCD), Jadelle implants and Emergency Contraceptive Pills (ECP).

All the data were properly arranged into tables separating new clients from returning clients by year, so the trends could be closely studied. It allowed for the evaluation of how many women chose and maintained this method, as well as their adherence with clinic recommendations. The data was kept unchanged to ensure it remained true and accurate to clinical practice.

The analysis of method-specific utilization and retention was done by calculating frequency counts, proportions and spotting trends. Similarly, using this lens, it becomes easier to understand how well and properly contraceptive options work, who should use them and how likely patients are to use them in a low-resource situation. A set of pictures showing the original manual records is provided in the appendix to demonstrate that the data is reliable and valid. The supplementary material shows the detailed tables which were generated from the images, helping with the results mentioned in the results section.

Results

In the period from 2020 to early 2025, the types of contraception used in the Shaheed Saif ur Rehman

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Government Teaching Hospital/ M&CH Complex in Gilgit reflected a mixture of client choices and changes in gynecological practices because of limited resources. The year-wise figures reveal that Condoms were the preferred method in 2020, perhaps because they are easy to obtain and not intrusive. More than half of the women surveyed used Inj. Depo-Provera or Jadelle implants. In the beginning, IUCD use was not high which may have been because doctors and counselors were not widely available. IUCD usage rose rapidly from 2021, reaching 803 clients in 2024 which points to increased gynecological assistance, more experienced providers and clients making better use of LARCs.

These trends are simple to recognize on the individual method line charts, as the use of IUCDs goes up due to skilled counseling and improved skill in performing the procedure. Both Inj. Depo-Provera and Condoms were consistently utilized , showing they continue to be significant and attainable methods for patients. In 2024, Inj. Sayana Press was introduced quickly,

showing the gynecological community was ready to offer patients a wider range of contraceptives.

The fact that more returning patients use each method than new patients advocate the practice to be more effective. The slight variation in Oral Pills indicates that some counselling for patients may be necessary, since there were few prescriptions for Mini Pills and ECPs.

The bar chart clearly displays that long-acting methods supplied by healthcare providers are taking the place of formerly dominant barrier methods. Jadelle implants became the top contraceptive option in 2021 which matches gynecologists' goals to ensure effective and lasting control over when couples have children and to avoid complications for child-bearing women. The results highlight the impact of expert gynecology, trained clinics and counseling on local contraceptive behaviors in Gilgit. Similarly, greater use of LARCs reflects improvements in reproductive health care in low-resource areas, showing how gynecologists play a significant role for better family planning care.

Table 1: Comparative Analysis of Year-wise contraceptive methods in Gilgit

Year	Condom	Inj. Depo-Provera	IUCD	Oral Pill	Implant	Mini Pill	Inj. Sayana Press	ECP
2020	651	258	67	70	281	101	0	2
2021	451	442	389 itute	for Exc196 in Ed	acation & Olesearch	169	0	0
2022	742	515	541	369	0	0	0	0
2023	673	404	568	239	147	94	0	5
2024	513	529	803	334	383	12	303	11
2025*	265	219	273	0	191	0	151	0

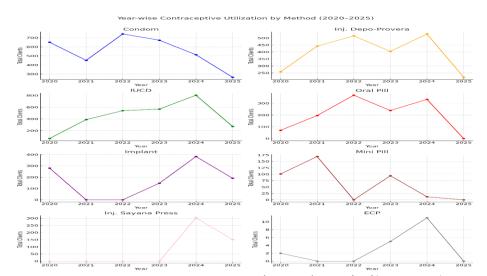


Figure 1: Year wise contraceptive utilization by method(2020-2025)

https:thermsr.com | Iqbal et al., 2025 | Page 152

ISSN: 3007-1208 & 3007-1216 Volume 3, Issue 6, 2025

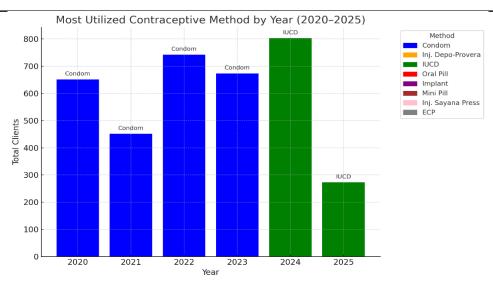


Figure 2: Most Utilized Contraceptive Method by Year (2020-2025)

