

Integrating Menstrual Health

Rehan Haider

Department of Pharmacy- University of Karachi-Pakistan

Received: 11/03/2023 Accepted: 30/05/2023 Published: 10/06/2023

Abstract

Menstruation is an herbal and quintessential vicinity of the reproductive cycle; 1/2 of the human populace has or will trip it. Menstrual Health (MH) is a quintessential phase of sexual fitness and rights. Access to Menstrual Health is, In addition, a human appropriate and necessary to public health. MH is fundamental for the fitness well-being mobility, education, monetary empowerment, and dignity of women, girls, and human beings who menstruate. Yet shame, stigma, and misinformation surrounding the menstrual existence cycle undermine the well-being of women, girls, and those who menstruate, making them inclined to gender discrimination, infant marriage, exclusion, violence, poverty, and untreated fitness problems. Enabling women, girls, and those who menstruate to manipulate their menstruation, and, barring shame, let them issue out their dignity, agency, and autonomy and revel in wonderful human rights. It affords them with wishes and manipulation of their bodies and lives 2020 used to be 12 months of pain, pause, and adaptation for billions of human beings spherical in the world. The COVID-19 Pandemic disrupted the fitness shipping machine at a magnitude that ushered in a new world. It, in addition, affected girls' and women's administration to manipulate their menstruation and their health.

Integrating menstrual health into healthcare systems is crucial, especially during the COVID-19 pandemic. The pandemic has disrupted healthcare services, including access to menstrual health products and services, which has disproportionately affected women, girls, and those who menstruate. As a result, there is a need to prioritize and integrate menstrual health into the broader healthcare system to ensure that everyone has access to menstrual health products, information, and services.

This integration will help to reduce the stigma surrounding menstruation, improve education on menstrual health, and empower women, girls, and those who menstruate to take control of their menstrual health. It will also help to ensure that menstrual health is recognized as a human right and is incorporated into public health policies and programs.

Keywords: Menstrual health, Menstruation, Reproductive health, Sexual and Health, Service delivery reproductive rights, Gender discrimination, Hygiene, COVID-19 pandemic

Introduction

The Rationale for integrating MH

There are clear human rights vital to combine MH when the human rights, comprising sexual and reproductive rights of girls, women, and all people who menstruate are met, they are large in all probable to time out menstruation in a safe, and dignified manner. Also, people's trip with menstruation every allows or impedes a giant variety of human rights MH is in addition greater and greater more diagnosed as crucial for the attainment of a few extraordinary SDGs.

Technical instruction for integrating MH

A built-in approach for menstrual fitness acknowledges that the menstrual trip influences each bodily and social determinant. it calls upon those working on MH, quite in the schooling and water, sanitation, and hygiene (WASH) sectors, to higher, apprehend the linkage between MH and SRH to apprehend that integration with the attainable to prolong affect all thru sectors. A built-in method moved beforehand, imposing discrete and isolated intervention nearer to a systematic method that approves all applicable sectors to undertake their

system to enable sustainable coherent insurance plan graph insurance plan insurance policies and features to be delivered to scale. A built-in method for menstrual fitness can empower girls, women, and peoples who menstruate with knowledge, skills, support, and preferences to thrive in the existence cycle. Menstrual Health should, therefore, be an imperative factor of efforts, nationally and globally. Over half of the world's populace is time out of menstruation at some element in the course of their lifetime. This herbal gadget is a key indicator of fitness and well-being (1-2) and a cornerstone for the success of human rights (3) however, around the world, gender inequality, discriminatory social norms, poverty, and structural and systematic barriers forestall , girls, and human beings who menstruate from having to get proper of entry to the information, resources, service, and merchandise they decide on to trip menstruation and distinctive kinds of uterine bleeding in a dignified empowering tightly closed and healthful manner. As a result, menstruation is commonly professional negative and is related to shame, distress, awful fitness outcomes, and restrictions in social participation (4). This is frequently authentic for these dwellings in low-

*Corresponding author: Rehan Haider, Department of Pharmacy- University of Karachi-Pakistan. Email: rehan_haider64@yahoo.com

and middle-income nations and humanitarian settings. Menstruation and notable kinds of uterine bleeding are precedents at some point in the full existence cycle of girls, women, and all human beings who menstruate. As the expectancy extends in many countries, and transport prices and age at the menarche limit there is a developing focal factor that menstrual fitness (MH) is a quintessential public fitness and human rights issue. Evidence is rising globally of the significance of MH for the broader fitness well-being mobility dignity and tutorial and economic empowerment of ladies women and all human beings who menstruate. This is supported by utilizing the usage of a developing physique of literature demonstrating MHs significance as a determinant of sexual and reproductive fitness and rights. The linkage between reproductive fitness and MH is two folds the herbal affiliation between MH and fertility contraceptive use, and reproductive tract infection, is evident, whilst sociocultural boundaries which consist of stigma lack of records restrictive social norms, and structural barriers, in addition, create a bi-directional linkage between MH and SRHR .

These herbal and sociocultural limitations supply give up result in girls, women, and human beings who menstruate being ill-prepared to make and have company over choices associated with sex, relationships, household planning, and health, thereby perpetuating the cycle of horrible SRHR and broader enhancement outcomes (5).

Despite this linkage, till recently, MH used to be usually ignored via the way of the global SRHR community. e.g., world SRHR techniques depart out or consist of definitely very limited references to MH. As a result, interventions are frequently delivered in parallel to, or in isolation from, broader SRHR initiatives. Also, SRHR interventions do now no longer take into consideration the impact of menstruation on people's experiences and expression of sexuality, and sexual and reproductive preferences making health-seeking habits participation in society and enterprise(6). This represents a not noted chance for holistic built-in and right-based policies, programming, and care. In many countries, holistic MH techniques are rising that manage the needs of women, girls, and human beings who menstruate for the length of the full existence cycle. A developing world motion for MH is in addition making big strides nearer to dissenting the stigma, discrimination, and taboos surrounding menstruation, Addressing the linkage between MH and SRHR in a built-in manner can applicable this momentum even in addition whilst advancing the well-known reason of each sector, in particular, to adorn the fitness and well being of girls, lady and all human beings who menstruate for the period of the full. existence cycle. MH is integral to conducting a world the place every being pregnant is favored every childbirth is blanketed and every youthful person's viable is fulfilled aiding girls, women, and all human beings who menstruate to manipulate menstruation safely and

with dignity is integral for the attainment of Sustainable Development Goals, the full implementation of the ICPD programmed of Action, the United Nations Youth 2030 Agenda, and the implementation of Africa's Agenda 2063. Further advertising and marketing of built-in programming and insurance plan insurance policies to tackle each MH and SRHR will make contributions to the implementation of a new global strategy for children and youth, My body, My life, My world Rights, and picks for all Adolescents and Youth (7). these methods can be bolstered and broadened with linkages to special areas such as household planning and maternal fitness with the aid of creating strategic creativeness and prescient for the holistic integration of MH.

