ORIGINAL ARTICLE

Fixing the Ailing Roots - Spectrum and Management of Paediatric and Adolescent Gynaecological Disorders in a Developing Country

GHAZALA MOEEN, SHABNAM TARIQ, NAZIZ BADAR, *MUHAMMAD AFZAL SHEIKH*

ABSTRACT

Pediatric and adolescent gynecology is an emerging specialty, at the intersection of pediatrics, pediatric endocrinology, gynecology, pediatric surgery, dermatology, psychiatry, public health medicine and genetics. A study was conducted in the Maternal and Child Health Department of Children Hospital, Lahore on 1940 patients. Al girls, being in the age group of 0.3 to 16 years (mean: 8.1 yrs.), attending the maternal and child health (MCH) OPD of CH&ICH from January 2008 to July 2009, were included in the study. A detailed medical and gynecological history was taken followed by the general physical examination including height, weight, and secondary sexual characteristics were recorded. Investigations such as complete blood picture with erythrocyte sedimentation rate (ESR), blood sugar random (BSR), renal function tests including urea / cretainine, cytology and culture of urine and vaginal / breast discharge or swabs, coagulogram, hormonal assays (FSH, LH, Prolactin, Androgen, T3, T4, TSH) and buccal smear for chromosomal analysis, karyotyping or presence of barr bodies were undertaken as and when indicated. Our MCH department receives a reasonably profound annual integer of paediatric and adolescent female patients from all over Punjab. Hence predictably, a diverse pattern of paediatric and adolescent gynaecological disorders were encountered in our study population, during one year period. Fixing today, the ailing roots of a successful motherhood of future that shall be nurturing further generations will span the years and the eternities. Modifying Napoleon Bonaparte's axiom "Give me the *healthy* mothers,

Key words: Paediatric & Adolescent Gynaecology, Menstrual disorders, Chronic Pelvic Pain, Vulvo-vaginitis, Labial Adhesions

INTRODUCTION

Pediatric and adolescent gynecology is an emerging specialty, at the intersection of pediatrics, pediatric endocrinology, gynecology, pediatric surgery, dermatology, psychiatry, public health medicine and genetics. It thus addresses a wide spectrum of diseases from the newborn period to adolescence[1] while representing 1.8% of the total gynaecological consultations[2]**.** These disorders are often both medically and psychologically unique and occupy a special space in the spectrum of overall gynaecological disorders of all ages, requiring a highly skilled approach differing from those utilized for an adult female population. This is because of the associated psychological factors which are very important in the growth and psychological remodeling of someone in the transition between childhood and womanhood[2,3].Knowledge of the special concerns in the anatomy and physiology of the pediatric female patients allows the physician to obtain pertinent histories, appropriate examinations with selection of precise investigations[4] .This can lead to appropriate diagnosis and treatment, in over 70% of the patients without any instrumentation[5], of common gynecologic infections, abnormal masses and trauma aiding in the determination of sources of vaginal bleeding, endocrinopathies, also and evaluation of benign and malignant conditions affecting the internal and external genitalia[6]. However, multidisciplinary approach is required for the management of such conditions that require surgical intervention.

Yet adolescent gynecology is a sub specialized area of gynecology which has still not been explored optimally and there is a dearth of supporting reference texts[2], the purpose of this study was to determine the prevalence and pattern of gynaecological problems in a prepubertal and adolescent population attending the gynecological outpatient department (OPD) at Children Hospital and Institute of Child Health (CH & ICH), Lahore Pakistan with a brief overview of the management protocols followed by the practicing clinicians to provide quality care to this peculiar population.

Incharge Maternal and Child Health Department, Children Hospital & Institute of Child Health, Lahore
Correspondence to Dr. Ghazala Moeen, Consultant Paediatric Gynaecologist, Email: ghazalamoeen@hotmail.com

PATIENTS AND METHODS

All 1940 girls, being in the age group of 0.3 to 16 years (mean: 8.1 yrs.), attending the maternal and child health (MCH) OPD of CH&ICH from January 2008 to July 2009, were included in the study. A detailed medical and gynecological history was taken followed by the general physical examination including height, weight, and secondary sexual characteristics were recorded. Investigations such as complete blood picture with erythrocyte sedimentation rate (ESR), blood sugar random (BSR), renal function tests including urea / cretainine, cytology and culture of urine and vaginal / breast discharge or swabs, coagulogram, hormonal assays (FSH, LH, Prolactin, Androgen, T3, T4, TSH) and buccal smear for chromosomal analysis, karyotyping or presence of barr bodies were undertaken as and when indicated.