Discussion

It is necessary to study use of contraception in areas like Gilgit, because it has major impacts on the maternal, reproductive rights and social development of peripheral areas (Bibi et al., 2023; Jabeen et al., 2020; Khan et al., 2024). The contraceptive uptake and adherence trends have changed over time from 2020 to 2025, influenced by both new clinical strategies and persistent difficulties facing the system. The preference for condoms in 2020 was likely because they are available and accepted in the culture (Ajayi et al., 2018; Stats et al., 2020). Despite their benefits, problems with dependence and reliability mean it is important to advocate for other effective methods of contraception. More people started with Inj. Depo-Provera or Jadelle implants initially, however, IUCD adoption was slow, possibly due to a lack of available providers, clinical training or resistance to long-acting methods (Bhatt et al., 2021; Elia Mosha, 2017).

In 2021, the number of IUCDs used soared and reached its highest point with 803 people using them in 2024. This increase is caused by better gynecological services, increased provider knowledge and better guidance offered to patients. The use of LARCs is rising as part of worldwide strategies that encourage birth control methods that are user-independent and last a long time to decrease unplanned pregnancies and help mothers(Nsubuga et al., 2016). The regular rise in Inj. Depo-Provera

patients indicated that it is still widely used in medical practice.

Condoms and oral contraceptive pills were both used unevenly; use of oral pills went up a bit but fluctuated over time, clearly highlighting the challenges users have with compliance and the problem of side effects from the pill (Hossain et al., 2024; Kazibwe et al., 2024). Because ECPs and minipills are underused, this suggests patients are not provided with enough information or may face societal barriers, so these topics need attention from health practitioners(Naz et al., 2024; Nsubuga et al., 2016). The quick adoption of Inj. Sayana Press after its launch in 2024 proves that local gynecological services are adapting to add more contraceptive choices and support autonomy for patients. In 2021 and 2022, Jadelle implants were not reported, but they surged again in 2023, showing that doctors are now placing more emphasis on long-acting reversible contraception. Similarly, many patients are observed to return again, suggesting great follow-up and satisfaction with the care they received. It has been recorded that in low-resource settings, women meet with many challenges, including having to pay for contraceptives as well as any required transportation and healthcare expenses (Rossier & Corker, 2017; Sedgh et al., 2016)

Women in such societies often have little autonomy over their own lives, making it hard for them to use contraception. The men in families influence or control the women's family planning services time

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Volume 3, Issue 6, 2025

((Shahabuddin et al., 2015; Upadhyay et al., 2014)). In spite of new medicines and easier access to contraceptives, barriers in finances and culture prevent family planning programs from working effectively. It is important to address these multiple problems by using community engagement, engaging men and providing funds to help women get access to education (Ajayi et al., 2018; Bhatt et al., 2021).

The rise in LARC use is applauded by doctors due to its effectiveness and the fact they require little from the user(Memon et al., 2024). It plays a major role in lowering both unintended pregnancies and adverse outcomes for mothers in low resource areas. The change of pattern in how people use contraceptives show that gynecological counseling and services are aligned with local culture and needs which is important for good care. It is evident from the trends that clinical counseling and the skill of providers play a major role in influencing how contraception is practiced in Gilgit. The increased use of IUCDs and Jadelle implants shows that gynecologists now feel more skilled and confident in handling LARCs which are recognized as highly effective and needing little user effort(Bibi et al., 2023). By using these methods, patients face a reduced risk of treatment failure and they need fewer trips to the clinic which is a major benefit in remote areas. Moreover, the regular return of clients demonstrates that side effects and complications are successfully managed which ensures quality gynecological support for continuing use of contraception.

However, the light use of Mini Pills and Emergency Contraceptive Pills by patients shows gynecologists have to devote more time to explaining and coaching the patients on such issues. Since many women struggle to make important choices regarding their gender, gynecological counselors have to offer guidance, help them make choices and encourage their partners to be involved (Bhatt et al., 2021; Naz et al., 2024). Therefore, it is still crucial to address the financial barriers preventing many low-income women from taking advantage of these services. Gynecologists play a key role in linking healthcare, community outreach and policy making to ensure that more people have the chance to access contraceptives. To achieve better results, health care professionals in

Gilgit ought to focus on giving culturally sensitive care to those who are marginalized.

