

National Conference 2023

SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS IN BANGLADESH

SHOWCASING RESEARCH THROUGH
IDEAS, INGENUITY AND INNOVATIONS

2 & 3 May 2023

Organised by:
Advancing Sexual and Reproductive Health and
Rights (AdSEARCH) by icddr,b

Conference Proceedings

A National Conference for Young Researchers, Practitioners,
and Policymakers to Facilitate, Debate, and Document the
collective knowledge and ideas on selective Sexual and
Reproductive Health and Rights (SRHR) Issues



Conference Proceedings

National
Conference
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Acronyms

AdSEARCH	Advancing Sexual and Reproductive Health and Rights
ANC	Antenatal Care
BCC	Behaviour Change Communication
BIRPERHT	Bangladesh Institute of Research for Promotion of Essential and Reproductive Health Technologies
CDC	Centers for Disease Control and Prevention
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DSHE	Directorate General of Secondary and Higher Education
EIS	Epidemic Intelligence Service Officer
FP	Family Planning
FPAB	Family Planning Association of Bangladesh
FRCS	Fellowship of the Royal College of Surgeons
GAC	Global Affairs Canada
HPV	Human Papillomavirus Vaccines
KP	Key Population
MCHD	Maternal and Child Health Division
MHH	Menstrual Health and Hygiene
MoHFW	Ministry of Health and Family Welfare
NCSRHR2023	National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh
PNC	Postnatal Care
PoC	Proof of Concepts
SAFOG	South Asia Federation of Obstetrics & Gynecology
SDG	Sustainable Development Goals
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
TENS	Transcutaneous Electrical Nerve Stimulation
UNFPA	United Nations Population Fund
UP	Unintended Pregnancies
VIA	Visual Inspection with Acetic Acid



Foreword



Dr Tahmeed Ahmed

Executive Director
icddr,b

I am delighted to present the conference proceedings of the National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh (NCSRHR2023) organised by AdSEARCH by icddr,b.

The conference has provided a unique space for sharing experiences, fostering innovation, and advocating for evidence-based approaches that can make a difference in our journey towards promoting Sexual and Reproductive Health and Rights (SRHR) in Bangladesh. It offered an opportunity for all attendees to come together, share experiences and knowledge, and seek solutions to the challenges ahead.

The proceedings encompassed all presentations, abstracts, reports, and a visual journey through photographs, serving as a comprehensive repository of the rich insights and discussions that took place during this event.

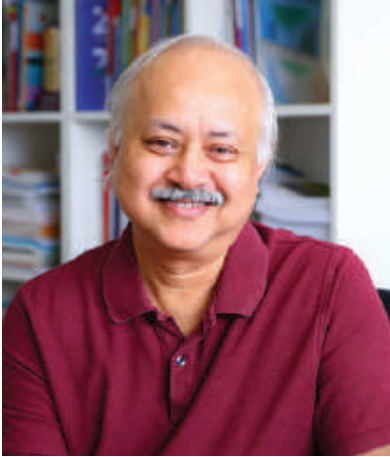
I extend my gratitude to Global Affairs Canada (GAC) for their unwavering support and commitment. I would also like to sincerely thank our esteemed event partners, Ipas Bangladesh and Share-Net Bangladesh, for their collaborative spirit and dedication. Such partnerships are fundamental to creating a comprehensive platform for dialogue, knowledge exchange, and collaborative action.

My heartfelt gratitude goes out to our partners, stakeholders, researchers, policymakers, healthcare professionals, civil society organisations, and young innovators, as well as the Maternal and Child Health Division and the AdSEARCH team who contributed to the conference's success.

I look forward to the dissemination of the conference proceedings, and I encourage each participant to carry forward the knowledge gained and to continue fostering innovation and evidence-based approaches. Together, let us persist in our shared goal of promoting SRHR in Bangladesh and beyond.



Gaining Perspective on the National SRHR Landscape: A Note from the Director



Dr Shams El Arifeen

Project Director
AdSEARCH by icddr,b

Senior Scientist & Senior Director
Maternal and Child Health Division,
icddr,b

I would like to express my heartfelt gratitude to all stakeholders, including Government officials, development partners, INGOs, NGOs, and universities for actively participating in the National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh (NCSRHR2023).

NCSRHR2023 shed light on the most pressing Sexual and Reproductive Health and Rights (SRHR) topics, Cervical Cancer, Family Planning, Fistula, and the Sexual and Reproductive Health of Key Populations (KPs). Additionally, it provided a platform to showcase remarkable SRHR innovations by various organisations.

The discussions centred around KPs were particularly engaging, as they bravely confronted the prevailing taboos in our country's context. It was refreshing to see that the focus went beyond HIV and STIs, addressing other crucial yet neglected areas of SRHR.

One of the biggest successes of the conference is the launching of the Innovation and Evidence Hub by AdSEARCH which brought together mentees and mentors selected from the pool of Abstracts and Innovation ideas. The Hub will serve as a catalyst for innovation in the field of SRHR, with a specific emphasis on developing and testing novel products to address the diverse SRHR needs and challenges faced by different communities.

This proceeding captures a comprehensive summary of the keynote speeches, discussions, and presentations that took place throughout the event. I would like to express my deepest thanks and appreciation to our event partners, Ipas Bangladesh and Share-Net Bangladesh, for their support and collaboration. Furthermore, I extend special thanks to Global Affairs Canada (GAC) for their generous contribution.

Together, we have taken a significant step forward in advancing SRHR in Bangladesh. I am confident that the knowledge shared, connections made, and the momentum generated during NCSRHR2023 will continue to inspire impactful actions toward promoting comprehensive SRHR throughout the country.



Table of Contents

Laying the Foundation: The Journey of AdSEARCH & NCSRHR2023	8
In Numbers	9
Setting the Stage: The Conference Inauguration	10
Excellence in SRHR Award 2023	12
Scientific Session on SRHR Themes	16
A Look into the Current Status of Cervical Cancer Screening and Elimination in Bangladesh	18
Family Planning Programme Issues and Challenges	19
Fistula Elimination from Bangladesh: Way to 2030	20
Leaving No One behind-Advancing SRHR among Key Populations (KPs): Current Status and the way forward	21
Session Takeaway	22
Scientific Session on SRHR Innovations	24
Digital Divide or Digital Opportunity? Exploring the Impact of Digitalisation on SRH Inequities	26
UNFPA: In Partnership of SRHR in Bangladesh (Simple Approaches at Scale)	27
Innovation on SRHR by Ipas Bangladesh	28
Innovation, not Invention	29
Session Takeaway	30

Pioneering SRHR Solutions: The Launching of the Innovation & Evidence Hub by AdSEARCH 32

Fostering Innovation: A Step-by-Step Account of AdSEARCH's Journey	33
The Mentors	34
The Mentees	36
Winners of NCSRHR2023 Best Innovations	38
The Best Innovation Presenters	39
Winners of NCSRHR2023 Best Abstracts	41
The Best Abstract Presenters	42
Showcasing AdSEARCH Proof of Concepts (PoC): The NCSRHR2023 Market Place	44
Launching of the Mukhorito App	45
The Discovery Zone	46
Launched to Drive Advances in SRHR: The Inauguration of the Innovation and Evidence Hub	47

Charting the Road Ahead for SRHR: The Conference Closing 48

Through the Lens 49

Best Abstracts 50

Best Innovations 65

NCSRHR2023 Branding 75



Laying the Foundation: The Journey of AdSEARCH & NCSRHR2023

The promotion of Sexual and Reproductive Health and Rights (SRHR) is crucial for ensuring human well-being, gender equality, and advancing toward a more equitable world. SRHR affects many aspects of daily life and is essential for achieving the United Nations' Sustainable Development Goals (SDGs). Despite progress in this area, Bangladesh still faces challenges in SRHR. Against this background in March 2021 icddr,b embark on a cross-divisional, multi-year project titled Advancing Sexual and Reproductive Health and Rights (AdSEARCH) by icddr,b, supported by Global Affairs Canada (GAC). This project aims to advance knowledge, generate evidence, and influence policy and programme design related to SRH realisation of rights among various demographic groups with varying SRH needs in Bangladesh.

Furthermore, the project is collaborating with the Ministry of Health and Family Welfare to conduct a national health facility survey on SRHR. AdSEARCH is testing the first national registers on High-Risk Pregnancy, Fistula, and Cervical cancer, and conducting a comprehensive landmark study to assess the SRH burden among Key Populations. AdSEARCH's studies and activities are carried out across the country with an ambition to play a significant impact beyond borders for a more equitable world.

To facilitate, debate, and document the collective knowledge, evidence, and ideas on selective SRHR issues, on 3 May 2023 AdSEARCH organised the National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh | Showcasing Research through Ideas, Ingenuity, and Innovations (NCSRHR2023) at InterContinental Dhaka. The conference had an impact on a wider range of audiences regarding SRHR by collaborating with policymakers, youth, and practitioners.

With a focus on innovation and invention, AdSEARCH is developing and testing a wide range of novel products, from ICT-based and technological innovations to behaviour, process, and health systems modifications. Conducting 50+ studies on selective SRHR themes, AdSEARCH is also the most comprehensive attempt to assess the SRHR needs and navigation of adolescent girls, recently married couples, pregnant women, and women involved in the ready-made garments sector.

In Numbers

Finalist Showdown | Best Abstracts & Innovations

2 May | icddr,b



152 Abstracts Submitted



22 Abstract Presenters



112 Innovations Submitted



21 Innovation Presenters



22 Reviewers



50%
External



50%
Internal



221 Participants



30%
Female



70%
Male



20+ Media Houses

National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh | Showcasing Research through Ideas, Ingenuity and Innovations

3 May | InterContinental Dhaka



400+ Conference Participants



36% Female



64% Male



8 Key Speakers & Panellist on SRHR



6 Young Researchers presented at the Panel Session

2

Scientific sessions on SRHR Themes and Innovations

40+

Media Houses

70

Poster Presented



Dr Quamrun Nahar

Setting the Stage: The Conference Inauguration

NCSRHR2023 commenced with a warm welcome speech by **Dr Quamrun Nahar**, Deputy Project Director, AdSEARCH by icddr,b, and the Head of Research, Maternal and Child Health Division (MCHD) icddr,b. She extended her heartfelt welcome to all the participants.

Special guest, **Joe Goodings**, Head of Development Cooperation at the High Commission of Canada in Dhaka, emphasised that gender equity is a core policy of the Canadian government. He further announced the Canadian government's commitment to providing substantial funding over the next 10 years to address SRHR issues.

Md. Saidur Rahman, Additional Secretary of the Health Service Division (HSD) Admin Wing & World Health (WH)

Wing, Ministry of Health and Family Welfare (MoHFW) took the stage and shed light on specific country-related challenges. He highlighted the prevalence of taboos surrounding gynecological issues, the stigmatisation faced by individuals.

In the speech of the session co-chair, **Arnob Chakrabarty**, Project Director, Share-net-Bangladesh, addressed the knowledge gaps in SRHR and stressed the importance of bridging those gaps.

“

“Access to sexual and reproductive health is a fundamental right for every individual. It is our collective responsibility to prioritise and provide dedicated care and attention to those who seek assistance in SRHR services.”

- Dr Md. Anwar Hossain Howlader

Secretary, Health Service Division, MoHFW

His remarks highlighted the need for evidence-based practices and research to drive innovation and progress in the field. **Dr Sayed Rubayet**, Country Director, Ipas Bangladesh and session co-chair, advocated for comprehensive SRHR education and emphasised the need to ensure equitable access to quality healthcare for women of all ages and socioeconomic backgrounds.

In the chief guest remarks, **Dr Md.**

Anwar Hossain Howlader mentioned that access to SRHR is an essential right for every individual and it should be accessible to all. Despite the increase in healthcare facilities and manpower over the years, access to all types of healthcare has remained a challenge. He requested all stakeholders to ensure the optimal use of healthcare facilities.

Dr Shams El Arifeen, Chair of NCSRHR2023 gave the vote of thanks and concluded the session.



Joe Goodings



Md Saidur Rahman



Arnob Chakrabarty



Dr Sayed Rubayet



Dr Md. Anwar Hossain Howlader



Dr Shams El Arifeen



Excellence in SRHR Award 2023

NCSRHR2023 presented the 'Excellence in SRHR Award 2023' to two exceptional individuals for lifelong contributions to the field of SRHR in Bangladesh. The recipients of this prestigious award were **Prof. A H M Touhidul Anowar Chowdhury** and **Dr Halida Hanum Akter**.

A H M Touhidul Anowar Chowdhury

Prof. Dr A H M Touhidul Anowar Chowdhury, one of the eminent names in the field of Gynecology and Obstetrics in Bangladesh, is also popularly known as the 'teacher of teachers'. Prof. Chowdhury stood first at MBBS exam from Dhaka Medical College in 1960 and went to the U.K. for higher studies on a government scholarship and passed the Final FRCS Examination from the Royal College of Surgeons of Edinburgh. He was the director of the Institute of Postgraduate Medicine and Research and professor of Obstetrics and Gynecology department at BIRDEM .

Prof. Chowdhury served as the Vice-President of the Asia and Oceania Federation of Obstetrics and Gynecology, and was also the president of the South Asia Federation of Obstetrics & Gynecology (SAFOG). He was awarded the ATCO Gold Medal for standing First in the MBBS Examination of Dhaka University, as well as the 'Gorkha Dakshin Bahu Gold Medal', one of the highest Civil Awards of Nepal, by the King of Nepal. He was awarded Independence Day Award in medical science in 2017, the highest state award given by the government of Bangladesh.

“

“This is an overwhelming experience for me. I have been dedicated to women's health for more than 60 years, and this recognition holds a truly special place in my heart.”



Dr Halida Hanum Akhter

Dr Halida Hanum Akhter is a reproductive health epidemiologist with over 30 years of national and international experience. She is a medical graduate and obtained a membership of the College of Physician and Surgeon (MCPS), MPH, and DrPH from Johns Hopkins University. As a Rockefeller Fellow, Dr Akhter served as Epidemic Intelligence Service Officer (EIS) at the Centers for Disease Control and Prevention (CDC), Atlanta, GA. She is currently a faculty at Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland. Dr Akhter was the Founding Director of the

Bangladesh Institute of Research for Promotion of Essential and Reproductive Health Technologies (BIRPERHT) for 16 years. She was the Director General of the Family Planning Association of Bangladesh (FPAB), and founder of a grassroots-level organisation (Society for Health Promotion Links) that trains women to become community maternity practitioners in rural Bangladesh. Dr Akhter received an Outstanding JHU Alumni Award, Justus Liebig University's Developing Country Award, and the United Nation's Population Award in 2006 (Laureate in the Individual Category).