Methodology

The technical quick-on-a-desk comparison of academic and Grey literature used to be carried out in September 2020. A complete of 187 peer-reviewed articles have been included, as nicely as seventy-six grey publications, with a variety of codes that embody technical reviews and teaching archives assembly evaluations laptop kits, job, look-up reports, and talk papers. Key trouble used to be as quickly as the constrained empirical proof accessible about the integration of MH and SRHR therefore, this quickly attracts normally from descriptive data and posits extra than a few hypotheses that have on the other hand to be validated with the useful resource of rigorous evaluative information

Human Rights imperative

Sexual and reproductive rights are a constellation of civil, political economic social, and cultural rights diagnosed in contemporary countrywide jail tips world human rights instruments, and special consensus archives associated with the sexual and reproductive fitness and existence of guys and women, and couples (8 -9) they property that all humans have the application to determine over their bodies, to achieve the fantastic possible potential well-known of SRH and to be free from violence. and discrimination. Menstruation is necessary for the success of these rights (10) When the human rights of girls, women, and all human beings who menstruate are met, they are an increasing number of probably to ride menstruation and SRH in an impenetrable healthy, and dignified manner, in addition, peoples outing of menstruation every helps or impedes an exact sized vary of human rights

Human rights treaties such as the Conference on the Rights of the Toddler (CRC) conference on the removal of all types of discrimination in the route of women (CEDAW) the Conference on the Rights of human beings with Disabilities (CRPD) and the World convention of economics, social and subculture rights (ICESCR) all articulate an array of human rights that are mainly applicable to MH and SRH. Regional human rights on the relevance of girls in Africa and the African constitution on the rights and welfare of children, in addition, enshrine

rights related to MH and SRH, in addition in 2018, the Human Rights Council explicitly renowned menstruation and menstrual hygiene as essential to rights to water and sanitation (11). MH used to be as quickly as excluded from preceding international norms-setting agendas, which consist of the ICPD Program of Action (1994), the Beijing Announcement and Platform for Action (1995), and the Millennium Development Goals. Although the sustainable Development Goals (SDG) do now no longer consist of a direct reference to menstruation, the reference to the “need of lady and female and these in inclined situations” in SDG pastimes get the acceptable entry to adequate and equitable sanitation and hygiene are generally understood. embody MH (12 -13) In addition, MH is a developing volume identified as imperative for the attainment of an extent of extraordinary SDG

The intersection between MH and SRHR

MH and SRHR intersect in relatively a variety of ways, all of which affect the ride and expression of sexuality, bodily autonomy, and health-related decision-making. The quintessential socio-cultural and herbal linkages between MH and SRHR. Menstruation and one-of-a-kind kinds of uterine bleeding exhibit up and trade all by a large range of existence stages. A full existence cycle technique is necessary to hold close to this linkage and its effect on the SRHR of women, girls, and all human beings who menstruate. Types of Bleeding episodes expert from menarche to menopause Types/ Cause of bleeding Age signs and symptoms and signs Cervical most cancers any age most cancers in the partitions of the cervix Bleeding is commonly no longer associated with menses and Endometriosis. 25 to 35 a nation of affairs ensuing from the appear to be of endometrial tissues outdoor the uterus, heavy month-to-month durations irregular. Menarche. Usually, 8 to 16

Socio culture linkage between MH& SRHR

Menstrual stigma, gender inequality, and SRHR

Although menstruation is a herbal process, the trip of menstruation in numerous genders is equality, stigma, and discriminating social norms. In some settings, menstrual stigma manifests as restrictions on bathing, managing components swimming, collaborating in a nonsecular gathering, ingesting exquisite foods, or drowsing in the equal family as non-menstruating household people (14-17) discrimination in faculties and workplaces, the place girls, women, and peoples who menstruate are unable to control their menstruation safely, with dignity and privacy, Is, in addition, a manifestation of menstrual stigma, All sorts of menstrual-related discrimination are a violation of human rights. As such, dismantling menstrual stigma and remodeling hazardous social and cultural norms are pivotal for the success of SRHR and gender equality.

Menstrual Knowledge & SRHR

Studies continuously exhibit of lack of menstrual grasp

and enormous false impressions about menstruation amongst girls, women, and all human beings who menstruate in LMICs. Girls frequently enter menarche with no or very few statistics about menstruation or high-quality puberty-related change. As a result, menarche is typically expert via shock, disgrace worries and embarrassment (18) even there with some expertise normally lacks a draw close of menstruation’s hyperlink with fertility. The very restrained proof on boys’ and men’s menstrual grasp suggests that they in addition have large statistics gaps, which make contributions to menstrual stigma and discrimination (19-21) In many settings moms are the predominant furnish of information for girls’ menstruation 22 However, many grownup females have inadequate expertise or deeply held false impact about menstruation and SRH (23-24). Adult women’s lack of menstrual grasp contributes to their very very personal did empower menstruation day out and in addition perpetuates the cycle of misinformation and false have an effect on these, in turn, can additionally, in addition, make contributions to a lack of bodily autonomy and restrained performance to looking for fitness care for MH and SRHR problems at some stage in wonderful existence stages.

Comprehensive sexual training (CSE) and puberty schooling can be fine channels to share accurate, age, awesome schooling on MH and SRHR and manage stigma amongst peers. Even as many LMICs have made an extension in the route of integrating CSE into country-wide curricula, packages are poorly carried out and puberty and MH are often not noted (25-26). Teachers, in addition, lack ample education and assistance to depart them feeling uncomfortable or resistant to educating about SRHR or MH (27) Another mission is that in many settings, misunderstanding the nature, purpose, and effect of CSE has generated perceived or expected nearby resistance (28-31). This resistance can keep away from getting admission to puberty and MH- related statistics in school-based packages that are complemented via the skill of the use of digital and community-based CSE and puberty coaching in addition to making positive that no one is left at the return of (32-35).

