

# **Report on**

## **Social Determinants of Health:**

### **Interactive Research workshop for Young Doctors**

#### **In Collaboration with Oxford University Global Surgery Group.**

### **Introduction**

Chittagong Medical College Student Union (CMCSU) had demanded for a research workshop for medical students. Promoting research culture amongst medical professionals and Research capacity building of young medical professionals are two of the mission statements of Chittagong Research Institute for Children Surgery (CRICS). As the demand of the medical students conveyed through CMCSU resonate with the mission of CRICS, the decision to organize a research workshop for medical students became one of the agenda of CRICS. Power and Participation Research Centre (PPRC) being at the forefront of research and policy advocacy had kindly agreed to organize this workshop with CRICS. Healthy Bangladesh had also decided to support the endeavor.

### **How the Workshop Came to Be**

The first meeting for the workshop was held on 10<sup>th</sup> October 2018 at CRICS office situated at 29 Panchlaish, Chittagong, Bangladesh. The meeting was attended by PPRC Chairman and Convener of Healthy Bangladesh Dr. Hossain Zillur Rahman, CRICS Director Professor Dr. Tahmina Banu, Miss Keneta Zillur, CRICS personnel Miss Tasmiah Tahera Aziz, Dr. Nowrin Tamanna, Dr. Arni Das, Mr. Orindom Shing Pulock and CMCSU Vice President Dr. Sabbir Ahmed. In the meeting the Name of the workshop was decided, a tentative schedule was planned and the logistics of the workshop was decided upon. The date of the workshop was set to be from 1<sup>st</sup> to 3<sup>rd</sup> November, 2018. The Registration fee was decided to be BDT 500. It was also decided to keep the number of participants to 50 for the first workshop.

The registration procedure was done by CRICS with the help of CMCSU. Registration started on 23<sup>rd</sup> October 2018 and 50 medical students/interns were selected by first come first basis and registered.

A second meeting was held at PPRC and the faculty members of the workshop were decided upon and invited. PPRC arranged the souvenirs for the workshop. The program schedule was finalized. The faculty list and program schedule is attached below:

## FACULTY

**Hossain Zillur Rahman**  
Executive Chairman, PPRC  
and Convener, Healthy Bangladesh

**S.M.Abdul Quddus**  
Ph.D, Professor of Public Policy and  
Governance, International Islamic  
University Malaysia

**Prof. Tahmina Banu**  
Director, Chittagong Research  
Institute for Child Surgery

**Prof. S.A. Hamid**  
Director, Institute of Health  
Economics, Dhaka University

**Md. Alamgir Hossen**  
Deputy Director, Bangladesh  
Bureau of Statistics (BBS)

## PROGRAM

New Conference Hall, Ground Floor, New Building, Chittagong Medical College  
**\*\*Only for registered participants\*\***

### DAY 1

- 9.00-10.00 **Registration**
- 10.00-11.30 **Introductory Session: Setting the Context**
- Health in the global agenda
  - Bangladesh Health Scenario: A balance Sheet
  - Professionalism in healthcare
- 11.30-1.00 **Technical Session 1**
- Social Determinants of Health
  - Research as a process
  - Statistical skills for Doctors
- 1:00-2:00 **Lunch**
- 2:00-3:00 **Technical Session 2**
- Research design
  - Analysis and presentation
- 3.00-5.00 **Technical Session 3**
- Choosing research topics for Day 2

### DAY 2

- 9:00-4:00 **Field Research**
- 4:00-6:00 **Draft Report Preparation**

### DAY 3

- 9:00-12:00 **Team Presentations**
- 12:00-12:45 **Jury Observations**
- 12:45-1:30 **Certificate Distribution**

## Day 1 (1<sup>st</sup> November 2018):

The day started with introduction of the faculty and the participants conducted by Dr. Professor Tahmina Banu. Dr. Hossain Zillur rahman then started the program with discussing the overall structure of the program and gave an overview on Research. He said, “Research is an organized investigation with some skills.”