“

“I am profoundly grateful to the award committee for this incredible honour. I believe SRHR is a fundamental human rights. I look forward to the day when a girl doesn't have to leave school at 15 and be a victim of family-forced marriage.”







Scientific Session on SRHR Themes

Keynote presentations and
Discussion on Cervical
Cancer, Family Planning,
Fistula, and Key Populations
affected by HIV and AIDS

Scientific Session SRHR Themes



Professor Dr Farhana Dewan

The NCSRHR2023 Scientific Session on SRHR Themes is being chaired by **Professor Dr Farhana Dewan**, a renowned expert in Obstetrics and Gynaecology and the President-Elect of the Obstetrical and Gynaecological Society of Bangladesh. Prof. Dewan introduced the keynote speakers and provided an overview of their respective topics. The chair invited each speaker to present, summarised the key findings, and offered her recommendations. Subsequently, she opened the floor for a moderated Q&A session, allowing attendees to engage in a fruitful discussion.

Session Chair

Prof. Dr Farhana Dewan

Professor, Obstetrical and
Gynaecology

President-Elect, Obstetrical
and Gynaecological Society of
Bangladesh

Key Note Presenters

Prof. Dr Ashrafunnessa

Professor, Department of Gynecological Oncology,
Bangabandhu Sheikh Mujib Medical University

Dr Sayed Rubayet

Country Director, Ipas Bangladesh

Prof. Dr Syeba Akhter

Professor & CEO, MAMM's Institute of Fistula &
Women's Health

Dr Md. Sharful Islam Khan

Head, HIV & AIDS Programme
Programme for HIV and AIDS
Health System and Population Studies Division



A Look into the Current Status of Cervical Cancer Screening and Elimination in Bangladesh

Prof. Dr Ashrafunnessa

Professor, Department of
Gynecological Oncology,
Bangabandhu Sheikh Mujib
Medical University

“

“If we do not act now, Cervical cancer deaths will rise by almost 50% by 2040. To combat this alarming trajectory, we need to expand of availability and infrastructure for high-quality, molecular diagnostic tests for screening.”

The Government of Bangladesh has implemented efforts to address Cervical cancer through screening and elimination programmes. One such programme is the free-of-cost VIA test, which was introduced as a pilot programme at Bangabandhu Sheikh Mujib Medical University (BSMMU) in 2005. The programme was later expanded to include all district-level hospitals and maternity hospitals by 2010 and shifted from the Directorate General of Family Planning (DGFP) to the Directorate General of Health Services (DGHS) in 2012. Under this initiative, 4 million women have participated in the screening programme, and 3.6% of them have tested positive for early Cervical cancer as of now. Till now, the programme runs at 601 centres of 424 upazila complexes. Women above 30 years can participate in this programme free of cost. Additionally, commercials, billboards, and brochures are also introduced among the general

population to raise awareness. The curriculum of this programme was revised in 2014 and later in 2016, reviewed and approved by IRC. The programme has detected cervical cancer at an early stage, which allows for prompt treatment. The coverage of screened women is 20% of the target group. Those who test positive are referred to colposcopy test and treatment.

As its background, a pilot programme of HPV vaccination was conducted at Gazipur successfully in 2016, and from next year, it will be scaled up nationally. By 2018, around, 200 centers have been established at the upazila levels. The government introduced data tracking for every individual woman without any data replication by NIS and DGHS. This data tracking is also maintained in upazila and community clinics. Besides, Family Welfare Assistant (FWA) and HA SHCP staff are trained to counsel women at home.

SRHR Themes

NCSRHR2023

National
Conference 2023

SEXUAL AND REPRODUCTIVE



Family Planning Programme: Issues and Challenges



Dr Sayed Rubayet

Country Director, Ipas Bangladesh

“

“We need to work together to meet the family planning needs of the high-risk populations including slum dwellers, poor and ultra-poor, and female factory workers for a healthier, prosperous nation.”

Bangladesh is home to a population of 165 million, and around 45 million women are between the ages of 15 to 29 years old, among them, 80% are married. Until 2022, around 23 million populations had been introduced to the family planning programme. However, the ratio of stillbirth and newborn maternal mortality is still alarming. The declining readership of newspapers and listenership of radio over the years has hindered the effective promotion of the family planning programme. Mostly the family planning programme is promoted through news media. It has been estimated that the percentage of people reading newspapers declined from 7% to 3%, and radio media

dropped from 90% to 3% from the year 2007 to 2022. Thus, the family planning programme could not convey its message to the general population, and very few people received the messages. Behaviour Change Communication (BCC) approach of the 80s and 90s are still dominating in programme with mass media advertisement, IPC by FWA, and Family planning messages are not contextualised with the present need and socio-economic conditions. On the other hand, due to the success of the family planning programme, the total fertility rate (TFR) declined rapidly until the mid-nineties. From 1975 to 1994, TFR decreased significantly from 6.3 to 3.3, and from 1994 to 2011 TFR decreased from 3.3 to 2.3. But

no change in TFR from 2011 to 2023. The unmet need for contraception and the high incidence of unsafe abortions, child marriage, early pregnancy, and SGBV remains public health challenges in urban Bangladesh. These challenges are high among slum dwellers, poor and ultra-poor populations, female factory workers, youth, and adolescents. DGFP is not in a position to provide family planning service for the urban population. The Ministry of Local Government, Rural Development and Co-operatives (MoLGRDC) may take the responsibilities. The large young female workforce working in garment and knitwear factories has limited access to FP services.

Scientific Session on SRHR Themes



Fistula Elimination from Bangladesh: Way to 2030

Prof. Dr Syeba Akhter

Professor & CEO, MAMM's Institute of
Fistula & Women's Health on Fistula

Fistula is an abnormal connection of the urinary bladder/rectum with the birth passage. It occurs as a complication of neglected, prolonged and obstructed labour. 50,000 to 100,000 new cases of fistula occur worldwide each year. In Bangladesh, 42 per 100,000 women who have delivered at least once suffer from obstetric fistula, and the prevalence of obstetric fistula was around 57% among the total cases of fistula in 2021.

To effectively address the issue of iatrogenic fistula, various aspects of the condition need to be considered, including its types, prevalence, and global scenarios. Among these, it has been observed that iatrogenic fistula has the highest incidence in Bangladesh compared to some African countries. To tackle this problem,

both government and private organisations have come forward to manage fistula. Initiatives like the "Campaign to End Fistula" by UNFPA and the "Programmatic Approach" by the Ministry of Health and Family Welfare, Bangladesh launched a second national strategy to eliminate obstetric fistula. 70% of births are now attended by medically trained providers in 2022. The decline in maternal mortality due to obstetric fistula was from 7% in 2010 to 3% in 2016.

But, there are still challenges to overcome, like 30% of deliveries being conducted by untrained medical professionals, and the increase in delivery by C-section from 17% in 2011 to 45% in 2022. The rehabilitation of fistula patients also remains a challenge, with minimal support being provided. Though the government had a dedicated rehabilitation and reintegration programme from 2006-2007, it is currently

functioning at a limited capacity. To eliminate fistula, it is essential to conduct further research on female genital fistula such as increasing the availability, accessibility, and quality of EmOC services at the grassroots level, training on 'Safe surgical practice', advocacy for fistula, and intensifying the countrywide campaign.

“

“It is essential to conduct further research on female genital fistula such as increasing the availability, accessibility, and quality of EmOC services at the grassroots level, training on ‘Safe surgical practice’, advocacy for fistula, and intensifying the countrywide campaign.”



Leaving No One behind-Advancing SRHR among Key Populations (KPs): Current Status and the way forward



Dr Md. Sharful Islam Khan

Head, HIV & AIDS Programme
Programme for HIV and AIDS
Health System and Population Studies Division,
icddr,b

“

First and foremost, they are human beings, thus their dignity needs to be upheld. Any form of sustainable services is futile until and unless their human rights are protected.”

Key populations (e.g. males having sex with males, male sex workers (MSW), hijra, and female sex workers (FSW)) are predisposed to heightened risks of compromised SRHR outcomes. Despite their disproportionate burden of physical and mental health challenges, existing healthcare strategies are skewed towards addressing HIV and STI-related complexities. However, SRHR issues among key populations warrant further research and intervention, as indicated by some of the findings presented by the first round of the first-ever SRHR surveillance conducted on key populations by AdSEARCH. For example, the first round revealed that 78% of the FSW reported unintended pregnancies at least once in their lifetime, in addition to almost half of these pregnancies being aborted. Moreover, the low levels of condom

use and family planning among both FSW and the female partners of MSM highlight the need for targeted SRHR interventions for MSM and FSW. Additionally, SRHR surveillance findings underlined the glaring SRHR service gap among all groups of key populations, including wives of MSM who face exclusion from SRHR services due to patriarchal dynamics. However, this intervention gap needs to be filled considering various social determinants of compromised SRHR such as poor living conditions, limited access to health services, education, and employment, and sexual abuse. However, it cannot be possible to bridge the SRHR service gap without the comprehensive involvement of policy planning stakeholders, so that they can drive positive change in informing tailored interventions to meet

nuanced SRHR needs of key populations. Multidisciplinary studies are also paramount for garnering a holistic understanding of SRHR risks. Dr Khan highlighted social determinants affecting SRHR outcomes for key populations, advocating for specialised social, economic and structural interventions alongside biomedical approaches. Current biomedical interventions may broaden the service gap by bracketing them further into marginalisation due to their disease defining their identity. In a context where they have been fighting against poverty throughout their lives, health interventions remain secondary because “when they need food, who needs research and interventions?”, a critical question that Dr Khan posed to the audience, followed by a conclusive call for actions to immediately address SRHR issues.



Session Takeaways

- The panel recommended developing a pilot programme for Human Papillomavirus (HPV), HPV test, and VIA test to achieve the WHO elimination threshold of Cervical cancer by 2030.
- The panel recommended the implementation of an evidence-based comprehensive Social and Behavior Change Communication (SBCC) strategy for family planning, which should be continually adapted based on the learnings and changes in the needs, social context, technology, and media platforms.
- To address the issue of Obstetric Fistula (OF) and prevent its occurrence, the panel recommended the stakeholders focus on enhancing the availability, accessibility, and quality of Emergency Obstetric Care (EmOC) services at the grassroots level.
- To address the compromised SRHR among Key Populations (KPs), The panel recommended to develop comprehensive SRHR interventions that go beyond HIV-related complexities, filling the knowledge gaps, addressing social determinants, and including specific attention to MSM involving policymakers.





Scientific Session on SRHR Innovations

Showcasing and
Discussion on SRHR
innovations from a2i,
UNFPA, Ipas Bangladesh
and Share-Net Bangladesh.



Dr Yasmin H Ahmed



Md. Sayeduzzaman

The NCSRHR2023 Scientific Session on SRHR innovation is being chaired by **Dr Yasmin H Ahmed**, Independent Consultant and Advisor, Bangladesh Health Watch, and co-chaired by **Md. Sayeduzzaman**, Director and Line Director, MNC&AH, Directorate General of Health Services, MoWCA. They introduced the keynote speakers and provided an overview of their respective topics then invited each speaker to present. Following the presentations, summarised the key findings and offered their recommendations. Subsequently, they opened the floor for a moderated Q&A session, allowing attendees to engage in a fruitful discussion.

Session Chair

Dr Yasmin H Ahmed

Independent Consultant and Advisor, Bangladesh Health Watch

Session Co-Chair

Md. Sayeduzzaman

Director and Line Director, MNC&AH, Directorate General of Health Services

Key Note Presenters

Anir Chowdhury

Policy Advisor, Aspire to Innovate (a2i), ICT Division

Dr Vibhavendra Singh Raghuvanshi

Chief of Health, UNFPA Bangladesh

Dipika Paul

Senior Advisor, Research Monitoring and Evaluation, Ipas Bangladesh

Arnob Chakrabarty

Project Director, Share-Net Bangladesh



Digital Divide or Digital Opportunity? Exploring the Impact of Digitalisation on SRH Inequities

Anir Chowdhury
Policy Advisor, a2i

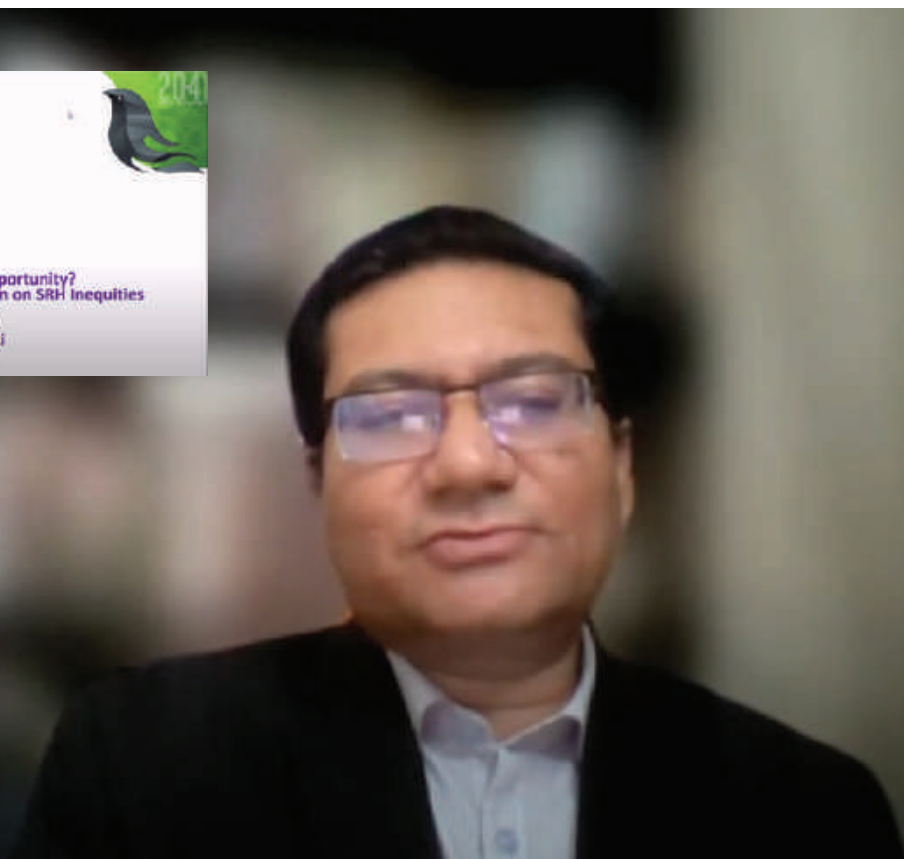
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“Bangladesh has ambitious health targets for 2041 which will require a step change in the accessibility, coverage, affordability, and quality of care.”