Menstruation and Gender-based Violence

Several kinds of gender-based violence (GBV) are directed towards human beings in particular due to the truth of their menstruation status. Bullying or teasing in college settings or places of work due to menstruation is a substantial incidence (36-37) one of a kind e.g. embody menstrual-related restrictions on mobility, consuming first-rate meals social participation, and seclusion when restrictions are imposed upon girls, women, and human beings who menstruate, they can be viewed acts of violence as they deprive human beings of the wish to free movement. Structural barriers, pretty insufficient WASH infrastructure, and restricted get admission to inexpensive and first-rate menstrual merchandise make contributions to the hazard to girls, women, and human

beings who menstruate, experiencing GBV. Women in many places critique going to the restroom to manipulate their menses to keep away from sigma and disgrace (38-39). This can neighborhood women and ladies at large hazard of sexual assault, harassment, and rape notably when bathrooms have been located an approach away, are dimly lit, and /or do now no longer have doorways or locks. The hazard of violence is special and excessive in humanitarian contexts. The neighborhood of female-friendly, adequate, and covered WASH infrastructure can be very limited. Menstruation is, in addition, related to CEFM in many societies. Menarche is understood as a signal that a female is geared up for marriage. A modern-day assessment of 24 lookups from LMICs placed that early age at menarche used to be related to an early age of marriage. There is In addition, an integral linkage between MH and FGM look up generally indicates that FGM is related to menstrual issues inclusive of heavy menstrual bleeding, dysmenorrhea, or difficulties passing menstrual blood(40-41).

Age at Menarche and SRHR outcomes

I related early menarche to early pregnancy and some sexually transmitted infections (STIs) in LMICs. These linkages existing a clear possibility to combine MH and SRHR packages and alternatives to increase assistance want younger adults (10- 14 years) However, many SRHR packages and alternatives ambition kids 15 and folders, and most country-wide fitness information structures accumulate SRH information from 15 years and above.

Menstruation and School/ workplace participation.

Numerous lookups from LMICs exhibit an affiliation between attainment and remarkable SRH results(42) However, proof suggests that menstrual stigma and gender discriminatory surroundings in a college area may additionally, in addition, make contributions to girls' limited participation and engagement (43-45) occasions of bullying and teasing from instructors and male peers. Due to menstruation is cited in many studies. Limited information exists on the have to effect of MH administrative core engagement and safety that menstruation contributes to females lacking work in some settings (46-47)This stays a now not noted hassle that warrants the same lookup

Periods Poverty and SRHR

Poverty is each a reason and outcome of horrific SRH outcomes forty-seven periods. Poverty refers to the lack of getting admission to menstrual merchandise due to financial constraints. It in addition refers to the multiplied vulnerability that girls, women, and all people who menstruate face due to the economic burden posed by way of the useful aid of menstrual merchandise alongside menstrual absorbent anguish therapy and underwear intervals poverty are mainly each day in LMICs with volatile penalties on SRH, when unable to purchase a good deal much less luxurious menstrual products, girls, women, and human beings who menstruate

may also additionally moreover resort to the use of unreliable absorbents, which can be a barrier for civic and social participation, as nicely as a cause of stress and anxiety(48--49) Also search for in Ghana Kenya, South Sudan, and Tanzania advise that some female can also add, in addition, have interaction in transactional intercourse to pay for menstrual products, growing their danger of HIV and different STIs unintended pregnancy, and GBV (50-53).

Many companies that are AF's absolute fine hazard of destructive SRHR penalties are In addition, the most inclined to intervals of poverty, for example, intercourse workers, transgender men, accelerated people, refugees, migrant, and homeless human beings regularly day out intersecting sorts of marginalization, and discrimination, which avoids their get admission to monetary sources and menstrual merchandise as excellent as neighborhood them at multiplied danger for dangerous SRH penalties event woman who day trip obstetric fistula everyday urinary leakage, mixed with cyclical menstrual bleeding will amplify their demand for absorbents yet, they are in addition regularly in decrease socioeconomic strata due to stigma, horrific fitness and lack of mobility, which prevents them from getting get admission to income-producing activities.

Menstruation Psycho-Social Wellbeing and SRH

One of the most constant findings in the path to look-up and settings is that menstruation is related to ideas of shame, fear, and distress. This can have harmful penalties on broader psycho-social well-being and intellectual health, consisting of anxiety, low self-esteem, and despair all with the aid of the existence cycle fifty four such mental fitness troubles are related with terrible SRH outcomes (54-55) Data from high-income international locations have validated that shame associated to menstruation can have an impact on subsequent sexual decision-making and risk-taking, Thus it is achievable that accelerated menstrual have to make contributions to amplify private corporation and lowering sexual risk-taking thereby helping efforts to lengthen SRH Data from high-income international locations exhibit off that incidence costs of intellectual fitness sickness inclusive of extreme despair are in specific excessive for lady and human beings who menstruate all with the aid of Perimenopause 56-57 However, there stays a huge proof hole in the pastime and provision of splendid therapy for middle-aged female and human beings who menstruate experiencing despair related to the hormonal adjustments of menopause.

Menstrual Irregularities and SRHR

Menstrual Irregularities, such as dysmenorrhea and exclusive uterine bleeding (AUB), are properly away linked to factors of SRH and can appreciably have an effect on the first-rate of existence for human beings who menstruate (58) Fibroids, Endometriosis, and Polycystic Ovary Syndrome (PCOS) are amongst the

tremendous motive of AUB (59) and can Impact fertility (60). Further, Moreau has related anemia as the main contributor to maternal morbidity in LMICs. AUB is in addition related to cervical cancer. The most common structure of most cancers is recommended amongst girls in Sub-Saharan Africa. Post-menopausal bleeding is greater and higher crucial as existence expectancy will make larger in LMICs one reason for Perimenopausal bleeding is a genitourinary syndrome of menopause (GSM) which refers to a sequence of symptoms and signs and symptoms that affect roughly 1/2 of the post-menopausal female (61) and has a large horrible have an impact on on the immoderate quality of life, sexual functioning, and emotional well-being (62) one of a type clarification of menopausal bleeding consist of benign cervical or uterine Polyps, endometrial hyperplasia (a thickening of the uterine lining), and masses tons much less commonly, endometrial most cancers (63) very little data on postmenopausal bleeding in LMICs exist, however, it is in all probability that this shape of bleeding is shrouded in the equal taboos and stigma as menstrual bleeding thereby limiting older women's get admission to quintessential fitness choices.