In sexually active patients or if symptoms suggested a gynecologic etiology, a pelvic examination was included in the initial assessment. Bimanual examination included evaluation of the vagina for patency and tenderness, cervix for cervical motion tenderness, uterosacral ligaments for tenderness or nodularity, uterus for size, shape and tenderness, and adnexa for tenderness, masses, and mobility. Radiologic imaging studies including abdomino-pelvic ultrasound (A/P USG), computerized tomography (CT) scan, or magnetic resonance imaging (MRI), depending on the abnormality suspected, were indicated to further evaluate an abnormality that is identified on pelvic examination.

RESULTS

Our MCH department receives a reasonably profound annual integer (Table 1) of paediatric and adolescent female patients from all over Punjab. Hence predictably, a diverse pattern of paediatric and adolescent gynaecological disorders were encountered in our study population, during one year period (Table 2).

As depicted from Table 2, menstrual disorders (35.3%) including primary and secondary amennorhoea, dysmennorhoea, and irregular menstrual cycles (oligomennorhoea and menorrhagea) were the most frequently presenting complaints. About 10.6% (n=207) girls had menorrhagia with 22.7% (n=47) of them having a hemoglobin of < 4g/dL, 59% (n=122) having 4-8 g/dL, who were also declared to be suffering from iron deficiency anaemia, and 18.3% (n=38) having > 8 g/dL. Among these, 3.75% (n=3) cases of primary amenorrhea were ultimately diagnosed as testicular feminizing syndrome through karyotyping and 2.5% (n=2) cases with intermittent pain in abdomen had vaginal agenesis. Most of the patients (39.6%) suffering from secondary amenorrhea (duration 4-5 months) or oligomenorrhea were ultimately diagnosed to be cases of polycystic ovarian disease (PCOD) based on clinical criteria of hirsuitism (92%), obesity (63%) and other features of hyperandrogenism (67.2%), and sonography findings (81%). But 9.5% (n=2) cases of PCOD also presented with periods of amenorrhea followed by menorrhagia. Premature ovarian failure as a cause of secondary amenorrhea was found in none. In the present study, out of the 685 girls suffering from menstrual problems, 9.7% (n=53) were found to have dysfunctional uterine bleeding (DUB). The second commonest reported disorder was vaginal discharge which varied from clear and odorless to purulent whitish, yellow to greenish in colour, with accompanying local itching and irritation. Physiologic discharge at ovulation or before menstruation was seen in 4.75% (n=26) cases. Culture was positive for hemophilus influenzae, staphylococcus aureus ,E. coli, group A-α hemolytic streptococci, and streptococcus pneumonia in 14.4% (n=77) patients, who also presented with bacterial vaginosis and high grade fever while 80% (n=441) were symptomatically presenting with candidiasis or other fungal infections. Three patients of 12, 13, and 16 years of age, with history of early marriage, had vulvovaginitis due to sexually transmitted infections like Nesseria gonorrhea, Chlamydia trachomatis and Trichomoniasis vaginalis etc. Other vaginal disorders like herpetic warts, pediculosis pubis and scabies was seen in 3.1% (n=17) cases. About 11.7% patients, with partial to complete fusion of labia minora (Fig:1), were reported and dysuria with or without dribbling/spraying of urine were seen in about 75% of them. Another 10.3% patients attended our MCH department with complaint of lower abdominal / chronic pelvic pain described by patients as abdominal to pelvic, worsening over time and cyclic, referring to back in some, with increasing abdominal girth in few and associated with dysuria in most. All such cases presented with varying etiology like ovarian cysts, endometriosis, of musculoskeletal origin, pelvic inflammatory disease, irritable bowel syndrome or threatened abortion but predominantly 65% of these cases had been confirmed by urine cytology and culture to be suffering from urinary tract infections caused by mainly E.coli, Pseudomonas aeroginosa, Trichomonas vaginalis etc. in 40% of these patients. Most frequent breast disorder encountered after ruling out lump breast through mammography, was non lactating mastitis 64.8% (n=94) with or without discharge, apart from other