SRHR management in Bangladesh remains a cause for concern due to the gender gap in digital access, gender inequality, and SRH information limitations. To address these issues, a digital device ‘Muktopaath’ has been introduced in Bangladesh since 2018 which is monitored by skilled professionals and is user-friendly. The ambitious health target for Bangladesh is set for 2041, this endeavour necessitates a profound transformation in terms of accessibility, coverage, affordability, and quality of healthcare services. While various initiatives such as SRHR awareness campaigns, digital applications, and information devices have been introduced to enhance healthcare delivery, there is still a need to foster awareness regarding SRHR. Additionally, smart pregnancy monitoring systems, early pregnancy detection, tracking women's

reproductive cycles, addressing adolescent health, promoting mental well-being, and enabling reporting of gender-based violence through a centralised helpline (333) have been implemented.

To facilitate these advancements, a comprehensive approach involving cross-cutting digital technologies has been adopted, aimed at breaking down barriers, promoting integration and interoperability, and fostering coordination and collaboration. These collaborative efforts seek to strengthen SRH services and bridge the gender gap in terms of access, utilisation, and ownership of digital technologies. Moreover, the legal framework is being utilised to safeguard the rights of women and girls concerning healthcare. Prioritising mental health and well-being remains a key objective of the government's agenda.





UNFPA: In Partnership of SRHR in Bangladesh (Simple Approaches at Scale)



Dr Vibhavendra Singh Raghuvanshi

Chief of Health, UNFPA Bangladesh

“

“We need to ensure trained professionals in all healthcare facilities to safer deliveries and improved maternal and neonatal health outcomes.”

While Bangladesh has made gains in providing support services in Maternal, Neonatal, and Children's Health (MNCH) and Family Planning (FP), there are still considerable gaps and unmet needs. UNFPA is using a rights-based approach to address SRHR issues and provide maternal health, midwifery, MPDSR, obstetric fistula, FP, STI, HIV/AIDS, urban health, Cervical cancer, and health sector response to GBV. Over a period of five years, from 2018 to 2022, notable achievements have been

accomplished. These include a remarkable 36% increase in the utilisation of antenatal care (ANC) services, ensuring that more women have access to essential prenatal check-ups and support. Additionally, there has been a commendable 39% increase in the implementation of skin-to-skin care after birth, enhancing the well-being and bonding between mothers and their newborns. Another noteworthy achievement is the attainment of 100% facility coverage with skilled midwives. This ensures that trained

professionals are available in all healthcare facilities, contributing to safer deliveries and improved maternal and neonatal health outcomes. Furthermore, there has been a significant improvement in the implementation of partographs. To address the comprehensive needs of women, UNFPA has worked towards ensuring that all facilities provide ANC and postnatal care (PNC) services. UNFPA has also focused on enhancing the readiness of healthcare facilities.



Innovation on SRHR by Ipas Bangladesh

Dipika Paul

Senior Advisor, Research Monitoring and Evaluation, at Ipas Bangladesh

“

“To ensure the sustainability of family planning and menstrual regulation services providing social support on SRHR issues is crucial.”

Ipas Bangladesh is working for the sustainability of Family Planning (FP) and Menstrual Regulation (MR) in Bangladesh. The organisation is working to ensure the uninterrupted supply of essential reproductive commodities in collaboration with the government and private sector. Ipas has also taken initiatives to provide social support to SRHR issues by supporting community radio stations, organising street dramas, and developing SBCC materials. Ipas has been able to build the capacity of more than 3,600 service providers on comprehensive FP and MR, resulting in over 2 million FP and 124 thousand MR services

being provided. Ipas has been able to contribute to policy change at the national level for the betterment of SRHR conditions in Bangladesh. The Ward Model for SRHR services in urban areas is an example of this change, which was introduced to provide comprehensive SRHR services to women and adolescents in urban areas. The innovative approaches taken by Ipas in Bangladesh have played a significant role in ensuring the sustainability of FP and MR services, strengthening the health management information system, and providing social support to SRHR issues.



Innovation, not Invention



Arnob Chakrabarty

Project Director, Share-Net

Bangladesh

“

“Recognising and respecting the diversity of human experiences and needs is crucial for comprehensive SRHR advancements. By encouraging fresh approaches and creative problem-solving, innovation can help overcome challenges and promote positive change in the realm of sexual and reproductive health.”

The role of information technology and other types of initiatives can contribute to improving the SRHR condition in the country. By making small modifications within the existing structure, stakeholders can achieve a more sustainable approach to address SRHR issues. The importance of innovation, not invention, to improve the SRHR landscape in Bangladesh is very significant. Finding a solution to the problem does not always require the creation of entirely new concepts. Instead, making small modifications within existing

structures can lead to more sustainable improvements. The presentation highlighted the effectiveness of courtyard sessions, which played a vital role in reducing child marriages. These sessions likely involved community gatherings or meetings held in courtyards to raise awareness and foster dialogue. Additionally, a popular reality show called "Ritu," broadcasted on television channels, that focused on menstrual hygiene management aimed to educate and inform viewers about proper menstrual

hygiene practices is addressed in the presentation. Furthermore, importance of accepting individuals' unique identities and preferences within society is highlighted. Recognising and respecting the diversity of human experiences and needs is crucial for comprehensive SRHR advancements. By encouraging fresh approaches and creative problem-solving, innovation can help overcome challenges and promote positive change in the realm of SRHR.



Session Takeaways

- The panel strongly recommended to prioritise cross-cutting digital technologies to expand opportunities, optimise efficiency, and capitalise on cost-effectiveness in order to enhance the accessibility and quality of SRHR, additionally, fostering coordination and collaboration.
- The panel recommended the government and other stakeholders scale up partnerships, train key personnel, implement an integrated approach, provide basic SRHR services for urban poor in slums, and address gender-based violence in all healthcare centers across the country.
- The discussants recommended that organisations and researchers embrace innovative approaches and reconstruct the existing structures to drive sustainable improvements in the field of SRHR and advancing the well-being of individuals in Bangladesh.





Pioneering SRHR Solutions: The Launching of the Innovation & Evidence Hub by AdSEARCH

One of the significant milestones of NCSRHR2023 was the launch of the Innovation & Evidence Hub by AdSEARCH, which brings together 60 young researchers who will receive a year-long exclusive mentoring from more than 22 eminent SRHR experts.

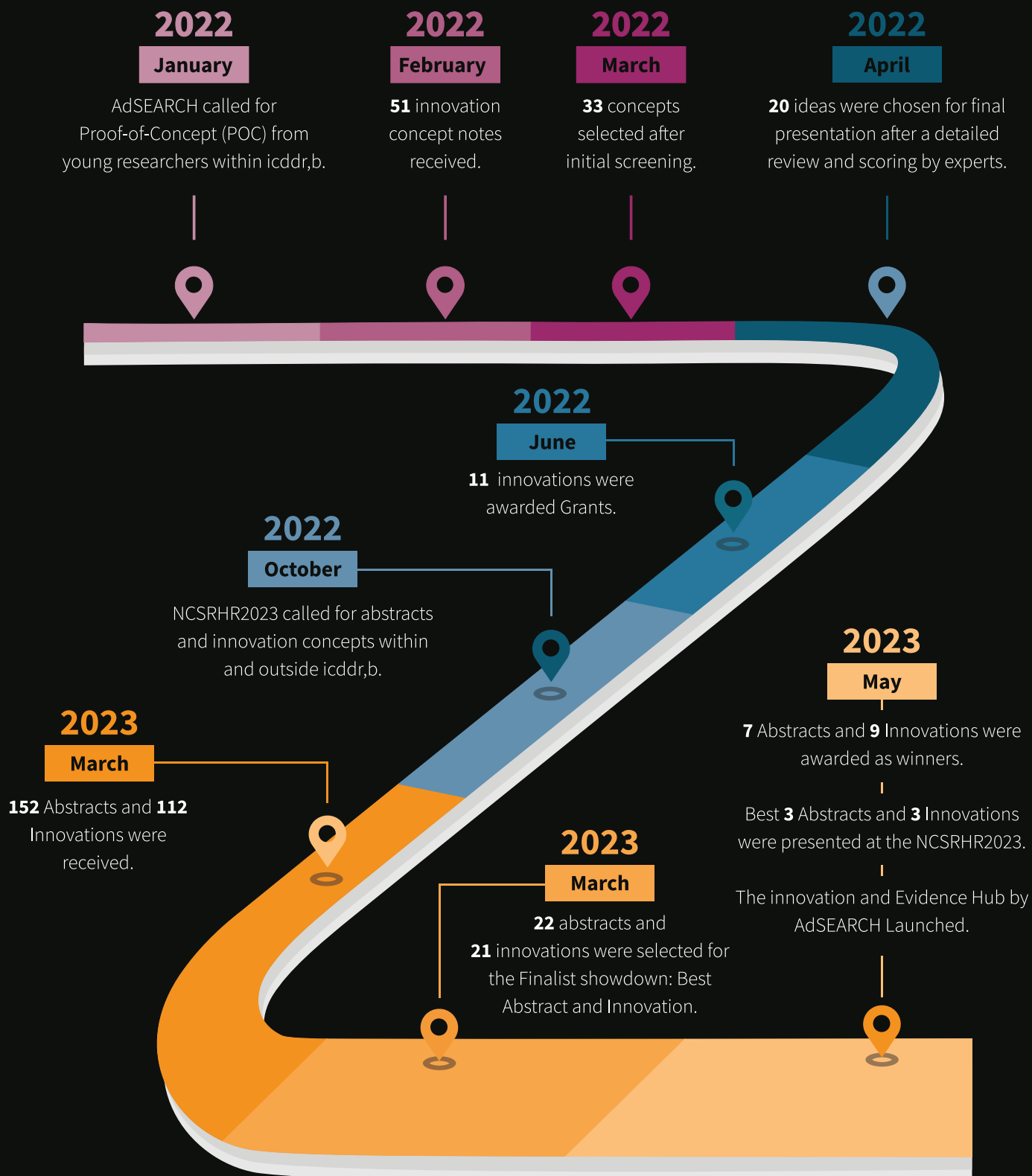
Dr Ahmed Ehsanur Rahman, Technical Coordinator of AdSEARCH, presented a brief overview of the hub and moderated the launching session

on 3 May 2023. The hub aims to create a collaborative space for researchers and SRHR practitioners to exchange expertise, promoting the advancement of SRHR. The hub is composed of Proof of Concepts (PoC) members, abstracts, and innovation finalists from the conference, as well as invaluable mentors who guide and support them.

The primary objective of the Hub is to foster innovation in the field of SRHR, with a particular emphasis on developing and testing novel products to address the diverse needs and challenges faced by different populations. The mentors possess a profound understanding of the subject matter, and their expertise is derived from both external and internal sources within icddr,b.



Fostering Innovation: A Step-by-Step Account of AdSEARCH's Journey



The Mentors - External

**Organised alphabetically by first name*



Dr AKM Nurun Nabi

Professor and Former Vice-chancellor (VC), Begum Rokeya University, Rangpur (BRUR)

Expertise: Measurement, Demography, Statistics and M&E



Dr Goutom Banik

Advisor - Newborn Health, Save the Children

Expertise: Implementation Research, Policy & Programme



Dr Jannatul Ferdous

MNCAH and Health System Specialist, UNICEF

Expertise: Implementation Research, Health System, Policy & Programme



Dr Kanta Jamil

Consultant, icddr,b

Expertise: Measurement, Statistics and M&E



Dr M A Mannan

Professor and former Chairman of the Department of Neonatology, Bangabandhu Sheikh Mujib Medical University (BSMMU)

Expertise: Health System, Policy & Programme



Dr Nazmul Alam

Associate Professor, Asian University of Women

Expertise: Epidemiology, Implementation Research and Global Health



Dr Sayed Rubayet

Country Director, Ipas Bangladesh

Expertise: Implementation Research, Health System, Measurement, Epidemiology, Policy Analysis, Program Evaluation, and Strategic Planning



Dr Sojib bin Zaman

M&E Consultant, UNFPA Bangladesh

Expertise: Implementation Research, Measurement, Epidemiology, Project Management



Dr Syed Shahadat Hossain

Professor and Former Director, Institute of Statistical Research and Training, University of Dhaka

Expertise: Measurement, Statistics and M&E, Epidemiology



Dr Tamanna Hawladar

Director and Professor, Institute of Statistical Research and Training, University of Dhaka

Expertise: Measurement, Statistics and M&E, Epidemiology



Dr Yasmin H Ahmed

Independent Consultant

Expertise: Social Science

The Mentors - Internal

**Organised alphabetically by first name*



Dr Ahmed Ehsanur Rahman

Scientist, MCHD, icddr,b

Expertise: Implementation Research, Health System, Innovation, Measurement, Epidemiology, Policy & Programme



Anisuddin Ahmed

Project Coordinator, MCHD, icddr,b

Expertise: Innovation, Implementation Research, Health System, Statistics and M&E, Epidemiology



Dr Fauzia Akhter Huda

Project Coordinator, MCHD, icddr,b

Expertise: Reproductive health



Dr Md. Mehedi Hasan

Senior Research Investigator, MCHD, icddr,b

Expertise: Measurement, Statistics and M&E, Epidemiology, Implementation Research



Dr Mohammad Jobayer Chisti

Senior Scientist & Head, Clinical Research, icddr,b

Expertise: Implementation Research, Paediatric Infectious Diseases, Paediatric Critical Care and Respiratory Medicine, Epidemiology, and Innovation



Dr Md Munirul Islam

Scientist, NCSD, icddr,b

Expertise: Implementation Research, Nutrition, Molecular Biology and Epidemiology



Dr Md. Sharful Islam Khan

Head, HIV and AIDS, HSPSD, icddr,b

Expertise: Medical Anthropology



Dr Mustafa Mahfuz

Scientist, NCSD, icddr,b

Expertise: Epidemiology, Implementation Research



Dr Quamrun Nahar

Head of Research, MCHD, icddr,b

Expertise: Social Science, Implementation Research, Epidemiology



Dr Ruchira Tabassum Naved

Emeritus Scientist, MCHD, icddr,b

Expertise: Gender studies



Dr Shams El Arifeen

Senior Scientist & Senior Director, MCHD, icddr,b

Expertise: Implementation Research, Health System, Epidemiology, Policy & Programme