Contraception, Family Planning, and MH

There are several intersections between MH and contraception. one hyperlink is that hormonal contraceptives are amongst the first-line treatments to alleviate symptoms and signs of AUB and dysmenorrhea (64-69).

A Second Intersection Related to Contraceptive induced menstrual bleeding changes (CIMBCs) refers to changes in bleeding patterns ensuing from the use of hormonal contraception. For some people, CIMBCs can be considered as a non-contraceptive benefit of precise hormonal techniques (70) However, CIMBCs are many times linked to component consequences cited as discontinuation (71-77) not remember the integral feature that CIMBCs play in contraceptive decision-making contraceptive counseling in LMICs regularly does now no longer safely put collectively girls, women, and human beings who menstruate to apprehend be counted on or manipulate CIMBCs A 1/3 hyperlink relates to contraceptive use at some stage in Perimenopause. Although fertility stages decline with age at age 45, about half of all women are however fecund. Access to contraception is as a result fundamental ordinarily on account that irregular bleeding patterns for the period of Perimenopause cutting-edge a hazard of unintended being pregnant hormonal contraception can moreover alleviate symptoms of dysmenorrhea and endometrial hyperplasia, which in many cases take place at some stage in Perimenopause (78-79). However, now not all contraceptive techniques are fabulous for the length of Perimenopause therefore tailored contraceptive counseling that consists of consideration for the transition between Hormonal contraception and workable hormone treatment ought to be prioritized for perimenopausal

girls and human beings who menstruate

HIV and MH

There is infinite linkage between MH and HIV prevention seem up have validated that susceptibility to HIV sickness and viral load amongst these dwelling with HIV (WLWH) can fluctuate at great phases of the menstrual cycle (80-82). while the risk of HIV transmission by means of potential of menstrual blood is even as low, This is a fundamental consideration for HIV prevention techniques in LMICs, the neighborhood HIV remedy gaps persist, Another hyperlink is that socio-cultural beliefs and practices related with menstruation have been established to intervene with HIV prevention technologies, mainly the dapivirine vaginal ring (83) In addition, seem to be up has set up that post-menopausal female may additionally in addition in addition be at extended hazard of acquiring HIV due to the natural decline of the immune attribute in the diminished genital tract, generally in generalized epidemic placing (84) with regard to the MH of human beings living with HIV, there is proof from immoderate revenue global locations that WLWH have a considerably giant threat of amenorrhea than zero horrible girl (85-87) In addition, they have an effect on of every day or heavy menstrual bleeding can make higher the hazard of anemia amongst girl and ladies residing with HIV prolonged so than their HIV horrible counterparts. As existence expectancy for human beings dwelling with HIV is increasing, the day trip of perimenopausal and menopausal WLWH is developing and larger relevant. Search for from immoderate earnings international locations and Peru suggests that the severity of menopausal symptoms and signs and signs and symptoms and signs and symptoms appreciation through WLWH is associated with non-adherence to High Acting Anti-Retroviral treatment (HAART)(88-89) WLWH have specific menopausal consideration which consists of the potential interaction between HAART and menopause hormone treatment (90) Also, Peri-menopausal WLWH is appreciably higher in all probability to journey depressive signs and symptoms and anxiety than seronegative Peri- menopausal women (91), However, the lack of acceptable professional health care organization knowledge that many WLWH are unable to get best of entry to excellent care aid for MH SRHR for the measurement of Perimenopause.'

Urogenital infection and MH

Results from limitless look-up advocate associations would perhaps moreover exist between poor's MH and large tiers of urogenital infections alongside reproductive tract infections (RTIs) (92)-However, methodologies fluctuate considerably and the customary brilliant of many look-ups is low, thereby limiting conclusions about the special infections, the energy of the effect, and the route of transmission, Nevertheless, it is clear that tackling menstrual taboos and stigma, alongside with imparting techniques desire and elements too. suitable

caring for and/or disposing of menstrual merchandise is necessary for girls, women, and human beings who menstruate too. Adapt sufficient MH practices

Conclusion

There is a developing hobby in the many blessings of taking a built-in approach to MH and SRHR. Not does integration grant possibilities for cost-effectiveness and sustainability through stopping duplication of efforts when it comes to realizing sexual and reproductive fitness rights for all, but, it can in addition acquire the widespread intention of making fine the best manageable preferred fitness and well-being for all girls, women, and human beings who menstruate. Going forward, the purpose is to collect the wealthy proof base in extremely good SRHR practices, as nicely as the rising proof on what works for MH in a variety of inserting and with a range of populace weave at the equal time the interconnected factors for most excessive fantastic and reach. The most profitable integration used to be as quickly as programmed and grounded in a context-specific draw shut of the bi-directional sociocultural, between MH and SRHR. This requires superb multi-sectoral collaboration and coordination with sectors which consists of health, education, WASH gender, and safety and an affiliation dedication to leaving no one in the back of often these most at risk in a comparable way investment are required to adorn a sturdy physique of actionable proof on causal pathway connecting MH with SRHR as nicely as underdevelopment penalties inclusive of teaching and gender equality the vicinity MH has been blanketed as necessary (as terrible to incidental) aspects of SRHR efforts. It has been proven to empower girls, women, and human beings who menstruate with the knowledge, skills, support, and company to thrive utilizing the existence cycle. MH ought to as a result be a quintessential component in SRHR efforts Nationally Regionally and Globally.

Acknowledgment

The completion of this research project would not have been possible without the contributions and support of many individuals and organizations. We are deeply grateful to all those who played a role in the success of this project. I would like to thank My Mentor Dr. Naweed Imam Syed Prof Department of Cell Biology at the University of Calgary for their invaluable input and support throughout the research process. Their insights and expertise were instrumental in shaping the direction of this project

Declaration of Interest

I hereby declare that I have no pecuniary or other personal interest, direct or indirect, in any matter that raises or may raise a conflict with my duties as a manager of my office Management

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Financial support and sponsorship

Nil.