The introductory session started at 11 am with lecture from Professor S.M. Abdul Quddus of Department of Public Policy and Governance, International Islamic University, Malaysia. His lecture topic was “Professionalism in Healthcare”. He talked about Public Policy & Governance. He discussed about the three C’s of Post Normal Times (Chaos, Complexity and Contradictions). He said we are navigating our way through uncertainties. He also discussed about survival techniques in Post Normal Times. He talked about how due to unbridled access to information the dynamics & realignment of powers of Doctor-Patient relationship is changing. He advised the young doctors to move forward accepting this reality. He also advised to not become “Excellence without a soul”.

The next faculty was Dr. Hossain Zillur rahman, Chairman of PPRC and Convener Healthy Bangladesh. His lecture topic was “Health in the Global Agenda”. He firstly talked about how health is viewed. He said Disease is not just a medical issue; it is also a social issue. He also said medical intervention is not the only solution of disease; lifestyle intervention, which is a social issue, is also an important solution of disease. As an example of how disease is a social issue he talked about Opioid Crisis in America. How increased stress contributes to increased pain killer intake which can lead to drug dependence. He emphasized on the effect of overall lifestyle on health. He then talked about Healthcare Expenditure. He said it is a major issue in Bangladesh. He said 67% of Out of Pocket (OOP) Expenditure is for health where as 35% OOP for health expenditure is allowed globally. He also talked about Sustainable Development Goal (SDG) and Universal Health Coverage (UHC). He said targets of SDG3 are Health, Wellbeing and Health for all. He also discussed three matters of UHC: Access, Quality and Affordability/ Financial risk protection. Then he also added, “Prevention is equally important agenda for healthcare”.

Then with interacting with the participants he made a balance sheet of Health Scenario of Bangladesh. The Balance sheet of Achievements and problems in Bangladesh is shown below:

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<ul style="list-style-type: none"><li>● Neonatal Mortality Decline</li><li>● Maternal Mortality Rate Decline</li><li>● Application of ORS</li><li>● Immunization Increased, EPI Schedule maintained</li><li>● Life Expectancy Increase</li><li>● Affordable Medicine price</li></ul>	<ul style="list-style-type: none"><li>● Lack of Referral System</li><li>● Anti-biotic Resistance</li><li>● Quality gap in Health Care</li><li>● Lack of screening for breast cancer, newborn, birth defects etc.</li><li>● Doctor-patient relationship</li><li>● Lack of Health Insurance</li></ul>

He then talked about Research Culture. He said, “Research is as per your need”. He said Research is a process and discussed about the 3 stages of research: Preparation, Execution and Analysis & Presentation. He said Preparation stage includes Choice of Topic, Contextual Information check and Research tool development. He also said determining the variables are an important part in research tool development. He emphasized on clarity among variables, data and unit. He then talked about the importance of the authenticity & trust-worthiness of data, to ensure it he advised Cross Checking of data. He then said Analysis and Presentation is a vital part of research. And finally he discussed about the importance of Social Validation of the research conclusion.

Technical session 1 was conducted by Md. Alamgir Hossen, Deputy Director of Bangladesh bureau of statistics. He discussed on “Social statistics for research”. The lecture was based on social determinants of health, research as a process and statistical skill for doctors. He mentioned that social statistic is the use of statistics to study human behavior and social environment. He started his lecture discussing about the main concepts especially about data, variables, general variables, mean, median, mode, SD, variance, non-probability sampling, probability sampling, OOP expense, quartile, percentile, Z, P value, stratified sample, snow ball sample etc. He emphasized that ideal sample size should be 384 for a P value of 0.5. In between his discussion he delivered some important information like now current poverty level of Bangladesh is 24.8%. Then he invited the participants for open question answer session. The participants asked him about Z, about difference between purposive and convenient sampling, difference between statistic and biostatistics. Mr. Alamgir answered these questions accordingly.