The Mentees

**Organised alphabetically by first name*



Abdullah Al Rifat
Shahjalal University of
Science and Technology



Abu Bakkar Siddique
icddr,b



Abu Sayeed
icddr,b



Amina Anjum
icddr,b



Anika Tasneem Chowdhury
icddr,b



Anika Tasnim Hossain
icddr,b



Anindita Saha
icddr,b



Arpita Shyama Deb
icddr,b



Dipika Paul
Ipas Bangladesh



Esrat Jahan
icddr,b



Fahmida Hoque Rimti
Chittagong Medical College



Farha Nusrat Zahan
icddr,b



Farhana Sultana
icddr,b



Fariya Rahman
icddr,b



Golam Sarwar
icddr,b



Halima Akter Prova
icddr,b



Hassan Rushekh Mahmood
icddr,b



K M Tanvir
icddr,b



Kazi Faisal Alam
International Online
Journal Hub



Kazi Istiaque Sanin
icddr,b



Lubna Hossain
icddr,b



Md. Alamgir Hossain
icddr,b



Md. Ashiquir Rahaman
icddr,b



Md. Fozla Rabbi
icddr,b



Md. Hafizur Rahman
icddr,b



Md. Khobair Hossain
icddr,b



Md. Hasinur Rahaman Khan
University of Dhaka



Md. Lutful Kader
icddr,b



Md. Murad Alam Khan
icddr,b



Md. Shahriar Mahbub
Bangladesh University of
Health Sciences

The Mentees

**Organised alphabetically by first name*



Mehedi Hasan
icddr,b



Mehjabin Tishan Mahfuz
icddr,b



Mithun Chandra Das
Volunteer Opportunities



Moktarul Islam
icddr,b



Nahida Akter
icddr,b



Nabila Mahmood
icddr,b



Nabeel Mohammed
North South University



Nazmul Alam
Asian University for Women



Raafat Hassan
icddr,b



Rubaiya Matin Chandrima
icddr,b



Saad Shafiq Sabit
icddr,b



Sadman Sowmik Sarkar
icddr,b



Sahar Raza
icddr,b



Saiba Jannat Hossain
icddr,b



Samira Dishti Irfan
icddr,b



Sezanur Rahman
icddr,b



Shaki Aktar
icddr,b



Shadman Islam
icddr,b



Shahnaj Sultana Sathi
icddr,b



Shusmita Khan
Data for Impact (D4I),
University of North Carolina
at Chapel Hill



Somaya Mostarin
icddr,b



Sultan Mahmud
icddr,b



Sudipta Das Gupta
icddr,b



Syeda Momena Afsana
icddr,b



Syeda Shamsun Nahar
icddr,b



**Syed Sharaf Ahmed
Chowdhury**
North South University



Tamanna Majid
icddr,b



Tariqujjaman Md.
icddr,b



Tashfiha Nusrat Ruhi
icddr,b



Tanveer Khan Ibne Shafiq
icddr,b

Scientific Session on SRHR Innovations



Winners of NCSRHR2023 Best Innovations

With a focus on SRHR innovation and invention, AdSEARCH is developing and testing a wide range of novel products, ranging from ICT-based and technological innovations to behaviour, process, and health systems modifications. In continuation of this effort, NCSRHR2023 called for SRHR innovations and received 112 innovation ideas from young minds in various institutes. After undergoing rigorous two rounds of assessments conducted by both internal and external reviewers, 21 innovations were selected for the Finalist Showdown: Best Abstract and Innovation on 2 May 2023, at icddr,b Sasakawa Auditorium. At the finale, 9 best innovations were awarded for funding and top three were selected for panel session on 3 May 2023, at the InterContinental Dhaka.

Abu Bakar Siddique

icddr,b

Performance of the InSilicoVA and InterVA5 method for assessing the cause of deaths to verbal autopsies: A validation study using physician review diagnostic gold standards in a nationally representative survey in Bangladesh

Fariya Rahman

icddr,b

SafeMe: A board-game to build awareness regarding sexual health and well-being amongst adolescents in Bangladesh

Farhana Sultana

icddr,b

Feasibility trial of a model Menstrual Health and Hygiene (MHH) interventions to create an enabling environment at scale in the health systems in Bangladesh

K M Tanvir

icddr,b

Fertimeter: A free-of-cost alternative to the expensive diagnosis of polycystic ovarian syndrome and full-time tracking to reduce adverse pregnancy outcomes

Nabeel Mohammed

North South University

Meno-Chat: An assistive chatbot against menstrual problems and menopause health for women

Nazmul Alam

Asian University for Women

mHealth talk-book intervention to address SRHR issues among tea garden workers in Bangladesh

Sahar Raza

icddr,b

The “push” to stop unnecessary C-section by taking control of labour pain: TENTrol Study

Sahnaj Sultana Sathi

icddr,b

Cost-effective (home ultrasound system) mobile self-operated ultrasound system for reducing preventable stillbirth in Bangladesh

Shusmita Khan

Data for Impact (D4I)

Using learning platforms to make “Physical education” chapter of the national school curriculum more accessible

**Organised alphabetically by first name*



The Best Innovation Presenters



Farhana Sultana | icddr,b

Feasibility Trial of a Model Menstrual Health and Hygiene (MHH) interventions to create an enabling environment at scale in the health systems in Bangladesh

Over 50% of Bangladeshi women and girls use cloth as menstrual absorbents, though proper maintenance is suboptimal. The use of unhygienic absorbents leads to urogenital infections. Rather than shifting these women and girls into an environmentally unfriendly and high-cost method of using single-use disposable

pads, we developed a low-cost MHH intervention consisting of: (1) Products-Sultana-icddr,b reusable cloth pads, (2) Education-pictorial flipcharts, training manuals, comic books, (3) Maintenance-Sultana Washer and Dryer Bags to maintain cloth pads, and (4) MHH Working Group-meetings for policy

implementations/ improvements. These interventions were built on our pilot studies conducted in 8 schools, 8 RMGs, and 2 slums that demonstrated reduced absenteeism, high uptake of both products, and development of the country's very first "2021 National MHM Strategy".



Nabeel Mohammed |
North South University

Meno-Chat:
An assistive chatbot against menstrual problems and menopause health for women

Proposed by: **Kazi Rafat¹, Mohammad Junayed Hasan¹, Fuad Rahman², Nabeel Mohammed¹**

¹North South University

²Apurba Technologies

Menstrual health problems and menopause are phenomena that regularly trouble the majority of women and bring up health complications, impact routine, and disrupt everyday lifestyles. Aid to such problems, which require frequent and quick interventions, is best served when we are able to provide easy access to information both on an educational and also in finding a match with the currently available resources and services. Menstrual problems and alike are often considered taboo

to discuss, and correct help and information are hard to find, and usually provided by professionals. The innovation proposes a retrieval-augmented chatbot system, Meno-Chat, to aid menstrual health and menopause state in women, through retrieval of accurate information from reliable/relevant sources. It is a chat-based approach to provide useful and empathetic responses to menstrual problems through state-of-the-art NLP and information retrieval solutions.

Meno-Chat looks to solve the aforementioned issue by providing factual and reliable information privately, efficiently, and effectively. Meno-Chat will utilise retrieval-based methods, thus producing efficient, small, true, and non-toxic models compared to the famous and large monolithic state-of-the-art black box models that are inefficient and still produce toxic/false responses.



Sahar Raza | icddr,b

The “Push” to stop unnecessary C-Sections by taking control of labour pain: TENTrol study

Access to pain management is a human right. Labour pain is the most intense pain that women experience during their lives. However, unlike other pains, it is associated with a meaningful life experience of bringing forth life. WHO recommends providing humanised obstetric care and both pharmacological and non-pharmacological methods of pain relief for a positive childbirth experience.

Introducing Transcutaneous Electrical Nerve Stimulation (TENS) device in midwifery-led care, that will manage labour pain and increase the sense of control in women for a positive childbirth experience in health facilities. TENS is a novel, safe, non-invasive, low-cost (\$80-\$100) as well as portable, and reusable non-pharmacological labour analgesic that uses the Gate

Control Theory of pain. TENS sends low-voltage electrical impulses through electrodes placed on the lower back. It can be set up by a midwife and self-operated by the expectant mother. In 2015, Cochrane conducted a systematic review and found TENS to be effective but the evidence was weak.

Scientific Session on SRHR Themes



Winners of NCSRHR2023 Best Abstracts

On October 2022, NCSRHR2023 called for abstracts on specific SRHR themes and received 152 responses from researchers, academics, and young minds in various institutes. After assessments conducted by both internal and external reviewers, 22 abstracts were selected for the Finalist showdown: Best Abstract and Innovation on 2 May 2023, at icddr,b Sasakawa Auditorium. The seven best abstracts were awarded as winners and the top three abstracts were selected for a panel session on 3 May 2023, at InterContinental Dhaka.

Fariya Rahman

icddr,b

Menstrual Regulation Service: A success story to address inequity built over the years in Bangladesh

Mehjabin Tishan Mahfuz

icddr,b

Menstrual knowledge and practices of Bangladeshi female adolescent athletes: A baseline study

Md. Lutful Kader

icddr,b

Temporal dynamics in the prevalence, inequalities and determinants of unintended pregnancy in Bangladesh, 1994-2018: A population-based study

Md. Shahriar Mahbub

Bangladesh University of Health Sciences

Violence against children and its associated factors in an urban area of Dhaka, Bangladesh

Sezanur Rahman

icddr,b

High genotypic diversity of human papillomavirus among transgender women and sex workers in Bangladesh: Impact on vaccination strategies

Syed Sharaf Ahmed Chowdhury

North South University

Socioeconomic and geographic inequalities in using skilled birth attendants in Bangladesh over two decades.

Tashfiha Nusrat Ruhi

icddr,b

Understanding the interconnected factors driving unintended pregnancies among female garment workers in Bangladesh: A socio-ecological perspective

**Organised alphabetically by first name*



The Best Abstract Presenters



Tashfiha Nusrat Ruhi | icddr,b

Understanding the interconnected factors driving unintended pregnancies among female garment workers in Bangladesh: A Socio-Ecological perspective

Authors: **Tashfiha Nusrat Ruhi¹**, **Sultan Mahmud¹**, **Tarana Mustary¹**, **Ruchira Naved Tabassum¹**

¹icddr,b

Unintended Pregnancies (UP) remain a neglected challenge for Sexual Reproductive Health and Rights (SRHR) in Bangladesh. Around one-third of pregnancies in the country are unintended, posing a threat to women's health and well-being. Given the gravity

of the issue and its associated risks, there have been no studies that identify the multi-level, interlinked factors of unintended pregnancies among Female Garment Workers (FGWs) who are particularly vulnerable to denial of SRHR. This study aims to address

this gap by measuring the prevalence of UP among FGWs and utilising a socio-ecological perspective to comprehend the interrelated drivers across multiple levels – individual, interpersonal, occupational, and societal.



Md. Shahriar Mahbub |
Bangladesh University of
Health Sciences

Violence against children and its associated factors in an urban area of Dhaka, Bangladesh

Authors: **Md. Shahriar Mahbub^{1*}**, **Nasreen Nahar¹**, **Begum Rowshan Ara¹**

¹Department of Reproductive and Child Health, Bangladesh University of Health Sciences

*Corresponding author

Violence against children is a serious public health issue all over the globe. Though it has attracted attention in recent years in Bangladesh, there are unanswered questions about its patterns and influencing factors. In this context, this study was carried

out to investigate violence against children and its associated factors in an urban area. A cross-sectional study involving 401 respondents was conducted among children aged 10-16 years in two wards of zone-2 (Mirpur-Pallabi) of Dhaka North City Corporation. Data were

collected using a pre-tested semi-structured questionnaire. Descriptive and inferential statistical analyses were performed. Ethical guideline of Bangladesh Medical Research Council (BMRC) was followed.



Fariya Rahman | [icddr,b](#)

Menstrual regulation service: A success story to address inequity built over the years in Bangladesh

Authors: **Fariya Rahman^{1*}**, **Farhia Azrin¹**, **Dipak Kumar Mitra^{2#}**

¹Maternal and Neonatal Health, Maternal and Child Health Division, [icddr,b](#)

²Department of Public Health, School of Health and Life Sciences, North South University

*Presenting Author

#Senior Author

Bangladesh Government supports the Menstrual Regulation (MR) service through its family planning programme. In the beginning, it was only allowed as a backup for accidental conception or contraceptive failure. As years passed by it became an important component of reproductive health and rights of women in the country and contributed largely to

reducing maternal mortality and morbidity. The objective of this study is to analyse if women of all wealth quintiles have equal opportunity to take leverage of MR service over the decade. The study has employed nationally representative cross-sectional Bangladesh Demographic and Health Surveys from 2007 to 2017. For the trend

analysis, bivariate analysis was used. It also has equipped the rich-to-poor ratio and the concentration index to analyse inequity in MR utilisation by women from all wealth quintiles such as poorest, poorer, middle, richer, and richest.



The conference witnessed a fascinating display of innovation by the young Principal Investigators (PIs) of AdSEARCH. Through a Call for Proposals on February 2022, nine outstanding innovations were selected for funding and development, forming the inaugural cohort of the Innovation and Evidence Hub. On 3 May 2023, a dedicated marketplace at NCSRHR2023 showcased these innovative projects, allowing attendees to engage with the PIs, delve deeper into their work, and foster meaningful discussions. This

interactive showcase not only highlighted AdSEARCH's commitment to nurturing SRHR innovation and creating an environment that encourages exploration and advancement but also served as a catalyst for collaboration among researchers, policymakers, and stakeholders. The market hub became a vibrant space for networking, learning, and celebrating the ingenuity of young researchers in the field of SRHR, igniting new possibilities and inspiring future breakthroughs.



Scan the QR code
to learn more



Launching of the *Mukhorito* App



Know more
about Mukhorito

At NCSRHR2023, AdSEARCH proudly launched the mobile-based application, *Mukhorito*. Developed to enhance school-based adolescent health programmes, *Mukhorito* facilitates peer communication and interaction and is one of the nine AdSEARCH PoCs. The launching ceremony, moderated by **Tanvir Hayder**, featured a compelling promo video showcasing the app's features. The event was graced by **Dr Shamsul Hoque**, PM, Adolescent Health Programme, DGHS; **Md. Aman Ullah**, the DPM, Adolescent Health Programme, DGHS; and

Md. Mazharul Huq Masud, Assistant Director, Directorate General of Secondary and Higher Education (DSHE), who emphasised the significance of addressing the health needs of adolescents. *Mukhorito* empowers students by providing a platform for peer leaders to organise formal sessions on SRHR, while also enabling adolescents to address their physical and mental health concerns. It fosters connectivity among students, peer leaders, and teachers, promoting discussions and support for adolescent health and rights.