References

1. American College of Obstetricians and Gynecologists(2015, pp. 143-146). Menstruation in Female and Adolescent: The Use of the Menstrual Cycle as a Quintessential Signal. Washington, DC: ACOG; 2015:143-146.
2. bitoye M, et al. Early Menarche: A Systematic Overview of Its Impact on Sexual and Reproductive Health in Low and Middle-Income Countries. *PLoS One.* 2017;12(6):e0178884. Doi:1371/journal.pone.0178884(Ibitoye et,al 2017.p.e0178884)
3. Winkler IT. Introduction: Menstruation as Fundamental. In: Nobel E, et al, eds. *The Palgrave Handbook of Essential Menstruation Research.* Singapore: Palgrave Macmillan; 2020:9-13(Winkler, 2020, pp. 9-13).
4. Simmer M, et al. A Time for Global Action: Addressing Girls' Menstrual Hygiene Management Needs in Schools. *PLoS Med.* 2016;13(2):e1001962. Doi:10.1371/journal.pmed.1001962(Simmer et al., 2016, p. e1001962).
5. Philips-Howard PA, et al. Inclusion of Menstrual Health in Reproductive Health and Rights. *Lancet Child Adolescent Health.* 2018;2(8):e18. Doi:10.1016/S2352-4642(18)30204-9(Philips-Howard et al., 2018, p. e18).
6. Nugget C, Macintyre A. How Can the Global Development Agenda Successfully Tackle Menstrual Hygiene Management? *Development Bulletin.* 2016;27:78-80. (Nugget C, Macintyre,et,al.2016 p,e78-80)
7. UNFPA. My Body, My Life, My World: Rights and Preferences for All Adolescents and Youth: A UNFPA Global Strategy. New York: UNFPA; 2019. Available at: <http://www.unfpa.org/childhood-strategy>. Accessed October 10, 2020.. (UNFPA 2020)
8. UNFPA. Menstruation and Human Rights: Frequently Asked Questions. 2020. Available from: <http://www.unfpa.org/menstruation-FAQ>. Accessed October 15, 2020. (UNFPA 2020)
9. UNFPA, The Danish Institute for Human Rights, United Nations. Reproductive Rights are Human Rights: A Handbook of National Human Rights Institutions. 2014. Available at: <http://www.ohchr.org/archives/publication/hr-handbook.pdf>. (UNFPA 2014)
10. United Nations Human Rights Office of the High Commissioner. Sexual Health and Rights. 2020. Available from: <http://www.ohchr.org/en/issues/women/reproductive-health-rights.aspx>. Accessed 11 November 26, 2020.(United Nations Human Rights Office of the High Commissioner, 2020)
11. Human Rights Watch. New York. Available from: <http://www.hrw.org/news/2017/08/27/menstrual-hygiene-human-rights-difficulty>. Accessed October 1, 2020. (Human Rights 2020)
12. Human Rights Council. The Human Rights to Protecting Water and Sanitation in A/HRC/39/L.11. 2018. (Human Rights Council 2020)
13. UN General Assembly. Resolution adopted by the General Assembly on work of the statistical commission on the 2030 Agenda for Sustainable Development. An international indicator framework for the sustainable development goals and targets of the 2030 Agenda for sustainable development. 2017.(UN General Assembly 2017)