After lunch the program began again on 3.00 pm. Technical session 2 was conducted by Prof S. A. Hamid, Director of Institute of Health Economics, Dhaka University. As the participants just came after a heavy lunch, he started his lecture in an interesting way. He asked the participants to write all the 26 alphabets serially and give each letter a number like A=1, B=2. Then he asked them to calculate the value of TALENT, HARD WORK, and ATTITUDE. After calculating he told them that the highest marks goes to attitude and that means that one need to improve one’s attitude more than his or her talent and hard work. Then he discussed about how to design a research, how to do literature review, why it is needed, about knowledge gap, qualitative and quantitative method, mixed method, causal research, explorative and experimental research, RCT, policy implication, research implication, difference among the methods, Type 1 and type 2 error etc. During the question answer session, participants asked him about null hypothesis and alternative hypothesis, hypothesis testing etc.

Technical Session 3 started at 4: 15 pm. The participants were asked to be divided into 10 groups of 5. Each group was asked to think of a research topic for Day 2. After discussion of Topic, Reference population, Sample, Variable, Tools, and Recording etc. with the faculty the groups choose a research topic. The Research Topics of the participants are listed below:

Group	Topic
<b>Group 1:</b> Fahmida Afroz Fariha Tabssum Aniq Kazi Sadika Ismam Ainun Nahar Shanta Rabeya Sabrin	Doctor-patient relationship: Is it worsening and why?
<b>Group 2:</b> Nayela Kawser Anonno Md Nahid Hasan Atqiya Mahmuda Taha Zarin Tasnim Abdur Rahman Abir	Evaluation of Lifestyle modification and association with complications among diabetic patients of Chattogram City
<b>Group 3:</b> Nishat Anjum Nourin Sadia Islam M. M. Ifrath Sadika Himal Panthi Shree Ram Panthee	Overview of trauma cases in CMCH
<b>Group 4:</b> Dr. Md Zahirul Islam Dr. Nafiz Saadman Ahsan Dr. Mohammad Yeasin Dr. Md Omar Faruk Dr. Mohammed Mostafa Sarowar	Awareness and Accessibility of ANC among obstetric patients admitted inCMCH
<b>Group 5:</b> Mostofa Arafat Islam Raihan Kabir Md Muid Sakib Mim Tanjila Afrose	Patient Satisfaction and Follow Up regulations for the postoperative patients of CMCH
<b>Group 6:</b> Sabrina Hossain Shafayat Ahmed Al-Noor Ashish Kumar Kuri Sanjida Siddique Shimu Zarin Tasnim Raka	<b>ANTIBIOTIC RESISTANCE AWARENESS:</b> Assessment of Pattern of Dose Completion Tendency & Receiving Non-prescribed Antibiotics Among General Population
<b>Group 7:</b> Nibras Wadud Khan Alifa Sybin Nikita Sakiba Musarrat Afrina Akter Zeba Fahmida	Psychosocial Determinants of the Use & Continuation of Oral Contraceptive Pills (OCPs) Among the Women of Chittagong

<p><b>Group 8:</b> Tajkia Mostafa Khadem Shaeera Tasfia Anutosh Sarker Md Atiqur Rahman Rafi Maliha Mehzabeen</p>	<p>A review of Doctor Patient Relationship: A study on chronically ill patients from the view point of counseling</p>
<p><b>Group 9:</b> Mohammad Azmain Iktidar Dr. Falguni Das Dr. Hafsa Rahman Promi Dr. Afia Tasnim Dr. Subrina Sultana</p>	<p>Status of healthcare quality in CMCH: are the patients satisfied?</p>
<p><b>Group 10:</b> Dr. Sabbir Ahmed Dr. Ainul Hasan Dr. Samira Hayee Dr. Jahan E Nur Imtiaz Uddin Manik</p>	<p>Out of Pocket Payment scenario of patients in Medicine and Surgery ward in CMCH</p>





## **Day 2 (2<sup>nd</sup> November 2018):**

The groups conducted their fieldwork and analysis on this day and prepared a draft presentation of their research.

And the CRICS members designed a Feedback Form under the guidance of Dr. Hossain Zillur Rahman and Professor Dr. Tahmina Banu.