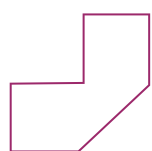
The Discovery Zone

Around 70 posters were displayed in the Discovery Zone, representing abstracts and innovations in the field of SRHR. These posters effectively showcased a wide range of

topics and allowed researchers to present their innovative ideas. Attendees actively engaged with the posters, appreciating the novel concepts and research findings. It

provided an opportunity for researchers to receive feedback, recognition, and establish connections within the SRHR community.



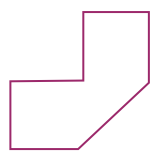


Launched to Drive Advances in SRHR: The Inauguration of the Innovation and Evidence Hub

In continuation of the hub launching, on 29 May 2023 at icddr, Sasakawa Auditorium, AdSEARCH by icddr, inaugurated its yearlong Innovation and Evidence Hub programme. Researchers, partners, mentors, finalists, and other SRHR stakeholders experienced this Inauguration ceremony and the first networking event of the Hub. The event commenced with a warm welcome speech by **Dr Quamrun Nahar**, Deputy

Project Director of AdSEARCH. **Dr Ahmed Ehsanur Rahman**, Technical Coordinator of AdSEARCH provided an enlightening overview of the hub's objectives, operational plan, committee, and contact details. The hub identified over 60 mentees from the pool of Best Abstracts and Best Innovation contest finalists and reviewers, and 22 external and internal mentors. On that day, the winners and finalists of the NCSRHR2023

were acknowledged and presented with crests and certificates. This recognition served to highlight their contributions to advancing SRHR. The event concluded with a vote of thanks delivered by **Anisuddin Ahmed**, Project Coordinator, AdSEARCH by expressing gratitude to all participants, partners, and stakeholders for their support and commitment.



Charting the Road Ahead for SRHR: The Conference Closing

The closing session marked the conclusion of NCSRHR2023 that brought together experts, practitioners, and stakeholders from various sectors.

The conference concluded with the closing remarks delivered by **Farzana Sultana**, representative of GAC, highlighted the significance of the conference as a platform for learning, knowledge creation, and innovation. She commended NCSRHR2023 as a valuable gathering of individuals passionate about advancing sexual and reproductive health and rights. She also emphasised this conference provided an excellent opportunity for attendees to learn and gain new knowledge. The exchange of ideas, research findings, and best practices contributed to the generation of new knowledge in the field of SRH, she focused on the importance of reaching a wider audience. The remarks highlighted the need to expand the conference's reach and involve more partners.

In his closing remarks, the conference chair **Dr Shams El Arifeen** thanked everyone and expressed gratitude for the successful conclusion of NCSRHR2023. He highlighted the important work of AdSEARCH in generating high-value evidence and fostering innovations in the field of SRHR. He acknowledged the overwhelming response to the call for abstracts and innovative ideas. The chair thanked the participants for their contributions and emphasised the diverse range of knowledge, experiences, and expertise brought to the conference. Gratitude was also expressed to GAC for their support and commitment, as well as to event partners Ipas Bangladesh and Share-Net Bangladesh for their collaboration. He concluded by

urging participants to carry forward the knowledge gained and continue fostering innovation and evidence-based approaches to advance sexual and reproductive health and rights for all.

“

“I hope that in the future, we can arrange it on a larger scale, reaching a wider audience, and involving more partners.”

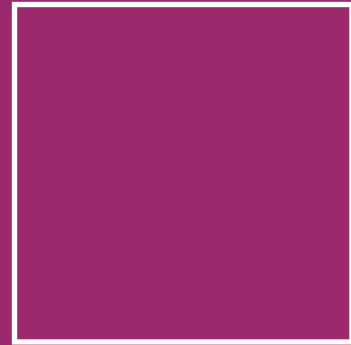
Farzana Sultana

Development Advisor at High Commission of Canada to Bangladesh



Through the Lens





NCSRHR2023 Best Abstracts



Male Adolescents' challenges and sufferings regarding SRHR knowledge: A study in urban slum, Sylhet, Bangladesh

Male adolescent rely on information only their peer group with similar social context and keeps it secret from parents due to shyness and fear of stigma.

Presenter: **Abdullah Al Rifat¹**

Authors: **Muhammad Salim Miah¹, Navila Kawsar¹, Abdullah Al Rifat¹**

¹Shahjalal University of Science and Technology

Adolescence requires special attention due to encountering numerous health challenges during the transition to adulthood. These challenges include limited access to Sexual and Reproductive Health Rights (SRHR) information and services, especially for those living in poverty in slum areas in Bangladesh. Most studies primarily focus on adolescent girls, resulting in less research on boys' perceptions. In the context of slum cultures, this lack of research creates increased vulnerability.

Health disparities that arise in particular institutional, social, and economic settings are frequently framed by critical medical anthropology. Therefore, this study aims to explore the social sufferings of male adolescents in gathering SRHR information in urban slums in Sylhet. The study adopted a qualitative research design, conducting a total of two Focus Group Discussions and 19 In-depth Interviews to collect data from adolescent boys, following the data saturation principle. The findings indicate that their peers, who share a similar social context, are their only reliable source of knowledge for sharing and acquiring information. Consequently, they tend to keep it a secret from their parents and other family members due to shyness and fear of stigmatisation if they discuss it with others. Scarcely any formal institutions (have been found in the study playing a role in disseminating such knowledge among adolescent boys. This analysis depicts that socioeconomic and institutional barriers are forcing them towards health inequalities.

Weights documentation practice in a Special Care Newborn Unit (SCANU) in Bangladesh

The study revealed a conspicuous digit preference for the final digit in recorded weights.

Presenter: **Abu Sayeed, icddr,b**

Author: **Abu Sayeed, icddr,b**

Weight holds pivotal significance in evaluating the overall health and well-being of newborns. Precise weight documentation plays a crucial role in medical assessments and tracking developmental milestones. This study aimed to evaluate the weight documentation practices within a Special Care Newborn Unit (SCANU) in Bangladesh. It encompassed neonates admitted to SCANU between January and December 2022 at a district hospital in Bangladesh, involving data extraction from the SCANU register, comprising information on 832 neonates.

The assessment of weight documentation practices primarily focused on digit preferences. Upon scrutiny of the SCANU register, it was evident that weights were recorded against three variables for each neonate: birth weight, weight at admission, and

weight at discharge. Notably, birth weights were recorded for 97% of neonates, while weights upon admission to SCANU were recorded for 98% of neonates. However, weights at discharge were documented for only 32% of the neonates. Healthcare professionals consistently recorded weights in grams, typically utilizing 4 digits. A distinct trend emerged in the recorded birth and admission weights, with 95% and 94% of neonates' weights ending in "zero" and 4% and 5% ending in "five," respectively. Strikingly, for recorded weights at discharge, all neonates had weights ending in either zero or five. This study underscored a prevalent tendency among healthcare professionals to round off newborns' weights to figures ending in "zero" or "five." Addressing this digit preference is pivotal for enhancing the accuracy of weight data measurement and recording. Future investigations integrating qualitative methodologies and direct observations can offer deeper insights into the underlying reasons for rounding and digit bias, thereby facilitating improvements in weight documentation practices.

Birth preparedness and complication readiness among pregnant women of hazard-prone areas of Southern Bangladesh: A cross-sectional study

Among all the eligible pregnant women from the Family Welfare Assistant (FWA) registers in their last trimester of pregnancy, only 16% had blood donors ready.

Presenter: **Anika Tasneem Chowdhury¹**

Authors: **Ahmed Hossain¹, Shams El Arifeen¹, Anika Tasneem Chowdhury¹**

¹icddr,b

Birth preparedness and complication readiness (BPCR) is one of the key interventions to increase maternal healthcare services. This study aimed to understand the BPCR status of pregnant women in the southern part of Bangladesh where natural calamities lower the institutional service uptake.

All the eligible pregnant women from the FWA registers were invited among which 572 respondents in their last trimester of pregnancy consented to participate in the study. Among the 572 respondents, 7% planned all components of BPCR, 75% decided their place of delivery, 55% identified birth attendants, 40% arranged transport, 28% saved money, and 16% had blood donors ready. 60% of the respondents were counseled on institutional delivery during their ANC visits, among them 72% decided to comply. Around half of the respondents perceived institutional delivery as only necessary if any complication arises. Perception of institutional delivery, counseling during ANC, knowledge of maternal danger signs, and place of previous delivery were statistically significant factors behind the choice of facility delivery among the respondents. Policymakers, facility managers, and healthcare providers should emphasise the achievement of improved coverage of all the components of BPCR to increase institutional deliveries, and combat birth-related complications proficiently in the hazard-prone areas of Southern Bangladesh.

Overcoming the challenges of long transportation time of samples in culturing *Neisseria gonorrhoeae* (NG)

Direct on-site inoculation on MTM medium and transportation in an anaerobic jar will help to increase the revival rate of Neisseria gonorrhoeae from key populations of different districts of Bangladesh.

Presenter: **Arpita Shyama Deb¹**

Authors: **Arpita Shyama Deb¹, Muntasir Alam¹, Md. Fakhruddin¹, Md Saiful Islam¹, Mst. Noorjahan Begum¹, Golam Sarwar¹, Md. Masud Reza¹, Muhammad Manwar Morshed Hemel¹, Sharful Islam Khan¹, Mustafizur Rahman¹**

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Neisseria gonorrhoeae (NG) is historically related to poor recovery in culture, especially in less-resourced settings when transport and/or layover time is unavoidable. We aimed to evaluate two specimen transportation methods for the isolation of NG from key populations, i.e. male sex workers, transgender women, and female sex workers. Anorectal, oropharyngeal, and cervical swabs were collected following the standard method. Initially, specimens were collected from Dhaka and Jessore districts (~ 200 Km away from Dhaka) and transported to the icddr,b laboratory (at Dhaka) within 6-8 hours of collection in Amies charcoal Transport Medium (ATM) (n = 451). The samples arrived late at night and were inoculated into the Modified Thayer-Martin (MTM) medium the next morning, which required an additional 8-9 hours of layover time. The incubation condition was 35°C in CO₂ enriched atmosphere for at least 48 hrs. Since NG remained undetected for 451 samples collected in Amies transport medium, we used an alternative strategy where specimens were directly inoculated onto MTM medium on-site and transported in anaerobic jars. After arrival in the laboratory at night, the anaerobic jars with plates were immediately placed inside the incubator. 388 samples were evaluated by both strategies and NG was identified using direct on-site inoculation method. Following the observation of the outcome, the direct on-site inoculation approach was continued. Suspected NG colonies were selected for Gram's staining, followed by oxidase and catalase tests and were further confirmed by the Vitek-2 system.

Measuring the readiness and functionality of health facilities to provide Sexually Transmitted Infection (STI) services in Bangladesh: Evidence from Bangladesh Health Facility Survey (BHFS) 2014 and 2017

There has been an overall decline in the readiness and functionality of health facilities to provide Sexually

Presenter: **Esrat Jahan¹**

Authors: **Anindita Shaha¹, Esrat Jahan¹**

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STIs represent a global public health burden. The World Health Organization's global strategy on STIs states the objective of reducing the incidence of syphilis and gonorrhea by 90% by 2030. Bangladesh is adhering to the strategy as mentioned in the "National Guidelines for Management of STI 2019". The Newborn Essential Service Package of Bangladesh states that the provision for STI services is available from the

Transmitted Infection (STI) services.

union to the district level. The objective of this paper is to assess the readiness of health facilities to provide STI services in Bangladesh.

Secondary analysis was done using the nationally representative BHFS 2017 and 2014. A total of 1524 and 1548 facilities were surveyed in 2017 and 2014 respectively. Analysis was done for three components- training capacity of healthcare providers, availability of diagnostic facilities, and availability of medicines and commodities. STATA 15 was used to do for data analysis.

There has been an overall decline in the readiness and functionality of health facilities to provide STI services. The BHFS does not have questions regarding gonorrhea diagnosis. Urgent action is required to upgrade the condition of health facilities in providing STI services in order to meet the global strategy's timeline by 2030.

Breaking the Silence: Exploring Menstrual Hygiene Management (MHM) and male involvement in coeducational high schools in Dhaka, Bangladesh

*82% of females
use
sanitary-pads,
with 42%
changing less
frequently than
recommended,
males exhibit
limited
knowledge of
MHM but can
play a role in
fostering a
supportive
environment for
girls.*

Presenter: **Kazi Faisal Alam¹**

Authors: **Kazi Faisal Alam¹, Moktarul Islam¹, Zaedul islam¹, Farha- Naj Hossain¹, Ehsan Ahmed¹, Tuhin Akhter¹, Kariul Islam¹**

¹International Online Journal Hub (IOJH)

Menstrual Hygiene Management (MHM) is crucial for the health and well-being of adolescent girls, yet it remains a taboo subject in many cultures. In Bangladesh, cultural norms and lack of access to MHM resources have been identified as major barriers to menstrual health. The objective of this study was to explore MHM practices and the role of male engagement in coeducational high schools in Dhaka, Bangladesh.

This cross-sectional study was conducted in three coeducational high schools in Dhaka, Bangladesh. A survey was administered to 300 students (150 girls and 150 boys) in classes 9-12 to collect data on MHM practices, knowledge, and attitudes. Additionally, 20 in-depth interviews were conducted with female students, male students, and teachers to gain a deeper understanding of MHM practices and the role of male engagement.

The survey results showed that the majority of female students reported using sanitary pads (82%) as their primary menstrual product, but 42% reported changing them less frequently than recommended. Male students had limited knowledge of menstrual hygiene management and were generally uncomfortable discussing the topic. However, male involvement was identified as crucial for creating a supportive environment for girls to manage their menstruation with dignity and without shame. The interviews revealed that male students and teachers could play an important role in supporting MHM through awareness-raising activities, provision of resources, and advocacy for policy change.

Implementation of WHO Robson Ten Group Classification to optimise the C-section rates in 8 district hospitals in Bangladesh

A comprehensive integrated intervention package significantly decreased the overall unclassified group of the Robson Ten Group Classification System from 38% to 27% to 8%.