14. Loughnan, L., et al. Monitoring Menstrual Health in the Sustainable Development Goals. In The Palgrave Handbook of Essential Editors. 2020. Palgrave Macmillan Singapore. pp. 577-592.(Loughnan L et al .2020 p.e 577-592)
15. Simmer, M., et al. Beyond Menstrual Hygiene: Addressing Vaginal Bleeding During the Life Course in Low and Middle-Income Countries. *BMJ Glob Health.* 2017;2:e000405. Doi:10.1136/bmjgh-2017-000405(Simmer M et.al 2017.p.e000405)
16. Nugget, C.A., Donaldson, A., & Macintyre, A. Integrating Menstrual Health, Water Sanitation and Hygiene, and Sexual Reproductive Health in Asia and the Pacific region. A Discussion Paper. 2017. Marie Stopes International and Water Aid International. London. Available from: <http://Wash matters.wateraid.org/publication/integrated-approaches-menstrual-health-asia-and-pacific>. Accessed October 2020.(Nugget CA 2020)
17. Duodena, P., et al. A cross-sectional study to determine awareness about menstruation in adolescent girls of a city slum in western Maharashtra. *International Journal of Adolescent Medicine and Health.* 2018;30(4):20160079. Doi:10.1515/ijam-2016-0079.(Duodena P et.al 2018)
18. Go, J.R., Patil, S., & Pilar, S. Knowledge and Practices associated to reproductive health amongst adolescent females. *Medical Journal of Dr. D.Y. Patil University.* 2015;8(6):719-723. Doi:10.4103/0975-2870.169882.(Go JR patil et.al 2015)
19. Cardoso, L.F., et al. Menstrual restriction occurrence and association with intimate partner violence amongst Nepali women. *BMJ Sexual Health.* 2019;45(1):38-43. Doi:10.1136/bmjsrh-2017-101908(Cardoso LF et.al 2019).
20. Mohamed, Y., et al. A qualitative exploration of menstruation-related restrictive practices in Fiji, Solomon Islands and Papua New Guinea. *PLoS ONE.* 2018;13(12):e0208224. Doi:10.1371/journal.pone.0208224. (Mohamed Y et.al 2018)
21. Adara R, et al. Gestion de l'Hygiène Menstruelle: Compartimentes Pratiques dans la Region de Kezdoglou, Senegal. Water Supply & Sanitation Collaborative Council and UN Women, 2015. Available from <http://menstrualhygieday.org/wp-content/uploads/2016/12/UN-Women-GHM-Comportements-et-pratiques-KP.C3%A9dougou-5%E2%80%8E63%C2%A92gall.pdf> (accessed March 5, 2021)(Adara R et.al 2015).
22. Chandra-MOIL V, Patel SV. Mapping the Knowledge and Perceptions of Menarche, Menstrual Hygiene, and Menstrual Fitness amongst Adolescent Women in Low- and Middle-Income Countries. *Reproductive Health* 2017;14(1):30. Doi:10.1186/s12978-017-0293-6.(Chandra MOIL V Patel SV 2017)
23. Chin Yama J, et al. Menstrual Hygiene Management in a Rural School of Zambia: Descriptive Study about Knowledge, Experiences, and Challenges Faced by School Girls. *BMC Public Health* 2019;19(1):16. Doi:10.1186/s12889-018-6320-2(Chin yamaJ et.al 2019)
24. Lahm AMR, Stern D. Factors Impacting on Menstrual Hygiene and their Implications for Health Promotion. *Global Health Promotion* 2018;25(1):54-62.(Lahm AMR Stern D 2018)
25. Geertz, A, et al. A Chance to Address Menstrual Health and Gender Equity. 2016. FSG. Available from <http://www.issuelab.org/resources/25405/25405.pdf> (accessed March 5, 2021)(Geertz A et.al 2016)
26. Geertz A, et al. Menstrual Health in India: Landscape Analysis. 2016. FSG. Available from <http://menstrualhygieday.org/wp-content/uploads/2016/04/FSG-Menstrual-Health-Landscape-India.pdf> (accessed March 5, 2021).(Geertz A et.al 2016)
27. Jonson, et al. Intersecting Inequalities: Gender and Adolescent Health in Ethiopia. *The Global Journal for Equity in Health* 2020;19(1):97. Doi:10.1186/s12939-020-01214-3. (Jonson et.al 2020)
28. Verma P, Singh KK. Pregnancy Risk Throughout the Menstrual Cycle: Misconceptions Amongst Urban Men in India. *Reproductive Health* 2017;14(1):71. Doi:10.1186/s12978-017-0332-3.(Verma P Singh KK 2017)
29. Micha H, et al. Menstrual Hygiene Management and Female Genital Mutilation: Case Study in Senegal. 2017. Water Supply & Sanitation Collaborative Council. Available from <http://menstrualhygieday.org/wp-content/uploads/2018/02/WSSCC-GHM-Senegal-EN-2018.pdf> (accessed October 5, 2020)(Micha H et.al 2018).
30. Mason L, et al. "We Do Not Know": A Qualitative Study Exploring Boys' Understanding of Menstruation in India. *Reproductive Health* 2017;14(1):174. Doi:10.1186/s12978-017-0435-x.(Mason L et.al 2017)
31. Ajah LO, et al. Adolescent reproductive health challenges amongst schoolgirls in Southeast Nigeria: position of know-how of menstrual sample and contraceptive adherence affected person preferences and Adherence. *Patient Prefer Adherence.* 2015;9:1219-1224. Doi:10.2147/PPA.589258 (Ajah LO,et.al 2015)
32. Chandler D, et al. Awareness and practices of Menstrual Hygiene amongst ladies of reproductive age in rural Puducherry a blended technique find out about. *International Journal of Adolescent Medicine and Health.* 2018;0:20170221. Doi:10.1515/Ijma-2017-0221 (Chandler D et.al 2018)
33. Hennigan JAO, Tsui A, Sommer M. Missed Opportunities: Menstrual Matters for Family Planning. *Sex Reprod Health.* 2019;45:55-59. Doi:10.1363/45e7917(Hennigan JAO et.al 2019)
34. Population Council. Sexuality Schooling: A ten-country overview of the School curricula in East and Southern Africa. 2012. UNESCO and UNFPA. Available from: <https://unesdoc.unesco.org/ark/48223/pf0000221121> (accessed March 5, 2021)(Population Council 2012).
35. Sommer MC, Sutherland V, Chandra Moule. Putting menarche and female into the international populace fitness agenda. *Reproductive Health.* 2015;12:24. Doi:10.1186/s12978-015-0009-8(Sommer MC et.al 2015)
36. Chandra Moule V, et al. The Political Research Programmatic and social responses to Adolescent Reproductive Fitness and Rights in the 25 years seeing that the Global Convention on the Populace and Improvement. *J Adolescent fitness.* 2019;65:516-540. Doi:10.1016/j.jadohealth.2019.09.011(Chandler Moule V et.al 2019)
37. Chandra Moule V, et al. Evolution and Resistance to Sexuality Education in Mexico. *Global Health Science and Practice.* 2018;6(1):137-149. Doi:10.9745/GHSP-D-17-00284 (Chandler Moule V et.al 2018)
38. Chandra Moule V, et al. Building Support for Adolescent Sexuality and Reproductive Health Education and Responding to Resistance in Conservative context instances from Pakistan. *Global Health Service and Exercise.* 2018;6(1):128-136. Doi:10.9745/GHSP-D-17-00285(Chandler Moule V et.al 2018)
39. UNESCO. Worldwide technical practice on sexuality

education. An evidence-informed strategy. 2018. UNESCO, UNAIDS, UNFPA, UNICEF, UN Women, World Health Organization. Paris. Available from: <http://unesdoc.unesco.org/ark:/48223/pf0000260770> (accessed March 6, 2021)(UNESCO 2018).

40. Painchaud C, et al. Towards complete sexuality schooling: comparative evaluation of the coverage surroundings surrounding school-based sexuality schooling in Ghana, Peru, Kenya, and Guatemala. *Sex schooling*. 2019;19(3):277-296. Doi:10.1080/14681811.2018.1533460.(Painchaud C et.al

41. UNICEF. (2019). The chance of digital sexuality training in East Asia and the Pacific. UNICEF East Asia and Pacific. Retrieved from <https://www.unicef.org/eap/media/3686/file/Digital.pdf>(UNICEF 2019)

42. UNESCO. (2016). Review of the proof of sexuality training. Document informing the replacement of the UNESCO International Technical guidance on sexuality training. UNESCO Paris.(UNESCO 2016)

43. Girls Impact and Girls Deliver. (2020). Going online for reproductive health: Meaning engaging adolescent girls and young women for smarter digital intervention. Girls Impact and Girls Deliver. Retrieved from <http://ladiesdeliver.org/wp-content/uploads/2020/08/Going-Online-for-Sexual-and-Reproductive-Health.pdf>(Girls Impact Girls Deliver 2020)

44. SYP and UNFPA ESARO. (2020). Evaluation on behavior change of young people using TuneMe in Southern Africa: A study on Malawi, Zambia, and Zimbabwe. UNFPA ESARO. Johannesburg. Retrieved from prod.uruguay.unfpa.org/en/publications/evaluation-behavior-change-young-people-using-tune-me-southern-Africa (SYP UNFPA ESARO 2020)

45. Women. (2020). Women FAQ. What are the links between menstrual health management (MH) and gender-based violence (GBV)? Women. Retrieved from <http://www.susane.org/resources/documents/default/3-3882-179-1592733409.pdf>(Women 2020)

46. Jewett, S., & Ryley, H. (2014). It has a woman factor: Menstruation, school attendance, spatial mobility, and wider gender inequalities in Kenya. *Geoforum*, 56, 137-147. Doi:10.1016/geo forum.2014.07.006 (Jewett S and Ryley 2014)

47. Hogget, C. D., Zielinski, & Nee, M. (2019). A shared agenda: Exploring links between water, sanitation, hygiene, and sexual reproductive health and rights in sustainable development. Water Aid, IWHC, MSI, Samaki. London. Retrieved from <http://wash matters.wateraid.org/a-shared-agenda>(Hogget C. D Zielinski & Nee,M 2019)