## **Day (3<sup>rd</sup> November 2018):**

On the third day, Professor Tahmina Banu gave vote of thanks to Principal Dr. Selim Mohammed Jahangir for his co-operation to conduct the 3 day interactive research workshop in new conference hall of Chittagong medical college. Dr. Hossain Zillur Rahman overviewed the program in brief to the principal and announced 25000/- BDT research grant for the best report presented by the students.



Principal Dr. Selim Mohammed Jahangir admired this initiative and thanked the organizer for such program. He honored Professor Tahmina Banu by appointing her as an International Advisor of Chittagong Medical college. He encouraged Chittagong Medical College Student Union to involve in such kind of workshop. He mentioned that by this workshop a door to the research world has been opened for the students, they have to follow the path to reach the ultimate goal. He also praised the faculty members, participants for co-operating in an interactive way in this workshop. Honorable principal also mentioned about exchanging students, teachers, sharing ideas and signing a MoU with the International Islamic University of Malaysia.

Dr. Hossain Zillur Rahman praised about three things in Chittagong medical College students' spontaneous participation in the workshop, the cooperation of Chittagong Medical College Student Union and good college canteen.

Professor Abdul Quddus asserted that Professor Dr. Tahmina Banu has been working to develop a research culture in Bangladesh. He also mentioned that students are lucky enough to get Professor Tahmina Banu and Dr. Hossain Zillur Rahman as their mentor. He stated that to set a research mind is very important to develop a research culture in a society.

Dr. Hossain Zillur Rahman and Prof. Tahmina Banu started the next session of presentation. Research topics were presented by 10 groups consisting of 5 members in each group. They presented their report made on the previous day's data collection and analysis.

After each presentation there was questions answer session, where the faculty gave review about the pros and cons of the presentation.

Advices of Dr. Hossain Zillur Rahman regarding areas of improvements in the presentations:

- Specific variables should be listed according to the specific objectives of the study.
- Data should be presented in uniform manner like percentage / frequency in all slides.
- Non- medical cost could be explained by more details. If there are multiple responses, one should mention in the slide.
- One of the students asked, 'what is the difference between survey and research?' Sir answered that, there is basically no definite distinction among both field. If any survey can identify the knowledge gap it will also be a research.
- Conclusion of the study or key findings of the study can be mentioned in separate slide to get an overview of the whole study.
- Sir also said that, Discussion of a report would be better if we use our country perspective than other country.
- During presentation one should notice presentation time and mention the highlights of the presentation rather than dictating it thoroughly.
- Title must be close to the objectives of the study.



Professor Tahmina Banu also suggested some key points about research:

- Informed written consent during data collection is best but verbal consent is sufficient for the consideration of short time period of study.
- If data is collected from guardians, patient's attendants in pediatric ward it should be mentioned in presentation
- Abbreviation should be given, so that lay man can understand the study.





## Student's question:

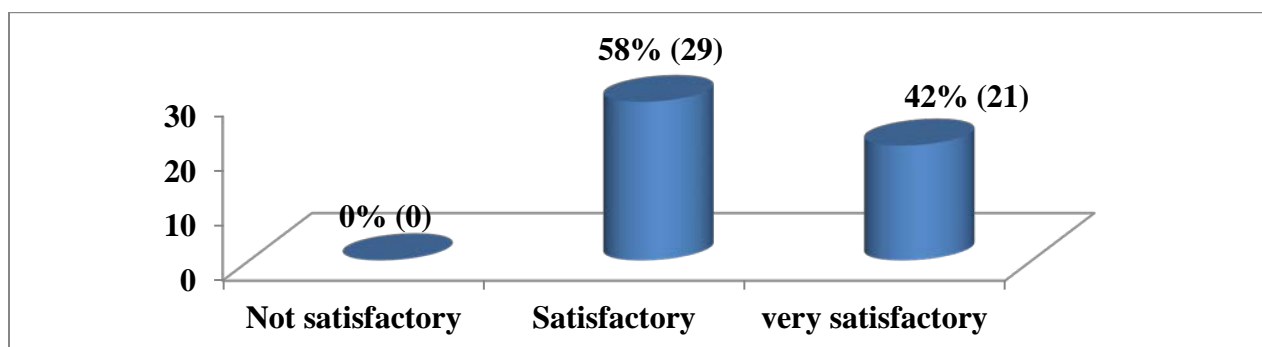
- Why did group-1 choose Chittagong Diabetic Hospital to collect data instead of Chittagong Medical College?
- How did group-3 ask suicidal patients about their suicide, from the ethical point of view?
- Question to group-4: Is period of data collection same as study period?
- Question to Dr. Hossain Zillur Rahman: What is the difference of survey and research?
- Question to faculty: Is verbal consent sufficient for ethical consideration?
- Question to group-6: How did you collect data from physics Olympiad?
- Question to group-6: Did doctor play any role in antibiotic resistance?