Study Limitations

There are some limitations in this study because of the study design and the data used. The data for contraceptives was gathered through traditional ledger system, unlike the electronic records that now exist. There is a chance that data entered manually could lead to errors, incomplete reports and inconsistencies in the dataset's results. It is important that future studies use improved tools like electronic records to track patient contraceptive use over time and incorporate more details in their data which shall lead to more precise results (Jabeen et al., 2020).

Conclusion

The study establishes that in Gilgit, Pakistan, more women are accepting and using long-term contraceptives such as IUCDs and Jadelle implants. The trends point to enhanced gynecological services and patient adherence, both supporting better maternal and child health results. However, some social, cultural and financial hurdles make it hard for many new users in low-income and traditional groups to use contraceptives(Ajayi et al., 2018; Kapoor, 1995; Memon et al., 2024).

Those who create policies should understand how much these constraints matter and prioritize family planning methods that are sensitive, inexpensive and easy for the public to use. Choosing contraceptives that are affordable, involve infrequent visits to the hospital and are easy to use helps many overcome financial difficulties and other challenges (Bhatt et al., 2021; Stats et al., 2020). It will be necessary to use community involvement and male partners to successfully deal with culture-based resistance.

Therefore, continuous improvement in both clinical care and policy decisions based on culture are needed to help improve reproductive rights and health equity for people in Gilgit. Future initiatives should focus on models that prioritize patients first, helping women make informed choices and make sure they continue with contraceptives which can achieve better outcomes in reproductive health and development.

ISSN: 3007-1208 & 3007-1216 Volume 3, Issue 6, 2025

Appendix

Supplementary Material

Contraceptive Prevalence Rate Year 2020 Family Welfare Center M&Ch Hospital

S.No	Name Of Contraceptive	New Client	Old Client	Total
01	Inj. Depo-Provera	153	105	258
02	Inj. Sayana Press			
03	Oral Pill	45	25	70
04	Mini Pill	52	49	101
05	Condom	383	268	651
06	Еср	01	01	02
07	Iucd	57	10	67
08	Implant	150	131	281

Contraceptive Prevalence Rate Year 2021 Family Welfare Center M&Ch Hospital

S.No	Name Of Contraceptive	New Client	Old Client	Total
01	Inj. Depo-Provera	218	224	442
02	Inj. Sayana Press			
03	Oral Pill	105	91	196
04	Mini Pill	65	104	169
05	Condom	331	120	451
06	Ecp	4		
07	Iucd	120	269	389
08	Implant			

Contraceptive Prevalence Rate Year 2022 Famly Welfare Center M&Ch Hospital

S.No	Name Of Contraceptive	New Client	Old Client	Total
01	Inj. Depo-Provera	152	363	515
02	Inj. Sayana Press			
03	Oral Pill	92	277	369
04	Mini Pill			
05	Condom	223	519	742
06	Еср			
07	Iucd	135	406	541
08	Implant			

Contraceptive Prevalence Rate Year 2023 Famly Welfare Center M&Ch Hospital

S.No	Name Of Contraceptive	New Client	Old Client	Total
01	Inj. Depo-Provera	225	179	404
02	Inj. Sayana Press			
03	Oral Pill	49	190	239
04	Mini Pill	50	44	94
05	Condom	236	437	673
06	Ecp	04	01	05
07	Iucd	102	466	568
08	Implant	41	106	147

ISSN: 3007-1208 & 3007-1216 Volume 3, Issue 6, 2025

Contraceptive	Prevalence R	ate Year 2024	Famly Welfare	Center M&Ch Hospi	tal

S.No	Name Of Contraceptive	New Client	Old Client	Total
01	Inj. Depo-Provera	186	443	529
02	Inj. Sayana Press	85	218	303
03	Oral Pill	76	258	334
04	Mini Pill	1	11	12
05	Condom	110	403	513
06	Еср	8	3	11
07	Iucd	186	617	803
08	Implant	127	256	383

Contracept	tive Prevalence Rate Year 2025	Famly Weltare	Center M&Cl	n Hospital
January/Ap	oril			
S.No	Name Of Contra Captive	New Client	Old Client	Total
01	Inj. Depo-Provera	46	173	219
02	Inj. Sayana Press	18	133	151
03	Oral Pill			
04	Mini Pill			
05	Condom	66	199	265
06	Еср			
07	Iucd	26	247	265
08	Implant	64	127	191

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