48. Kerth, B. (2016). Girls and women's right to menstrual health: Evidence and opportunities in outlook on reproductive health. PATH. Seattle. Retrieved from <https://path.azureedge.net/media/documents/RH-Outlook-MH-022016.pdf>(Kerth,B (2016)

49. World Health Organization. (2020). Female genital mutilation. Retrieved from <http://www.who.int/newsroom/fact-sheets/detail/female-genital-mutilation> (World health Organization 2020)

50. Geertz, A., et al. (2016). Menstrual health in Kenya: U.S.A. landscape analysis. FSG. Retrieved from <http://menstrualhygieneday.org/wp-content/uploads/2016/04/FSG-Menstrual-Health-Landscape-Kenya.pdf> (Geertz A et.al 2016)

51. Hennegan J, Ocama P, Nampijja M, Amone-P'Olak K, Agaba P, Ogwal-Okeng J, et al. Measuring the prevalence and impact of poor menstrual hygiene management: a quantitative survey of school girls in rural Uganda. *BMJ Open*. 2016;6(12):e012596. Doi:10.1136/bmjopen-2016-012596 (Hennegan J,et.al 2016)

52. De Saints V, Ferreira A, Wessels L, Câmara R, Bortolini M, Matos MG. Dysmenorrhea in adolescents and young adults: a survey in different countries. *Acta Bio Med*. 2016;87(3):233-246.(De saint et.al 2016)

53. Miro G, Nankinga J, Wabwire-Mangen F, Muyonga JH, Lutalo T, Ekwaru JP, et al. Menstrual hygiene and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. *BMC Women's Health*. 2018;18(1):4. Doi:10.1186/s12905-017-0502-z(Miro G et.al 2018)

54. Kulkarni J. Perimenopausal depression: an under-recognized entity. *Australian Prescriber*. 2018;41(6):183-185. Doi:10.18773/austprescr.2018.060(Kulkarni J 2018)

55. Yamada K, Komagata E. Reduction of quality-adjusted life years (QALYs) in patients with the premenstrual dysphoric disorder (PMDD). *Qual Life Res*. 2017;26(11):3069-3073. Doi:10.1007/s11136-017-1642-1(Yamada K komagata 2017)

56. Benetti-Pinto CL, da Rocha AB, Pinto-Neto AM, de Carvalho Lopes A. Abnormal uterine bleeding. *Rev Bras Ginecol Obstet*. 2017;39(7):358-368. Doi:10.1055/s-0037-1603807(Benetti et.al 2017)

57. Whitaker L, Critchley HO. Abnormal uterine bleeding. *Best Pract Res Clin Obstet Gynaecol*. 2016;34:54-65. Doi:10.1016/j.bpobgyn.2015.11.012(whitaker L Critchley Ho 2016)

58. Kagan RS, Kellogg Spadt S, Parish SJ. Practical considerations in the management of the genitourinary syndrome of menopause. *Drugs Aging*. 2019;36(10):897-908. Doi:10.1007/s40266-019-00700-w(Kegan RS et.al 2019)

59. Moral E, Fernández-Alonso AM, Fernández-García E, Fernández-García I, Fernández-Sánchez M, González-Sánchez M, et al. The impact of genitourinary syndrome of menopause on wellbeing, functioning, and quality of life in menopausal women. *Menopause*. 2018;25(12):1418-1423. Doi:10.1097/GME.0000000000001148(Moral E et.al 2018)

60. Goldstein SR. The appropriate evaluation of postmenopausal bleeding. *Menopause*. 2018;25(12):1476-1478. Doi:10.1097/GME.0000000000001181(Gold SteinSR 2018)

61. Spritzer PM, Motta AB. Adolescence and polycystic ovary syndrome: current thoughts on diagnosis and treatment. *Int J Clin Pract*. 2015;69(1):1236-1246. Doi:10.1111/ijcp.12127(Spritzer PM Motta AB 2015)

62. Spritzer PM, Motta AB. Adolescence and polycystic ovary syndrome: cutting-edge thinking on prognosis and treatment. *Int J Clin Pract*. 2015;69(1):1236-1246. Doi:10.1111/ijcp.1212719(Spritzer PM Motta AB 2015)

63. Al Khalifa RA, et al. Metformin or oral contraceptives for adolescents with polycystic ovarian syndrome: a meta-analysis. *Pediatrics*. 2016;137(5):e20154089. Doi:10.1542/peds.2015-4089 (AL Khalifa RA et.al 2016)

64. Alves RDMS, et al. Does a levonorgestrel-releasing intrauterine device have an effect on the bleeding pattern in reproductive-age women? *Int J Gynaecol Obstet*. 2019;147(3):326-331. Doi:10.1002/ijgo.12962 (Alves RDMS et.al 2019)

65. Campos RR, et al. Use of a levonorgestrel-releasing 52 mg

intrauterine device in the management of abnormal uterine bleeding in women with inherited bleeding disorders. *Contraception*. 2020;102(4):254-258. Doi:10.1016/j.contraception.2020.05.009 (Campos RR et.al 2020).

66. Cheong YIT, Cameron HOD, Critchley HO. Abnormal uterine bleeding. *Br Med Bull*. 2017;123(1):103-114. Doi:10.1093/bmb/ldx027 (Cheong YIT et.al 2017)

67. Grigorieva V, et al. Use of a levonorgestrel-releasing intrauterine device to treat bleeding associated with uterine leiomyomas. *Fertil Steril*. 2003;79(5):1194-1198. Doi:10.1016/S0015-0282(03)00175-4 (Grigorieva V et.al 2003)

68. Polis CB, Hussein R, Berry A. "There might be blood": a scoping review on women's responses to contraceptives-induced menstrual bleeding change. *Reprod Health*. 2018;15(1):114. Doi:10.1186/s12978-018-0561-0 (Polis CB Hussain R berry A 2018)

69. Rademacher KH, et al. Menstrual bleeding changes are normal: proposed counseling tool to address common reasons for non-use and discontinuation of contraception. *Glob Health Sci Pract*. 2018;6(3):603-610. Doi:10.9745/GHSP-D-18-00093 (Rademacher KH et.al 2018)

70. Berlin EK, Mizroji A, Bonney AE. Twelve-month continuation of the etonogestrel implant in an outpatient pediatric setting. *Contraception*. 2016;94(1):81-86. Doi:10.1016/j.contraception.2016.02.030 (Berlin EK Mizroji A Bonney AE 2016)