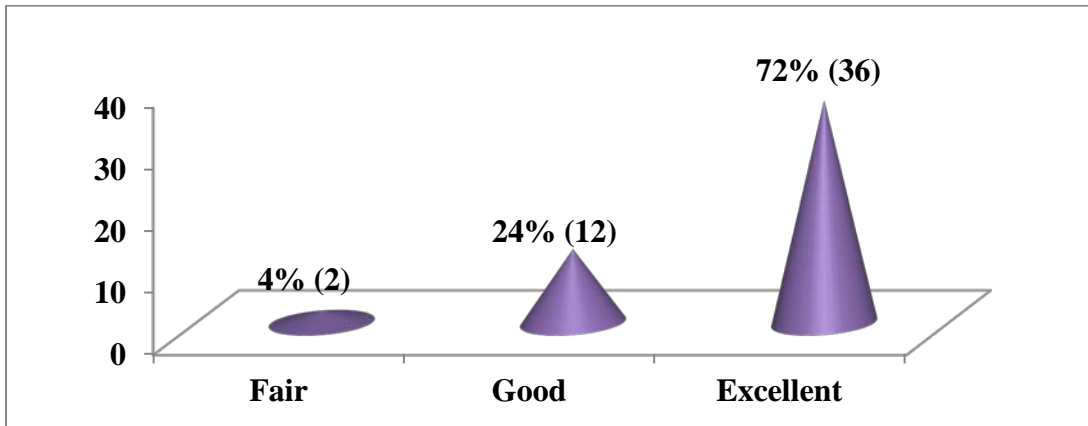
## Feedback of participants

The participants were given a Feedback Form to fill out and give back on the last day of the workshop. Participants' feedback is presented below:

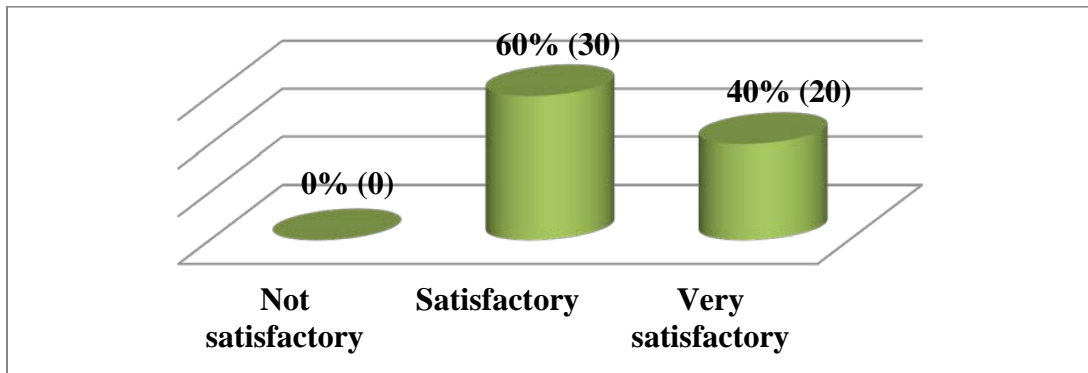
### 1. Was the program structure satisfactory?