Presenter: **Lubna Hossain¹**

Authors: **Hassan Rushekh Mahmood¹, Md. Abu Bakkar Siddique¹, Farhia Azrin¹, Md. Mahiur Rahman¹, Haroon Bin Murshid¹, A K M Mahmudul Hassan¹, Sabrina Jabeen¹, Shams El Arifeen¹**

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Rising rates of Cesarean section (C-section) are a serious public health problem that is causing international discussions due to the potential risks to mothers and newborns, disparity in access, and the difficulties associated with cost. Aim of this study was to implement the Robson Ten Group Classification System (TGCS), analyse and interpret the obstetric data of 8 District Hospitals (DHs) of Bangladesh according to Robson TGCS. In September'21, during the Covid-19 pandemic, Robson TGCS was implemented in eight DHs. One online and two rounds of face-to-face were conducted at all facilities, along with ongoing data monitoring to improve data quality and reduce the percentage of unclassified records throughout the study period. A total of 20,441 mothers gave birth during the study period, with 4,750 deliveries assisted by CS. Following face-to-face training, the overall unclassified group decreased significantly, from 38% (Sep'21-Apr'22) to 27% (May'-Jul'22) to 8% (Aug'22-Dec'22). Gaibandha DH demonstrated the most improvement, declining from 59% to 11.7% to 0.7%, while Bhola DH's improvement varied from 32.7% to 13.6% to 25.5%.

Post data quality improvement, the overall CS rate was 23.8% (Aug'22-Dec'22), with 19.9% attributed to groups 2(Nulliparous, term, induced/pre-labour C-section), 4(Multiparous, term, induced/pre-labour CS), and 5(Multiparous, previous CS). However, despite contributing only 1.2% to the CS rate, groups 1(Nulliparous, term, spontaneous) and 3(Multiparous, term, spontaneous) comprised 64.6% of the study's women. Bhola DH exhibited the lowest C-section rate (4.2%), in contrast to Bogura DH, recording the highest (61.7%).

Evidence generated from the study will help National-level policymakers, professional bodies, and other stakeholders develop strategies to optimise the C-section.

Young maternal age at first birth and child undernutrition in Bangladesh: Evidence from Bangladesh Demographic Health Survey (BDHS) 2017-18

Compared to the children of older mothers, the stunting, wasted, and underweight were 1.5, 1.6, and

Presenter: **Md. Alamgir Hossain¹**

Authors: **Md. Alamgir Hossain¹, Md. Tariqujjaman¹, Novel Talukder¹, Rubaiya Matin Chandrima¹, S.M Hasibul Islam¹, Md. Abu Bakkar Siddique¹, Mahfuzur Rahman¹, Anika Tasnim Hossain¹**

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In LMICs, it is projected that 21 million girls between the age of 15-19 years will become pregnant, about 12 million will give birth, and roughly 45% of under-five children will die

1.4 times higher for children whose mothers were under 19 years old.

from malnutrition. Giving birth at a young age is common in Bangladesh, which has an adverse influence on nutrition and health. This study examined the relationship between young maternal age at first birth and child undernutrition in Bangladesh.

Data extracted from the Bangladesh Demographic and Health Survey (BDHS) 2017-18. Mothers aged ≤ 19 at their first childbirth were considered younger mothers, >19 were considered adult mothers. According to the median of WHO Growth Standards, children with Z-scores for stunting, wasting, and underweight below -2 SD were considered malnourished. Children with Z-scores below -2 SD were classified as stunted (height-for-age), wasted (weight-for-height), and underweight (weight-for-age) respectively. A multivariate logistic regression model was used to examine the association between young maternal age at first birth and child undernutrition of under-five children.

We found that 71.5% of mothers gave their first birth at an age below 19 years. The undernutrition status of the children of younger mothers and the children of adult mothers was significantly different—stunted ($p<0.001$), wasted ($p=0.008$), and underweight ($p<0.001$). Children born to mothers under 19 were 1.4, 1.6, and 1.5 times more likely to be stunted, wasted, and underweight, respectively, compared to the children of older mothers.

Being pregnant is not my choice: The story behind the social norms of rural women's pregnancy decisions

Normative expectations were the main factor influencing women whether they accepted their husband's wishes or refrained from having children.

Presenter: **Md. Khobair Hossain¹**

Authors: **Md. Khobair Hossain¹, Md. Rashidul Azad¹, Md. Hafizur Rahman¹, Tarana Mustary¹, Md. Kamal Pasa¹**

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Historically poor autonomy prevents women of Bangladesh from making decisions about their own bodies that may affect their health and well-being. However, how specific social beliefs support norms potentially disempowering women from making reproductive decisions has not been adequately studied. The Research aims to understand which social beliefs prevent mothers from participating in reproductive decision-making. A qualitative study among married women in Ukhiya, Cox's Bazar in 2022 was conducted.

From the study, most women accepted their husband's decision to conceive immediately after marriage despite their empirical expectation that every woman should conceive within the first 6–12 months of their marriage. They also expected that every husband should allow women to have a birth interval of 2-3 years between the first and second child. However, many of them became pregnant within 3 months and had abortions. Normative expectations were the main factor influencing women whether they accepted their husband's wishes or refrained from having children.

This study suggests that reproductive empowerment programs should devise social norm interventions that influence families to ensure women's rights in reproductive decision-making.

Temporal dynamics in the prevalence, inequalities and determinants of unintended pregnancy in Bangladesh, 1994-2018: A population-based study

Various factors, including early marriage, employment status, wealth status, religion, spousal disagreement on family planning, and higher parity, contribute to unintended pregnancy in Bangladesh.

Presenter: **Md. Lutful Kader**, icddr,b

Author: **Md. Lutful Kader**, icddr,b

Identification of trends and modifiable factors of unintended pregnancy (UP) are essential to revisit policies and customise maternal health programmes. We explored the temporal dynamics of prevalence, inequalities, and determinants of UP in Bangladesh. We analysed 8 rounds of population-based, nationally-representative Bangladesh Demographic and Health Survey data collected during 1993-2018. We applied multivariable binary logistic regression and calculated the concentration index (CI). Analysis included 36,937 women aged 15-49 years. In 2018, 21.1% of pregnancies were unintended in Bangladesh, highest in Khulna division (25.9%). During 1994-2018, UP reduced from 32.5% to 21.1% (average annual rate of reduction, AARR 1.7%). This decline was greater among richest (AARR 3%) than poorest (AARR 0.4%), urban (AARR 2.6%) than rural (AARR 1.5%), secondary+ (AARR 2.3%) than ≤primary (AARR 0.5%) education, and adult (AARR 2.3%) than adolescent (AARR 1.5%) marital age. However, gaps in UP have widened between the poorest and richest (1994: poorest 29.9%, richest 32.7%, gap -2.7%; 2018: poorest 23.8%, richest 16.8%, gap 7%), ≤primary and secondary+ educated (1994: ≤primary 32.1%, secondary+ 31.6%, gap 0.5%; 2018: ≤primary 26.4%, secondary+ 18.1%, gap 8.3%) and retained between women's marriage at adolescence and adulthood (1994: adolescent 32.1%, adult 28.9%, gap 3.1%; 2018: adolescent 21.4%, adult 17%, gap 4.4%) women. UP was disproportionately distributed among the pro-poor and deepening over time (CI: 2004: -0.04, 2007: -0.05, 2011: -0.12, 2014: -0.17, 2018: -0.09). Women's marriage at adolescence, working women, poorest wealth status, Muslim religion, spousal discordance on fertility preference, and women with higher parity were associated with a greater likelihood of UP in Bangladesh. These factors varied over time.

Perceived mental stress and associated factors: A comparison between employed and unemployed infertile women in Bangladesh

56% of employed and 44% of unemployed infertile women reported high mental stress, with an insignificant

Presenter: **Moktarul Islam¹**

Authors: **Moktarul Islam¹, Mohammad Delwer Hossain Hawlader²**

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Infertility is one of the most stressful conditions for couples who desire children. A study found that 15.2% suffered from mental stress along with an infertility condition. In Bangladesh, infertility is a growing problem that can have emotional, psychological, and social impacts on women.

difference.
Infertility can significantly impact women's mental health, regardless of employment status.

A hospital-based comparative cross-sectional study was carried out among 61 employed and 61 unemployed infertile women aged between 20 and 49 years who attended two health facilities in Dhaka between March and December 2022. Data on socio-demographic and infertility-related factors, as well as perceived mental stress (assessed using the PSS-10 scale), were collected through face-to-face and self-reported methods, respectively.

The study found that 56% of employed and 44% of unemployed infertile women reported high levels of perceived mental stress (PSS score >20 out of 40), with no significant differences ($p = 0.127$) between the two groups. Marriage age ($p = 0.011$), total family income ($p = 0.001$), duration of trying to get pregnant ($p = 0.022$), place of residence ($p = 0.017$), history of gynecological surgery ($p = 0.014$), and facing problems in treatment ($p = 0.041$) were identified as factors associated with perceived mental stress.

Menstrual knowledge and practices of Bangladeshi female adolescent athletes: A baseline study

Around 19% of participants reported taking oral contraceptive pills to delay or stop their menstrual cycle, especially during competitions.

Presenter: **Mehjabin Tishan Mahfuz¹**

Authors: **Mehjabin Tishan Mahfuz¹, Nishantika Neeher¹, Sudipta Das Gupta¹**
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Menstrual irregularities are reported to occur more frequently in female athletes, particularly at the professional level. High physical obligations, insufficient recovery, chronically poor nutrition, and the psychological pressure to perform better are all possible causes. Little research exists to understand adolescent athletes' lifestyles, health-related practices, challenges, and psychological states. This gap is more prominent in low-middle-income countries where the health of female athletes is mainly neglected. A cross-sectional quantitative survey was conducted on adolescent female athletes at Bangladesh Krira Shikkha Protishtan (BKSP). A structured questionnaire was used to collect the baseline data by trained data collectors. Descriptive analysis was performed to determine female adolescent athletes' menstrual knowledge and practices. A total of 58 students were included in the analysis with an average age of 16 ± 1.36 (SD), and they were primarily involved in sports like cricket, football, swimming, athletics, and hockey. For 90% of the respondents, the source of information about menstruation was family, and 62% were from friends. All the respondents use sanitary pads; about 91% reported using sanitary pads, and 9% (Swimmers) reported not using any product during tournaments. Around 19% of participants reported taking oral contraceptive pills (OCP) to delay or stop their menstrual cycle, especially during competitions.

Socioeconomic inequalities of Low Birth Weight and its association with Maternal Dietary Diversity: Results from Maternal Infant and Young Child Nutrition Programme in Bangladesh

Low Birth Weight (LBW) is highly concentrated among the poorest (16%) compared to the richest (10%), and adolescent mothers with inadequate dietary diversity had a significantly higher chance of giving LBW babies.

Presenter: **Md. Tariqujjaman¹,**

Authors: **Md. Tariqujjaman¹, Mahfuzur Rahman¹, Gobinda Karmakar¹,
Mustafa Mahfuz¹, Tahmeed Ahmed¹, Haribondhu Sarma²**

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Globally, every year, 20 million children are born with weight below 2500 grams, considered Low Birth Weight (LBW). About 90% of these births are taking place in low-and middle-income countries. Information regarding the socioeconomic inequalities of LBW is scarce in rural areas in Bangladesh. We aimed to explore the socioeconomic inequalities of LBW of under-five children and its association with maternal inadequate dietary diversity in rural areas of Bangladesh.

We extracted data from a large-scale evaluation programme conducted between 2014 to 2018, as a part of the Maternal Infant and Young Child Nutrition program Phase 2 in Bangladesh, implemented by BRAC. We used the Concentration Index (CI) to measure the socioeconomic inequalities of LBW. Cluster-adjusted multiple logistic regression analysis was performed to determine the association between LBW and maternal dietary diversity. A total of 4,651 under-five children with their mother's information were included. The overall prevalence of LBW was 13.5%. About 16% of mothers living in the poorest wealth quintile gave birth to LBW babies, whereas the prevalence was 10% among mothers who lived in the richest households. The CI showed that LBW babies were more prevalent among the socioeconomically worst-off (poorest) group (CI = -0.08) indicating mothers of the poorest households are vulnerable. An adjusted multiple logistic regression model indicated that mothers with inadequate dietary diversity had higher odds (AOR: 1.35; 95% CI: 1.13, 1.62) of giving birth to LBW babies. In the interaction of mothers' age and dietary diversity, we found adolescent mothers with inadequate dietary diversity had 3.5 times higher odds of giving LBW babies compared to adult mothers who consumed diversified foods.

Media access and Maternal Healthcare Service utilisation in Bangladesh: An evidence from BDHS 2017-18

Access to media increased the likelihood of women attending four Antenatal care visits five times with at least one by medically trained providers.

Presenter: **Mehedi Hasan**, icddr,b

Author: **Mehedi Hasan**, icddr,b

Exposure to media such as television, radio, and newspapers allows for easy information provision. In Bangladesh, the utilisation of Maternal Health Services (MHS) like Antenatal Care (ANC) visits, Postnatal Care (PNC) visits and facility delivery remains unsatisfactory despite the multitude of efforts. Therefore, understanding the relationship between women's media access and MHS utilisation is essential in developing effective interventions to improve women's health behaviours.

This study examined reproductive and media data from 5,304 ever-married women from the 2017-18 Bangladesh Demographic and Health Survey. Logistic regression was used to investigate the relationship between women's media access and their use of MHS, which included antenatal and postnatal care by medically trained providers (MTP), and facility delivery.

After adjusting for confounding factors previously found to be significantly associated with MHS utilisation across literature including the respondent's educational status, wealth index, place of residence, and occupation along with husband's educational status and occupation, it was found that women who were exposed to all three media were more likely to attend and utilise MHS services. Access to all three media increased the likelihood of women attending four ANC visits with at least one by MTP five times (95% CI=1.441, 15.023), PNC within 48 hours of birth by MTP (95% CI:1.56, 5.027) and facility delivery three times (95% CI= 1.612, 5.219) respectively, compared to those with limited or no access.

Teenage pregnancy among female garment workers: Magnitude, decision-making and drivers

Female Garment Workers (FGWs) who did not experience teenage pregnancy despite being married during adolescence could do so because their husbands wished to delay it.

Presenter: **Raafat Hassan¹**

Authors: **Raafat Hassan¹, Aklima Akter¹, Mahfuz Al Mamun¹, Ruchira Tabassum Naved¹**
¹icddr,b

Worldwide, an estimated 18 million teenage pregnancies occur each year. Employment is hypothesised to provide females with a life trajectory free from child marriage and teenage pregnancy. However, literature on this topic is scarce. This mixed-method paper examines the aspirations of female garment workers (FGWs) in Bangladesh regarding the timing of their first pregnancy, the magnitude and drivers of teenage pregnancy, and decision-making.