less frequent diseases like breast trauma in 6.8% (n=10), asymmetry or hypoplasia of breast in relation to menarche in 11.7% (n=17), infectious or inflammatory disorders of associated skin and areola in 8.9% (n=13) cases etc. Iron deficiency anaemia with hemoglobin level from <4-10g/dL was observed in 3.86% cases. About 0.6% (n=12) cases presented with ovarian masses. Radiographically through ultrasound, CT and MRI and morphologically by histopathology, majority 58.3% (n=7) were diagnosed as ovarian tumors; 28.5% (n=2) cases each of dermoids and immature teratomas, 14.3% (n=1) cases each of simple serous cyst adenoma, serous cyst adenocarcinoma (Fig:2) and germ cell tumour of juvenile granulosa cell variety was seen. Rest 41.6% (n=5) had functional ovarian cysts. All these patients presented with unilateral abdominal masses, pelvic pain and rarely were metastatic at diagnosis. Ambiguous genitalia and congenital tract anomalies as seen were vaginal agenesis and transverse or longitudinal vaginal septae in 9% (n=1) cases each, clitoromegaly and abnormalities of hymen like imperforate or microperforations etc were seen in 27.2% (n=3) cases each. Two (0.1%) children, aged 10 and 11 years turned out to be Turner's and Klinefelters when assisted with karyotyping.

Table 1: Total Annual Turnover of Paeditric Gynaecology Department, CH&ICH from Jan. 2008 to Jun. 2009

Disorders	No. of Presenting Cases n(%)	Age Range of Presenting Cases (yrs.)
Menstrual disorders	*685 (35.3)*	
Primary amennorhoea	80 (11.6)	
secondary Amennorhoea	53 (7.7)	12-16
Dysmennorhoea	85 (12.4)	11-16
Irregular menstrual cycles	458 (66.8)	9-16 10-16
Oligomennorhoea	121 (26.4)	
Menorrhagea	201 (45.1)	
PV Discaharge (Vulvovaginitis)	547 (28.1)	0.6-16
Fused Labia	228 (11.7)	0.3-5.5
Lower Abdominal Pain including UTI	200 (10.3)	0.9-14
Breast Problems	145 (7.47)	12-16
Fe Deficiency Anaemia	75 (3.86)	5-16
Ovarian mass and PCOs	21 (1)	12-15
Ambiguous Genitalia	11 (0.56)	0.5-9
Miscellaneous*	28 (1.4)	0.3-15
Total	1940	

Table 2: Spectrum of paediatric gynaecological disorders reported at MCH Department, CH&ICH from Jan. 2008 to Jun. 2009

Months	No. of Visiting Patients n(%)	
	2008	2009
Jan	80 (6.7)	117 (15.47)
Feb	100 (8.4)	130 (17.2)
Mar	92 (7.7)	140 (18.5)
Apr	127 (10.7)	117 (15.47)
May	104 (8.8)	153 (20.2)
Jun	119 (10)	99 (13)
Jul	92 (7.7)	---
Aug	93 (7.8)	---
Sep	74 (6.25)	---
Oct	93 (7.8)	---
Nov	117 (9.8)	---
Dec	93 (7.8)	---
Total	**1184 (61)**	**756 (39)**

Table 1: This table shows the total turnover of the patients (n=1940) presenting with various gynaecological disorders at the paediatric and adolescent gynaecology department of CH& ICH Lahore Pakistan. Where CH&ICH: children hospital and institute of child health.

Table 2: This table shows a diverse pattern of paediatric gynaecological disorders seen in CH &ICH during January 2008 to June 2009. Note the menstrual disorders being the commonest presenting ailment (35.3%). Where CH&ICH: childen hospital and institute of child health, PV: per vaginal, UTI: urinary tract infection, PCOs: polycystic ovaries. *generalized weakness, veginismus, mineral deficiency including rickets, juvenile diabetes, obesity not relating to gynaecological origin, and cases referred from nephrology, medical, surgical and orthopaedic in and outpatient departments for gynaecological consultations.

Fig 1: This figure shows complete occlusion of the vaginal orifice, below the clitoris, due to fused labia. Note the

midline raphe characteristic of an acquired origin of this disorder.

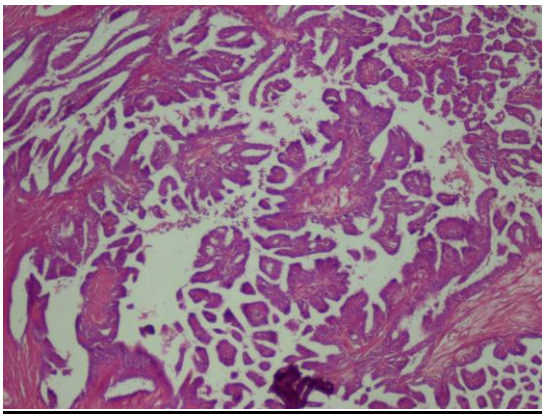

Fig. 2: This figure shows the H&E stained section of serous cystadenoma of the ovary seen in a 15 years old girl (20X x 10X). Where H&E: haematoxylin and eosin.