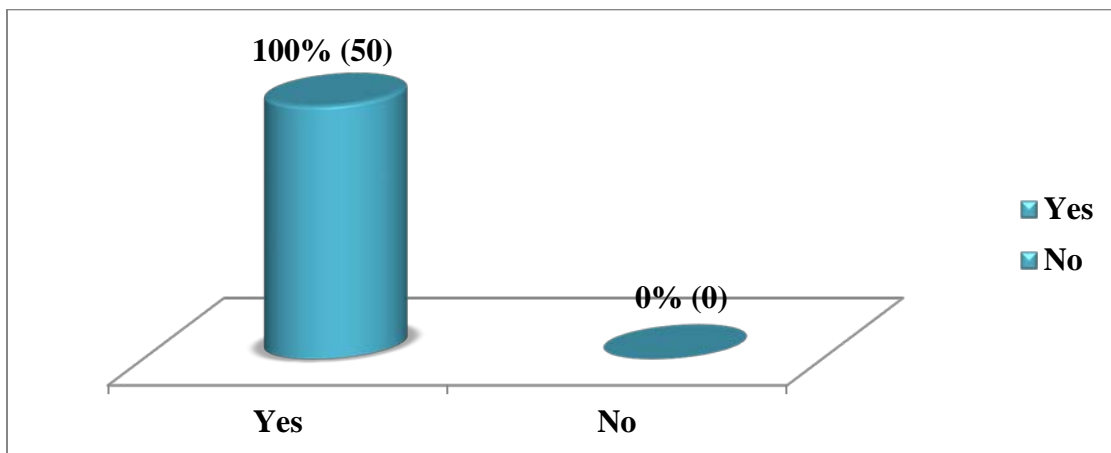
**2. Quality of Faculty?**



**3. Was the management of the program satisfactory?**



**4. Do you think such program should be continued?**



## 5. Any Other Comments?

<b>Participant Name</b>	<b>Comments</b>
1. Imtiaz Uddin Manik	Good
2. Dr. Md. Omar Faruk	Involvement of the all of the dept. of CMCH. Opening of opportunity for technical research also.
3. Sakiba Musarrat	The program could be conducted for a longer period and if we got more time for data collection & analysis more amazing results and facts could have been achieved. I believe!
4. Nayela Kawser Anonno	If it could be taken by giving intervals.
5. Raihan Kabir	Workshops for upcoming days can be arranged in more extended form and should introduce more varied form of research.
6. Dr. Sabbir Ahmed	To arrange a long term & in depth workshop on Research methodology. To arrange a workshop on Data Analysis software.
7. Hafsa Rahman	Field research time should be extended.
8. Tanjila Afrose	Number of participants should be exceeded up to 70. Thus we can get much more good work and excellence to enjoy.
9. Md. Nahid Hasan	Number of members in a group can be increased.
10. Jahan E Nur	We want to have more workshops on data processing in different software.
11. Alifa Sybin Nikita	Faculty was excellent & very helpful. We faced some problems though during data collection & perhaps access to faculty's advice would be helpful at that time.
12. Nibras Wadud Khan	If faculty/sir/madam could be coordinators, students could be grouped to work and report to them. This could give us chance to learn from them & expertise directly on field while conducting research & not only as suggestions during presentation
13. Afrina Akter	Such kind of programs should be held more to broaden our knowledge & skills. We got to have the experience team work. Thanks to the faculty & we are looking forward to more opportunities like this.
14. Dr. Ainul Hasan	It was eye opening and broadening our sector, thinking.
15. Zarin Tasnim	Such programs should be designed with a little bit of longer period.
16. Atqiya Mahmuda Taha	Study period should be increased.

**Future Plan/Goal:**

1. This workshop was the prototype; its' success opens the door for organizing such workshop all over the country including students/researchers from varied sectors.
2. To make a Handbook on Basic Research Skills in Social Research from the experience of the workshops.
3. Make a series of working papers that are prepared in the workshop.