Data for this analysis were obtained from the first round of a mixed-method longitudinal cohort study of FGWs aged 15-27 years, residing in two slums covered by icddr,b's Urban

Health and Demographic Surveillance System under Dhaka and Gazipur city corporations. The data were collected through 40 In-depth Interviews and 9 KIIs. During the data collection, all FGWs were aware of at least one adverse effect of teenage pregnancy, and many did not aspire to have a teenage pregnancy. The majority of the FGWs, 71% had child marriages, and 45% conceived before reaching the age of 20. Factors contributing to teenage pregnancy were a lack of knowledge about its adverse effects at the time of marriage, a lack of knowledge about contraceptives, and a lack of agency. Husbands dominated decision-making regarding pregnancy. Thus, FGWs who did not experience teenage pregnancy despite being married during adolescence could do so because their husbands wished to delay it.

Strengthening maternal health services in Bangladesh: An assessment of UH&FWs' readiness to diagnose Pre-Eclampsia and Eclampsia

One-fifth of the total UH&FWC's hardly had tools to test protein in urine. Only 25% of healthcare providers had received training, whereas only 36% of UH&FWC's have at least one trained staff on Pre-Eclampsia/ Eclampsia (PE/E).

Presenter: **Sadman Sowmik Sarkar¹**

Authors: **Sadman Sowmik Sarkar¹, Sabit Saad Shafiq¹, Md. Ashiquzzaman¹**

¹icddr,b

Hypertensive disorders (pre-eclampsia and eclampsia) in pregnancy accounts for 10-15% of maternal deaths worldwide and are the second leading cause of maternal deaths in Bangladesh, rising from 39 in BMMS 2010 to 46 per 100,000 live birth in 2016. Early detection and treatment can prevent maternal and fetal complications. Bangladesh's primary healthcare facility, the Union Health and Family Welfare Center (UH&FWC), delivers about 20,000 normal births per year. This study aims to evaluate the trend of UH&FWCs' readiness and diagnostic preparedness to diagnose and refer PE/E cases to higher facilities.

This study analysed BHFS data from 2014 and 2017, and will also use the 2022 data once it is available, to evaluate trends from 2014 to 2022. The sample included 1,508 and 1,506 healthcare facilities, with UH&FWC's comprising 266 and 250 (weighted) in 2014 and 2017, respectively. Our outcome variables focused on the availability of manual BP apparatus with stethoscopes or only digital BP apparatus in outdoor or ANC corner or delivery corner and urine dipstick protein tests in diagnostics or urine protein tests in ANC corner. We also evaluated healthcare providers' knowledge of PE/E using the BHFS 2017. Bivariate analysis was performed to assess diagnostic and referral readiness.

We found that most UH&FWC's had the necessary equipment for diagnosis of PE/E, with 89.37% in 2014 and 93.85% in 2017 having either a stethoscope and manual BP apparatus or at least one digital BP apparatus. However, a small percentage had tools to test protein in urine with 16.93% and 22.20% in 2014 and 2017, respectively. Moreover, only 24.68% of healthcare providers had received training on PE/E. In addition, only 36.15% of UH&FWCs have at least one trained staff in PE/E.

High genotypic diversity of human papillomavirus among transgender women and sex workers in Bangladesh: Impact on vaccination strategies

Among Human Papillomavirus (HPV) - positive participants, half had HPV types not covered by current vaccines.

Presenter: **Sezanur Rahman¹**

Authors: **Sezanur Rahman¹, Md Abir Hossain¹, Md Safiullah Sarker¹, Muntasir Alam¹, Mst. Noorjahan Begum¹, Rubel Howlader¹, Golam Sarwar¹, Md. Masud Reza¹, Muhammad Manwar Morshed Hemel¹, Sharful Islam Khan¹, Mustafizur Rahman¹**

¹icddr,b

Human papillomavirus (HPV) is one of the most commonly acquired sexually transmitted infections (STIs) and a Prominent source of morbidity and mortality. HPV has over 170 genotypes including at least 17 high-risk HPV (HR-HPV); however, the licensed vaccines include only nine of them based on data from high-income countries. Therefore, data on global genotypes especially from low-income countries are essential for future vaccine development. We reported here HPV genotypic diversity among key populations (KPs) in Bangladesh. Anorectal swabs (AS) from Male Sex Workers (MSW) and transgender women, and cervical swabs (CS) from Female Sex Workers (FSW) were collected and tested for seventeen HR-HPV and six low-risk (LR-HPV) genotypes (GTs) using a commercial real-time PCR kit. Among 1489 swab specimens tested, 62% were HPV DNA positive, and 53% had at least one HR-HPV. Among HR-HPV, GT-16 was the most predominant (20%) followed by GT-52 (12%), GT-58 (11%), GT-18 (8%), GT-45 (4%), GT-33 (3%), and GT-31 (3%) which are included in the current vaccines. In contrast, half of the HPV-infected participants had HR-HPV genotypes such as GT-39 (9%), GT-59 (8%), GT-53 (6%), GT-82 (6%), GT-56 (3%), and GT-35, GT-51, GT-68, GT-73 (<2%) which are not covered by the current HPV vaccines. Among LR-HPV, GT-42 was the most predominant (16%) followed by GT-6 (11%), GT-43 (6%), GT-11 (4%), GT-81 (3%), and GT-44 (3%). The highest burden of HR-HPV infections was found among transgender women and sex workers. The high genetic diversity of HPV in KPs warrants regular screening and interventions including vaccination.

Time-trends in the prevalence, determinants, and inequalities of adolescent motherhood at national and sub-national levels in Bangladesh: A population-based study

Women with higher age, lower education, no mass media exposure, and lower educated household heads were associated with a greater possibility of adolescent motherhood.

Presenter: **Somaya Mostarin**, icddr,b

Author: **Somaya Mostarin**, icddr,b

Adolescent motherhood is evidenced to share a greater toll on maternal and newborn mortality and morbidity but is less frequently evaluated in Bangladesh. We examined the prevalence, inequalities, and determinants of adolescent motherhood over time in Bangladesh.

We analysed two rounds (2012 and 2019) of population-based Multiple Indicator Cluster Survey (MICS) data to assess adolescent motherhood, defined as women aged 15–19 years with a live birth or current pregnancy. We performed multivariable binary logistic regression and measured absolute and relative inequalities including concentration index (CI). In 2019, the prevalence of adolescent motherhood was 18.5% in Bangladesh, highest in Rajshahi division (23.7%) and Chapainawabganj district (31.4%). Between 2012 and 2019, the prevalence of adolescent motherhood increased in Barishal (from 13.1% to 17.7%) and Sylhet (from 7.4% to 12.1%) divisions, and Barguna (from 3.3% to 14.1%), Jashore (from 15.9% to 25.3%), Khagrachhari (from 11.9% to 22.1%), Moulvibazar (from 4% to 9.3%) and Patuakhali (from 7.2% to 21.8%) districts and decreased in Lakshmipur district (from 22.9% to 14.7%). Women with higher age, lower education, no mass media exposure, and lower educated household head were associated with a greater likelihood while women who belonged to female-headed and large households were associated with a lower likelihood of adolescent motherhood at both time points. Women's wealth, religion and residence were inconsistently associated with adolescent motherhood between 2012 and 2019. In 2019, adolescent motherhood was disproportionately distributed among the poorest group (Poor-Rich difference (Q1-Q5): 7.39%, Poor:Rich ratio (Q1/Q5): 1.51, CI: -0.08). These inequalities declined compare to 2012 (Q1-Q5: 14.5%, Q1/Q5: 2.18, CI: -0.16). Changes in inequalities in adolescent motherhood over time were common across divisions.

Socioeconomic and geographic inequalities in using Skilled Birth Attendants in Bangladesh over two decades

Over the last two decades, Skilled Birth Attendant (SBA) use was significantly higher among wealthier and more educated women. However, inequalities in SBA use decreased significantly in all dimensions over time.

Presenter: **Syed Sharaf Ahmed Chowdhury¹**

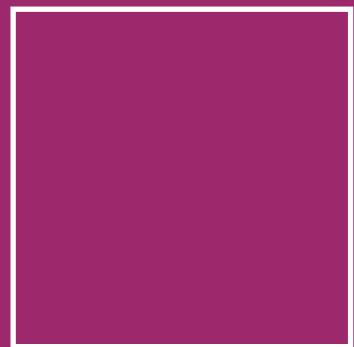
Authors: **Syed Sharaf Ahmed Chowdhury¹, Satyajit Kundu¹, Azaz Bin Sharif¹**

¹North South University

Maternal and neonatal mortality is a major public health concern globally. Evidence supports that the use of Skilled Birth Attendants (SBA) can significantly reduce maternal and neonatal mortality. Despite the improvement in SBA use, Bangladesh lacks evidence of equality in SBA use across socioeconomic and geographic regions. Therefore, we aim to estimate the trends and magnitude of inequality in SBA use in Bangladesh over the last two decades.

Data from the last 5 Bangladesh Demographic and Health Surveys (BDHS; 2017-18, 2014, 2011, 2007, and 2004) were used to measure the inequalities in the SBA use utilising the WHO's Health Equity Assessment Toolkit (HEAT) software. Inequality was assessed by four summary measures, namely, Population Attributable Risk (PAR), Population Attributable Fraction (PAF), Difference (D), and Ratio (R) based on the four equity dimensions: wealth status, education level, place of residence, and subnational regions (divisions). For each measure, point estimate along with 95% confidence interval (CI) were reported.

An overall increasing trend in the prevalence of SBA use was observed (i.e., 15.6% in 2004 to 52.9% in 2017). We found significant inequalities in SBA use in every wave of BDHS (from 2004 to 2017), with the result concentrating on the rich (in 2017, PAF: 57.1; 95% CI: 52.5-61.7), educated (in 2017, PAR: 9.9; 95% CI: 5.2-14.5), people from urban areas (in 2017, PAF: 28.0; 95% CI: 26.4-29.5). We also identified geographic disparities in SBA use favouring Khulna and Dhaka divisions (in 2017, PAR: 10.2; 95% CI: 5.7-14.7). In our study, we also observed inequality in using SBA among Bangladeshi women decreased over time. To increase SBA use and to decrease inequality in all four equity dimensions, disadvantaged sub-groups should be prioritised in policies and planning for programme implementation.



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Best Innovations



Assessing the feasibility and acceptability of a digital obstetric register for strengthening the Management Information System in selected public facilities of Bangladesh

Proposed by: **Anika Tasneem Chowdhury**, icddr,b

Paper-based registers are used to collect antenatal care, EmONC, and postnatal care data manually in healthcare facilities in Bangladesh which are cumbersome, time-consuming, and prone to human errors.

AND

Maternal and Child Health Division, icddr,b has already digitalised the EmONC register (eRegister) which was included in the maternal health OP for sub-national scale-up in 20 districts.

BUT

The Antenatal Care (ANC) and Postnatal Care (PNC) registers are still paper-based

THEREFORE

We will digitalise the ANC and PNC registers, synchronise with the EmONC register and develop one single Android tablet-based app to capture the complete obstetric data of women which will be readily available for future use during current and subsequent pregnancies at different service delivery points. The app will capture real-time service data which will reduce the delays, errors, and incompleteness in data entry, and guide with tier-specific treatment and investigation prompts following the Maternal Health SOP which will help the healthcare providers to adhere to the standard protocols.

Improving MHH among tribal school going adolescents in Bangladesh

Proposed by: **Esrat Jahan**, icddr,b

Menstrual Health and Hygiene (MHH) is integral to the well-being and empowerment of female adolescents.

AND

The recent Bangladesh Adolescent Health and Wellbeing Survey revealed a significant gap in menstruation knowledge among adolescents (75% lack knowledge before menarche).

BUT

It is likely to be more pronounced among tribal adolescents as they are a marginalised population and lack access to basic health information.

THEREFORE

We are proposing a peer-led menstrual health and hygiene leadership program “Odommo: Invincible not Invisible” for school-going adolescents in Rangamati, Chittagong. It will follow the peer education model. University, degree, and medical college female students from Rangamati will be recruited as volunteers who will attend a daylong workshop organised by icddr,b researchers. The volunteers will then visit schools to conduct the workshop for Class 11 students, who will do the same for Class 6 students.

SafeMe: A Board-Game to build awareness regarding Sexual Health and Well-Being amongst adolescents in Bangladesh

Proposed by: **Fariya Rahman**, icddr,b

One-fifth of Bangladesh's total population consists of adolescents.

AND

They are particularly vulnerable to many health risks including early pregnancy, sexually transmitted diseases, infection by AIDS/HIV, syphilis and etc.

BUT

They have little agency over their body and informed sexual participation due to the lack of proper knowledge regarding sexual and reproductive health.

THEREFORE

We aim to develop a Board-Game: SafeMe focusing on gender-transformative sexual health and well-being, which will function as an intervention to generate holistic and gender-diverse sexual health awareness amongst Bangladeshi adolescents.

A Free-of-Cost alternative to expensive diagnosis of Polycystic Ovarian Syndrome

Proposed by: **K.M Tanvir**, icddr,b

Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder affecting around 13 million women in Bangladesh which can lead to various adverse pregnancy outcomes and infertility.

AND

Early detection of PCOS can help women manage their symptoms and reduce the risk of complications.

BUT

Due to the lack of awareness, limited access to specialised medical care, and the expensive diagnosis process, many women remain undiagnosed and suffer from its effects.

THEREFORE

Through the development of a machine learning model that incorporates an array of factors including menstrual cycle patterns, body mass index (BMI), hirsutism, and behavioral characteristics, a data-driven prediction of PCOS can be provided via the FertiMeter mobile application which will also aware people through informative blog posts and video tutorials.

Performance of the InSilicoVA and InterVA5 method for assessing the cause of deaths to verbal autopsies: a validation study using physician review diagnostic gold standards in a nationally representative survey in Bangladesh

Proposed by: **Md. Abu Bakkar Siddique**, icddr,b

Verbal autopsy (VA), a method of determining cause of death (CoD) can be conducted by two methods named physicians certified (PCVA) and computer-coded (CCVA) verbal autopsies using WHO 2016 VA tools.

AND

CCVA is a faster and more cost-effective method of assigning the cause of death, compared to the gold standard PCVA method.

BUT

Comparison of CCVA-produced results hasn't yet been compared with PCVA in the Bangladesh context to ensure whether it produces reliable and valid results.

THEREFORE

We will assign physician reviewed CoD using two rounds of BMGF surveys conducted in Dhaka in 2022 and Sitakunda in 2021 and compare with the CoD produced by InSilicoVA and InterVA5 (two types of CCVA) methods. The performance of CCVA will be evaluated through reliability and validity measures of top-10 CoD to make cause-specific recommendations.

To implement the WHO-recommended non-clinical interventions to reduce C-section rates in Bangladesh

Proposed by: **Md. Alamgir Hossain**, icddr,b

Since 1985, the International health care community considers the ideal rate for C-sections between 10-15%.