Fig 3: This figure shows complete separation of labia minora (red arrow) after 4 weeks of premarin treatment in the same patient as in Fig:1.

DISCUSSION

Worldwide, a diversity of programs are underway to address the sexual and reproductive health needs of paediatric and particularly the adolescent population; the interventions appropriate to the changing global context thereby are needed to make an impact not only in improving the knowledge, attitudes and intentions but also focusing profusely on lasting behavioral changes among the parents and the targeted population especially in the developing countries.

In our study cases, one imperative area that we found in dearth was severe lack of parent-child as well as the parent/patient-doctor communication that might be due to several factors, most importantly being the lack of enlightened education, social embarrassment and above all religious myths that limit an open access and communication for the gynaecological or obstetric complaints in our females especially of paediatric and adolescent age groups. Also we observed a parent's inclination and trend towards early marriages in teenage girls ignoring the fact that physical maturation occurs earlier in young women than in young men, but psychological and emotional readiness for the potential consequences of sexual activity occur much later than menarche, subsequently impairing the gynaecological health of adolescent population in our part of the world.

Besides many of such female children are growing up in circumstances quite different from those of their parents, with greater access to formal education, increasing need for such technological skills as computer and internet literacy, and more exposure to new ideas through media, telecommunications but still most of today's parents were not taught about sexual and reproductive health by their own parents or even in school[7], therefore they are in a most discomfort and failing to pass on this crucial knowledge to their children, leaving them and their siblings in an environment of fear, mortification and misconceptions that further impede and delay a timely hunt for relevant health care facility affecting adversely the sexual and reproductive health outcomes in this population.

Gynaecological problems in children and adolescents are often both medically and psychologically unique and require a highly skilled approach differing from those utilized for an adult female population. The practicing gynaecologist therefore needs to know how to filter these types of cases to the relevant specialist in order to avoid mismanagement. Tertiary referral level university teaching hospitals should have at least a paediatric and adolesecnt gynaecologist to provide gynaecological care for these patients.

The MCH department of CH & ICH is fully capable of offering complete managerial services to a large number of patients reporting with various gynaecological ailments from all over the province, especially those in paediatric and adolescent age group which constituted a considerable fraction of this large turnover. Similarly, in the University of Calabar Teaching hospital (UCTH), Nigeria, over a 10-year period, the paediatric gynaecological disorders constituted 3.1% of total gynaecological admissions in UCTH and that was most common (52.2%) in the 8 to 11 years age group (8). Also in a retrospective study by Randawa and colleagues at the Gynaecology unit of Ahmadu Bello University Hospital Zaria (ABUHZ), Northern Nigeria, it was reported that childhood gynaecological disorders

were very common especially labial fusion, urethral prolapse and vulvovaginitis constituted two-thirds (72.8%) of the total childhood gynaecological attendance in 62 girls aged 1 month–12 years, counting 17 infants, 14 under 5 years, and 31 between 6–12 years of age[2].

Menstrual disorders were found to be the commonest (35.3%) gynecological problems seen in our study cases. This is in concordance with the findings of the investigators from India and Nigeria, where the former reported a total of 124 adolescent girls attending the gynecological outpatient departments with menstrual disorders being the commonest presenting complaint (58.06%) varying from amenorrhea (29.1%) to menorrhagia (13.2%)[3]. Similarly, in UCTH, vaginal bleeding was the most common (63.1%) presenting symptom[8]. DUB was the commonest etiology of menstrual dysfunction in both studies. Overall, in as many as 95% of adolescent girls, abnormal vaginal bleeding is caused by DUB[9]. It may take 2 to 5 years for the complete maturation of hypothalamic pituitary ovarian axis after the menarche[10]. In our patients, with no obvious cause seen for dysmmenorhea, conservative therapy like haematenics, analgesics and oral contraceptives (OCPs) was prescribed. However, in patients with menorrhagia, according to the cause, treatment varied from analgesics including NSAIDs, tranexamic acid (Transamin), Haematenics, OCPs (progesterone + estrogen) to even surgery which was ultimately required in one married patient of 15 years bearing one child. Patients with primary amenorrhea underwent hormonal trial with OCPs like Primalut-N, Dian 35, Duphaston and Progyluton etc. Two cases of primary amenorrhea with cyclic pelvic/ lower abdomen pain and bulging hymenal tissue had vaginal agenesis and imperforate hymen. They were referred to the paediatric surgeon for surgical repair of hymenal tissue and vaginoplasty.