71. Friedrich JT, et al. Association of short-term bleeding and cramping patterns with long-acting reversible contraception methods satisfaction. *Am J Obstet Gynecol*. 2015;212(1):50e1-50e8. Doi:10.1016/j.ajog.2014.07.025 (Friedrich JT et.al 2015)

72. Qiu, M., et al. (2017). Contraceptive implant discontinuation in Huambo and Luanda, Angola: A qualitative exploration of motives. *Maternal & Child Health Journal*, 21(9), 1763-1771. Doi:10.1007/s10995-017-2349-1 (Qiu M, et.al 2017)

73. Lavergne, A. R. S., Stevens, E., & Guru, K. (2017). Facet outcomes and the want of secrecy characterizing discontinuation of cutting-edge contraception and its reasons in Ethiopia the usage of combined techniques. *Contraception and Reproductive Medicine*, 2(1), 24. Doi:10.1186/s40834-017-0052-7 (Lavergne A.R.S et.al 2017)

74. Lunde, B., et al. (2017). "Put on Dark underpants Most important": mastering from adolescents and younger adults ride with early discontinuation of the contraceptives implant. *Journal of Pediatric and Adolescent Gynecology*, 30(3), 395-399. Doi:10.1016/j.jpag.2016.12.006 (Lunde B et.al 2017)

75. Di Bella, Z. I. K., et al. (2016). Contraception and household planning at the excessive of r reproductive existence. *Climacteric, Revista da Associação Brasileira*, 62, 454-457. Retrieved from http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-42302016000500454&nrm=iso (Di Bella Z I K et.al 2016)

76. Miller, T. A., et al. (2018). Contraception for center female: A review. *Menopause*, 25(7), 817-827. Doi:10.1097/GME.0000000000001073 (Miller T A et.al 2018)

77. Gay, J. M., Crace-Galis, K., & Hares, K. (2016). What Works for Girls and Girls Proof for HIV/AIDS Interventions. The proof task. Population Council and what works Association. Washington DC. Retrieved from www.whatworksforwomen.org (accessed on 5 March 2021) (Gay J M et.al 2016).

78. Boily-Larouche, G., et al. (2018). Characterization of the genital mucosa immune profile to distinguish phases of HIV susceptibility. *The Journal of Infectious Disease*, 219(6), 856-866. Doi:10.1093/indices/jiy585 (Boily-Larouche G et.al 2018)

79. Benki, S., et al. (2004). Cyclic shedding of HIV-1 RNA in cervical secretion all through the menstrual cycle. *The Journal of Infectious Diseases*, 189(12), 2192-2201. Doi:10.1086/421298 (Benki S et.al 2004)

80. Dubey, Z., et al. (2020). Hygiene blood goes with the flow and vaginal overload why girls eliminated on HIV prevention vaginal ring at some point of menstruation: Malawi, South Africa, Uganda, and Zimbabwe. *AIDS and conduct*, 24(2), 617-628. Doi:10.1007/s10461-019-02514-8 (Dubey Z et.al 2020)

81. Chappell, C. A., et al. (2015). The impact of menopause on the innate antiviral pastime of cervicovaginal lavage. *American Journal of Obstetrics and Gynecology*, 213(3), 204.e6. Doi:10.1016/j.ajog.2015.03.045 (Chappell C.A et.al 2015)

82. Cetin HE, Varietal C, King EMAY, Albert M, Murray MCM. Extended amenorrhea and resumption of menses in women with HIV. *J Women's Health*. 2018;27(12):1441-1448. Doi:10.1089/jwh.2018.7046 (Cetin HE et.al 2018)

83. Cimiano-Pacheco V, Pérez-Reyes E, Núñez-Roldán A, et al. Menopausal signs and symptoms are related to non-adherence to highly active antiretroviral therapy in human immunodeficiency virus-infected middle-aged women. *Climacteric*. 2020;23(3):219-236. Doi:10.1080/13697137.2019.1664457 (Cimiano-Pacheco et.al 2020)

84. Duff PK, Devries K, Frankish JC, et al. Severe menopausal symptoms associated with decreased adherence to treatment among perimenopausal and menopausal women living with HIV in Metro Vancouver. *Menopause*. 2018;25(5):531-537. Doi:10.1097/GME.0000000000001040 (Duff PK et.al 2018)

85. Bull L, Tjia J, Fung D, et al. HIV and menopause: A review. *Post Reprod Health*. 2017;24(1):19-25. Doi:10.1177/2053369117748794 (Bull L et.al 2017)

86. Sumpter C, Torondel B. A systematic review of the health and social impact of the menstrual hygiene management. *PLoS One*. 2013;8(4):e62004. Doi:10.1371/journal.pone.0062004 (Sumpter C Torondel B 2013)

87. Das P, Kumar A, Mohapatra JK, et al. Menstrual hygiene practices, WASH access and the risk of urogenital infections in girls from Odisha, India. *PLoS One*. 2015;10(6):e0130777. Doi:10.1371/journal.pone.0130777 (Das P et.al 2015)

88. Singh EJ, Unisa S. Menstrual hygiene practices and its association with reproductive tract infections and abnormal vaginal discharge among women in India. *Sexual & Reproductive Healthcare*. 2015;6(4):249-254. Doi:10.1016/j.srhc.2015.06.001 (Singh EJ Unisa S 2015)

89. Zarkin-Scott SC, Von Euler-Chelpin S, Teller S. Science Research Practicum: Reproductive tract infections associated with various MH methods—A systematic review. 2017 (Zarkin Scott et.al 2017)

90. Lobb SE, Simpson AN, Dyer KR, et al. Association between HIV status and psychological symptoms in perimenopausal women. *Menopause*. 2018;25(6):648-656. Doi:10.1097/GME.0000000000001058 (Lobb SE et.al 2018)

91. And EJ Singh, Unisa S. Menstrual hygiene practices and its affiliation with reproductive tract infections and strange vaginal discharge amongst females in India. *Sexual &*

Reproductive Healthcare. 2015;6(4):249-254. Doi10.1016/j.srch.2015.06.001(And EJ Singh Unisa S 2015)

92. Das P, Khan MA, Behera B, Biswas P, Mohanty S, Jha R, et al. Menstrual hygiene practices, WASH access, and the risk of urogenital infections in girls from Odisha, India. PLoS One. 2015;10(6):e0130777. Doi: 10.1371/journal.pone.0130777(Das P Khan MA et.al 2015)