AND

In Bangladesh, 45% of all births are delivered through cesarean section. The rates increased by 27% from 2011 to 2022.

BUT

Most of cases C-sections are medically unnecessary and potentially harmful procedures. Moreover, high rates of C-sections can lead to adverse health outcomes for mothers and babies.

THEREFORE

WHO recommended Non-clinical intervention is highly relevant to reduce the high C-section rates. So, we are designing non-clinical interventions to implement and reduce C-section rates in Bangladesh.

Empowering girls differently: Delaying marriage for brighter future

Proposed by: **Md Hasinur Rahaman Khan**, University of Dhaka

Child marriage remains prevalent in Bangladesh, with around 52% of girls married before the age of 18.

AND

Factors such as poverty, lack of education, gender inequality, and cultural norms contribute to this issue.

BUT

There is a lack of understanding regarding the complex relationship between factors like education, household wealth, religion, and geographic location in influencing the prevalence of child marriage in Bangladesh. Existing interventions need to address the root causes comprehensively.

THEREFORE

This innovative idea is to implement "Empowering Girls Differently (EGD)" in two high-prevalence villages in Rajshahi division. This multifaceted programme aims to empower adolescent girls through education, life skills training, and community engagement. Vulnerable girls at risk of child marriage or dropping out of school will be identified and mobilised. Life skills training, education support, community awareness campaigns, and advocacy efforts will be key components. Participatory methods, peer education, and collaborations with local organisations and government agencies will ensure sustainability.

Developing and testing a pictorial family diary of unpaid work to promote gender equality values

Proposed by: **Md. Khobair Hossain**, icddr,b

The health of women from low-educated families in rural Bangladesh is adversely affected by various challenges, including marginalisation and gender-based discrimination.

AND

These factors contribute to the vulnerability of women in terms of their sexual and reproductive health, increasing the prevalence of various health problems they face.

BUT

Limited interventions effectively promote gender equality values towards addressing women's vulnerability in SRH in a participatory and inclusive manner for all women, irrespective of their educational background.

THEREFORE

We aim to develop a pictorial family diary as a visual intervention, highlighting rural, low-educated women's labor-intensive daily unpaid household work, promoting gender equality values, and addressing women's sexual and reproductive health issues.

Improve access to healthcare services for sex workers in Bangladesh through the digital health card 'AMAR HEALTH'

Proposed by: **Mithun Das Kabbo**, Volunteer Opportunities

The sex workers' community constitutes 140,000 population throughout the country, and around 20% are below 18.

AND

Prostitution was legalised in Bangladesh in 2000 and the government provides an insufficient amount of food and financial ration.

BUT

Sex Workers are not included in proper Social Protection schemes and most of the sex workers have minimal access to fundamental health services including SRH. Also, access to information about the available health services is very limited in this community.

THEREFORE

We would like to introduce a mobile app-based Digital Health Card that will allow sex workers to have access to essential healthcare without facing any social stigma and discrimination. The app will also provide the user access to information and awareness on SRHR issues. Precisely, the app will include some key features like telecommunication with doctors, regular health tips, video content around SRHR, health records of users, location, and accessibility to vending machines, and telecommunication with doctors for sanitary napkins.

mHealth talk-book intervention to address SRHR issues among tea garden workers in Bangladesh

Proposed by: **Nazmul Alam**, Asian University for Women

Tea garden workers are vulnerable in terms of their SRHR.

AND

There are more than 200,000 tea workers in nearly 135 tea gardens located in the Sylhet division alone, nearly two-thirds of them are women and girls.

BUT

No targeted intervention out there to promote key SRHR issues, which is appropriate for mostly illiterate tea garden workers in Bangladesh.

THEREFORE

We are developing a multimedia talk book app (Deshoali- a local dialect in the tea state community), which will be preinstalled to talk when prompted highlighting five different modules on i. contraception and family planning, ii. maternal health, iii. adolescent SRH including child marriage and teen pregnancy, iv. menstrual health and v. gender-based violence.

Engaging men and boys in preventing child marriage and adolescent pregnancy among rohingya refugee girls in Bangladesh

Proposed by: **Nazmul Alam**, Asian University for Women

According to UN statistics, nearly 1 million Rohingya people are living in camps in Cox's Bazar, Bangladesh.

AND

Most of the Rohingya people are of Muslim descent and fled their homes.

BUT

42% of girls are married before 18 years of age.

THEREFORE

The invention proposes a theory-based three-fold intervention to be tested, targeting men and boys for the prevention of child marriage and adolescent pregnancy among Rohingya refugee girls in Bangladesh. This intervention includes:

- i. Culturally adopted Information, Education, and Communication (IEC) materials.
- ii. Yard meetings to sensitize men and boys.
- iii. Local volunteers as change agents.

Working with men and boys will have a significant impact on society and individuals, contributing to the efforts to end child marriage and adolescent pregnancy. Our proposed intervention will be implemented through an existing service delivery platform managed by the Government of Bangladesh (GoB) and NGOs. This intervention project will be guided by the Theory of Change (ToC) model, which employs planning, participation, and evaluation to promote social change.

Assessing the feasibility of an app-based data recording system in 'Adolescent-Friendly Health Corners (AFHC)' of selected health facilities

Proposed by: **Dr Rubaiya Matin Chandrima**, icddr,b

There are around 1371 adolescent-friendly health corners all over Bangladesh.

AND

Each AFHC maintains a separate paper-based service register to collect information about the adolescents visiting these corners.

BUT

The paper-based register has a high probability of recall errors, reporting gaps, missing data, and data manipulation, affecting the overall quality of the data. There is also duplication of work producing unnecessary workload. This paper-based register cannot ensure the confidentiality of the adolescents.

THEREFORE

We are introducing an app-based data recording system addressing adolescent health in the selected AFHCs. The app will feature an in-built system for error checks and will have the capability of producing prompts, instructions, and recommendations in real-time, improving data quality. Furthermore, the software makes maintaining data safety, security, and confidentiality simple.

Strengthening maternal health services in Bangladesh: An assessment of UH&FW's readiness to diagnose Pre-Eclampsia and Eclampsia

Proposed by: **Dr Sabit Saad Shafiq**, icddr,b

Menopause, an inevitable physiological transition, often becomes entangled in a web of misunderstanding and misinformation.

AND

Lack of awareness regarding menopause can result in women not seeking proper medical attention.

BUT

There are no protocols and guidelines for menopause management in healthcare settings complicates the issue in Bangladesh.

THEREFORE

'Nobo-Mukti' will be created to raise awareness and improve the well-being of women aged 40–55 years.

Exploring the acceptability and feasibility of implementing facility-based Kangaroo father care for small babies in a low-resource setting in rural Bangladesh

Proposed by: **Dr Shaki Aktar**, icddr,b

Several studies have shown significant benefits of kangaroo mother care on newborn survival, growth, and development.

AND

Postpartum sick mothers, mothers of twins, and mothers who have had C-Sections often struggle to maintain the optimal duration of skin-to-skin contact and do not practice KMC properly.

BUT

Bangladesh's society and health system are still not prepared to accept the participation of male partners in providing direct care for newborns.

THEREFORE

We explore the acceptability and feasibility of implementing facility-based Kangaroo father care for small babies (preterm and low birth weight) and develop intervention strategies to integrate Kangaroo father care along with the current Kangaroo mother care in a low-resource setting in rural Bangladesh.

Mobile linked easy to use ultrasound system for reducing preventable stillbirth in Bangladesh

Proposed by: **Shahnaj Sultana Sathi**, icddr,b

Bangladesh has made significant progress in reducing stillbirth rates.

AND

Still ranks seventh globally in terms of absolute number of stillbirths, with a rate of 25.4 per 1000 births.

BUT

A major challenge is the lack of access to standard ultrasound machines, which are expensive (at least USD 1500) and not widely available in the country, hindering proper fetal monitoring.

THEREFORE

To address this, the innovative idea is to introduce a cost-effective alternative, the "InstinctTM Ultrasound Device" by PulseNmore. This mobile-operated device, priced at no more than \$300, can assess crucial parameters like fetal position, cardiac activity, placental location, and amniotic fluid levels. By implementing this device, especially at the facility level, we can enhance monitoring capabilities and potentially prevent a significant proportion of the over 40% of stillbirths that are preventable.

Using learning platforms to make the “Physical education” chapter of the national school curriculum more accessible

Proposed by: **Shusmita Khan**, Data for Impact, University of North Carolina at Chapel Hill

Anecdotal evidence suggests that due to cultural sensitivity, a large portion of the teachers do not teach these chapters.

AND

Studies observed in describing contents and illustrations for younger children is often difficult.

BUT

The COVID-19 pandemic has compelled educational institutions to shift to online platforms, lacking human interaction but offering privacy for self-paced learning.

THEREFORE

Our innovative idea is to digitise the "Physical Education" curriculum for classes VI-VIII on the Ghoori Learning platform, catering separately to girls and boys. This digitised curriculum will be implemented in schools across diverse settings (urban/rural, Bangla/English, public/private). An assessment will gauge the module's adoption and measure changes in knowledge, attitudes, and practices.

Validation and accuracy determination of an AI-based Point-of-care mobile digital microscopy method for diagnosis of soil-transmitted helminthiasis

Proposed by: **Syeda Momena Afsana**, icddr,b

The conventional method of diagnosing soil-transmitted helminthiasis (STH) through stool microscopy faces challenges.

AND

Availability of skilled parasitologist remains a challenge in low-resource healthcare setups.

BUT

An innovative AI-based point-of-care mobile digital microscopy tool for STH diagnosis can mitigate the need for skilled technicians and reduce inaccuracies.

THEREFORE

The innovation aims to validate and determine the AI tool's accuracy against the gold standard microscopy for STH diagnosis. Using deep learning algorithms, it identifies parasites in digital images of stained stool samples taken via a mobile microscopy scanner. STH affects over two billion people globally, with pregnant women being at high risk. The tool's accuracy and scalability are crucial for proper detection, especially for pregnant women who may have limited access to appropriate laboratories. This AI-based solution will aid in combatting nutritional deficiencies and promoting fetal health during pregnancy.

Improving male community members' knowledge and awareness of Cervical cancer for better service utilisation

Proposed by: **Tamanna Majid**, icddr,b

Cervical cancer is the 2nd most common cancer in Bangladesh and 4th worldwide.

AND

Vaccination and regular screening can prevent Cervical cancer incidence, morbidity, and mortality.

BUT

Women have limited involvement in health-seeking decisions due to their social and economic dependency on males.

THEREFORE

We are promoting meaningful male involvement to improve the knowledge and awareness of community male on SRHR issues in the context of Cervical cancer and empowers women to co-decide on health-seeking behavior by introducing 'Joutho Somabesh' with the married couple and 'Ma Somabesh' with women in selected community clinics.



NCSRHR2023 Branding



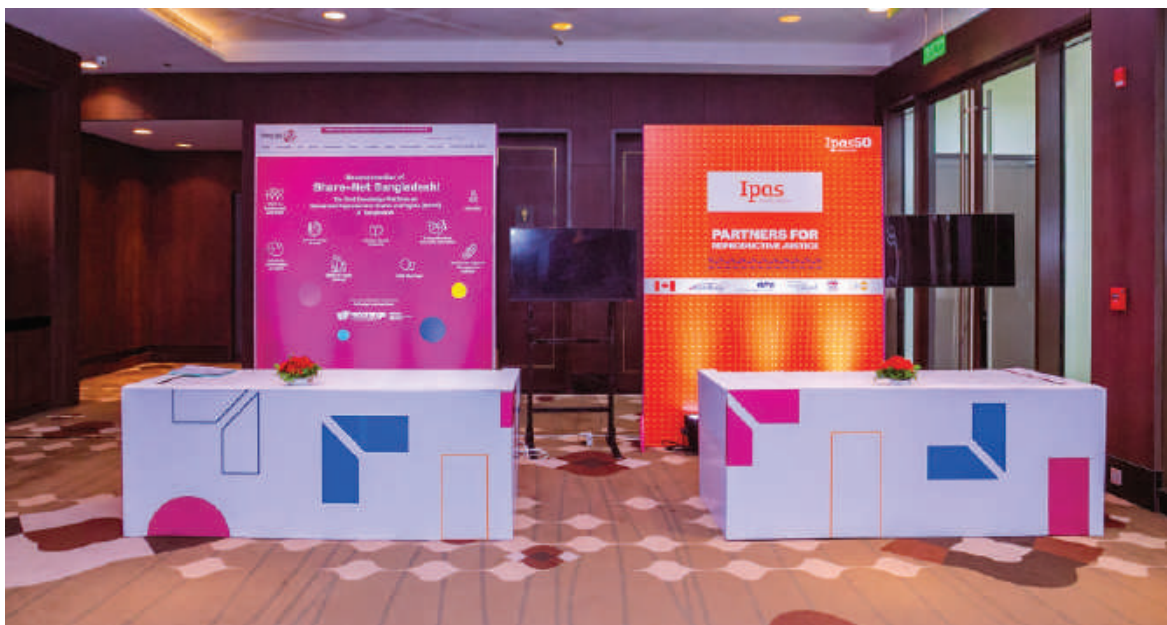
The conference venue, InterContinental Dhaka and icddr,b Dhaka were decorated with vibrant banners and posters, infographics, showcasing the conference theme. The occasion also included live telecasts of sessions and backdrop for the stage. The stunning branding and decoration of the conference added to the overall experience and contributed to making it a successful event.

National Conference 2023: Sexual and Reproductive Health and Rights in Bangladesh

Showcasing Research through Ideas, Ingenuity and Innovations

3 May | InterContinental Dhaka



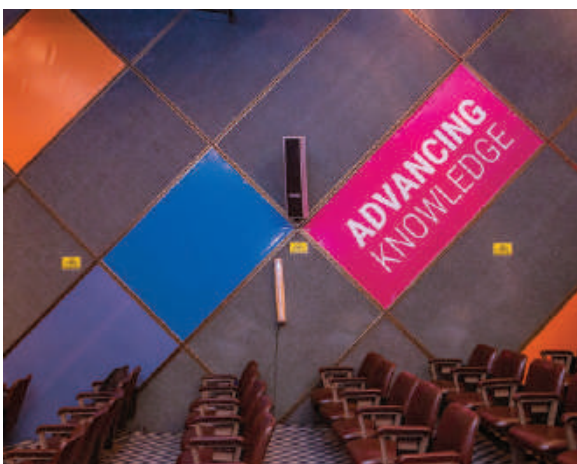






Finalist Showdown | Best Abstracts & Innovations

2 May | icddr,b





Inauguration of Innovation and Evidence Hub by AdSEARCH
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