Vulvo-vaginal inflammation is a common gynaecological disorder of prepubertal girls and accounts for over 50% of visits to paediatric gynaecological clinics[11]. Inflammation may involve the vulva or vagina or both and can result from a variety of stimuli altering the normal vaginal ph[4.5] such as poor hygiene, foreign body, chemical irritants, pin worms, dermatologic conditions like eczema and seborrhea, and sexual activity. There was also a high prevalence rate of vulval conditions (inflammations/ adhesions) compared with pelvic or abdominal involvement in our study group. This is similar to the findings in most studies[2,3,8] including one at Northern Nigeria, in which the commonest condition observed was labial fusion (33.9%), urethral prolapse (14.5%) and vulvo-vaginitis (6.5 %). For nonspecific vulvo-vaginitis, our recommended measures were advising the front-to-back wiping with tepid water after defecation, avoidance of deodorant soaps, lotions, or scented toilet paper, keeping good hygiene and dryness of vulvar area, and washing of hands with soap before and after the toilet activity. Antibiotics, if secondary bacterial infection was suspected, including broad spectrum penicillin/cephalosporins for 2 weeks and occasionally for longer periods of time (up to 4 weeks) concomitantly with analgesics, whereas for suspected candida or pinworm infection, antifungals {Fluconazole orally, 1% Clotrimazole locally and mebendazole (Vermox) 100 mg orally once and repeated in 1 week respectively} were prescribed with dosage adjusted for age and clinical severity of the disease. Vaginal passaries, however, were administered in married teens only. Vulvovaginal denudation is suspected due to disturbed bacterial homeostasis, especially after an episode of vulvo-vaginitis, which in turn may lead to adhesions of the labia minora[12]. Treatment is not always necessarily administered in labial adhesions because resolution may occur spontaneously at puberty once oestrogen is produced[11]. However we recommend and advocated treatment as most of the presenting patients were suffering from moderate to severe urinary tract infection (UTI) and other urinary complaints. Precise topical Premarin with care of vulvar hygiene, application of petroleum jelly and sitz baths were recommended twice a day with weekly follow up, till resolution of symptoms. Most of the girls were completely treated, with complete separation of fused labia, in an average duration of 2-4 weeks (Fig:3).

Although there are various definitions of chronic pelvic and/or abdominal pain, the accepted pediatric criteria, as stated by Apley and Naish, are three or more bouts of pain severe enough to affect activities over a time period of not less than 3 months[13]. Chronic pelvic / lower abdominal pain in adolescents accounts for 10% of outpatient gynecology visits[14]. Some symptoms may be more suggestive of a gynecologic etiology especially when the pain is specific to a certain time in the menstrual cycle, associated with vaginal bleeding or exacerbated with menstruation or sexual intercourse. Müllerian abnormalities and uterine anomalies may present with outflow tract obstruction and a wide range of symptoms including cyclic pelvic pain, dyspareunia, amenorrhea, pelvic mass, infertility, and recurrent abortions. Obstructive abnormalities associated are more likely to be associated with pelvic pain and endometriosis[15] and it is observed that 70% of adolescent patients whose pelvic pain is unresponsive to initial therapy have endometriosis[14.] None of our patients, however, presented with

endometriosis. Paediatric surgical conditions in the prepubertal girls manifesting symptoms similar to other gynaecologic conditions is well documented[16,17]. So after ruling out such conditions and abdominal etiologies, we routinely prescribe broad spectrum antibiotics along with analgesics (NSAID), haematenics and multivitamins for patients with UTI, dysmenorrhea, and pelvic inflammatory diseases. Müllerian abnormalities and ovarian masses were dealt by the paediatric surgeons and the oncologists.

Gynecologic malignancies, though extremely rare in this group, are still reported and majority in adolescents are ovarian. Whether benign or malignant, functional or organic, fluid or solid, ovarian masses are the most common gynecological tumors, with benign tumors and functional cysts greatly predominating (18). Ovarian tumours account for approximately 1% of all tumours in children and adolescents and 30 % of these neoplasms are malignant (19). About 67% of all childhood and adolescence ovarian tumours are germ cell in origin (20). Patients with functional ovarian cysts were treated conservatively with OCPs and NSAIDs. However, laparoscopy or laparotomy were also opted but more specifically for patients with ovarian tumours where the surgeons aimed to protect fertility by preserving the underlying ovary. Surgical interventions followed by chemotherapy by the oncologists were the most reliable methods of diagnosis and first-stage treatment. Comparable to our findings, Randawa also reported about 4.8% of cases at ABUHZ presenting with ovarian tumours; one 11-month-old infant, having vaginal tumour (Sarcoma Botryoides) whereas 03 girls were histologically diagnosed with endodermal sinus tumour[2].

Congenital malformations of the vagina, cervix, and uterus, although rare, and are often detected in the adolescent period, may have profound implications for the patients and the family[21]. In a study at ABUHZ, ambiguous genitalia constituted 9.7% of total childhood gynaecological disorders[2]. There were 08 cases of ambiguous genitalia in our study, which were subsequently referred to the relevant paediatric surgeons and urologist for further reconstructive management. Patients with chromosomal abnormalities were referred to paediatric genetist for complete diagnosis and planning for further management.

Palpable breast masses arising in pediatric and adolescent patients are uncommon. According to Weinstein SP, his study population had palpable breast findings but all due to benign causes including cyst, fibroadenoma and abcesses22). As reported by Indiana Hospital USA, between 1980 and 1993, 74 children and adolescents were referred for surgical evaluation of palpable breast masses. Thirty-two were managed non-operatively including 26 cases for unilateral thelarche, 3 of fibroadenoma, 2 of gynecomastia, and 1 case of hemorrhagic cyst. The other 42 children had surgical intervention including 19 cases of giant or painful fibroadenomas, 5 acses of breast abscesses, 6 of painful gynecomastia, 4 of metastatic disease and 8 cases presenting with other conditions. No instances of primary breast malignancy were noted[23]. Inflammatory or infectious lesions of the breast or associated skin and areola, the most frequent presenting features in our study group, were treated with analgesics, antibiotics and/or antifungal cover. Parents and patients with breast asymmetry or hypoplasia, were counseled to monitor till at least 18-21 years of age when after maximum breast development, their actual size or any differences can rightly be assessed.

There is an intense demand for improving the knowledge and awareness on paediatric and adolescent reproductive health in general community as well as health and social service providers including the family physicians, clinicians, surgeons, obstetricians and gynaecologists, nurses and other allied health care professionals in medical sector. There should be more collaboration and networking at all levels of the health system to provide better information on reproductive health and to ensure continuing commitment by all concerned which shall be highly consequential especially when the parent-child communication gap is appropriately bridged.

Our recommendations are to train doctors and paramedics in this discipline especially in those regions which do not have basic reproductive health planning information or proper primary health care services. A specified curriculum for reproductive health at undergraduate level should be developed as in many foreign universities that should focus on improving the way comprehensive, evidence-based reproductive health information will be taught and disseminated in Pakistani population keeping with the current, accepted information concerning the teachings of Islam with regard to sexual health especially child spacing, contraception and other topics relevant to sexual assault.

The practical training at undergraduate level through clinical rotations in the paediatric gynaecology and adolescent obstetrics and urology departments should be an adaptable teaching tool that may be used in medical colleges as well as in nursing schools, physician assistant programs, residency training programs or as an in-service training tool to strengthen the paediatric and adolescent reproductive health services of practicing health care providers. This training/teaching should

primarily draw attention to improving service provider-patient communication skills and cultural competence, with special attention paid to psychosocial, psychological, ethical and legal issues, concepts of religion and spirituality, appropriate information dissemination in illiterate and poor communities who are most vulnerable to quackery practices and demographic factors in relation to health care.

CONCLUSION

Fixing today, the ailing roots of a successful motherhood of future that shall be nurturing further generations will span the years and the eternities. Modifying Napoleon Bonaparte's axiom "Give me the *healthy* mothers, I will give you a *healthy* nation" and envisaging a lack of standard protocol and organized collaborative departmental policy for the care of prepubertal and adolescent girls with gynaecological or obstetric ailments, called for concern in compiling and assessing the current status of such patients in our population. With a large cohort of females in this age group, it is essential to carefully design interventions and review their impact ensuring that the prepubertal and adolescent girls have the tools to make informed and healthy cultivation of their reproductive and sexual health in the coming decades. Therefore, it is imperative to elicit a holistic multidisciplinary approach for creating awareness in general community and training of health care providers in our country in terms of reproductive health issues of paediatric and adolescent girls.

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