

# Introducing Interprofessional Education to Foster Patient Centred Health Care : A Quasi Experimental Experience in Bangladesh

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## Abstract

**Introduction:** Interprofessional education is considered to be an innovative and useful concept to accelerate the effort of transforming health professional education under health systems perspective. Generally Interprofessional Education (IPE) occurs when two or more professionals belong to different professional groups learn together through mutual interaction with the purpose to improve collaboration and the quality of care. The key for IPE is that the learning must be interactive. It is an important step in advancing health professional education for many years and has been endorsed by the Institute of Medicine as a mechanism to improve the overall quality of health care. **Methods:** Realizing the importance of IPE, a quasi experimental study was undertaken and conducted in Bangladesh in May 2014. Sample size was 32 out of which 15 teachers (Such as Professor, Associate Professor, Assistant Professor, Lecturer and Instructor) and 17 students of medical, dental, nursing, medical technology and allied health science institutes. All the participants voluntarily attended 5 sessions on basic concept on IPE, role delineation, communication, teamwork & team building and patient centered care followed by group work and group activities within three consecutive days. After those 5 sessions, views of the participants were sought through self administered structured questionnaire after data entry and analysis. **Results:** According to the study, 100% participants viewed that medical, dental, nursing, and medical technologists should have few common sessions in their student life while about 90.7% respondents opined that those sessions will develop positive relationship among them, which will help to feel and honor each other's professional responsibilities viewed by all the respondents. It was also revealed that 96.9% respondents viewed that IPE sessions in student life will help to reduce silos in professional life. Better team work among doctors, nurses and medical technologists will ensure patient centered better health care was viewed by 100% respondents. Study recommended introducing IPE in Bangladesh to foster patient centered health care. **Conclusion and Recommendation:** The study concluded with recommendation that specific sessions for IPE should be incorporate in the under graduate education curriculum of the health professionals during their academic period and also during in- service period at workplace as part of their professional development to promote quality of care.

**Key words :** Interprofessional Education (IPE); Foster patients; Under graduate education curriculum; Health Professional Education (HPE).

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## INTRODUCTION

While referring to the Lancet commission report on “Health Professional Education for a New Century” (2010) Health Professional Education (HPE) has not kept pace with the emerging health challenges such as rapid demographic and epidemiological transitions, inequity in healthcare access, and environmental and technological hazard to health. HPE has not been able to keep up with the rapidly changing health needs due to fragmented, out-dated and static curricula which produce ill-equipped graduates<sup>1</sup>. These deficiencies are due because of lack of competencies against patient and population health needs, poor teamwork, professional tribalism, narrow technical focus, weak leadership and so on<sup>1</sup>. Therefore, transforming HPE is recommended and adopting a system approach is a timely call due to interconnectedness of the problems<sup>1-3</sup>. In this system approach, interdependence of health and education sectors is recognized. Reform of the education system is emphasized. More specifically reform should be brought in instructional and institutional aspects<sup>1</sup>.

Instructional change includes promoting interprofessional education which is necessary to break down professional silos and enhance collaboration and non-hierarchical relationships among the team members for patient centered care. Interprofessional Education (IPE) has got due importance especially for fostering patient care<sup>4</sup>. IPE allows two or more professionals to learn and work together to achieve planned outcomes. It has now been considered as an important learning method which promotes collaboration and sharing while accomplishing responsibilities and contributes to strengthen the health system responding health needs and requirements. The concept “IPE” is comparatively new in Bangladesh. Bangladesh is aiming to become a middle income country by 2021 and also aspiring to ensure universal health coverage by 2032<sup>5</sup>. Hence the country needs to strengthen its health system so that it can be capable enough to satisfactorily respond people’s health needs and expectations. IPE is an innovative approach for which provisions should be created in the education curriculum so that professionals could learn to work in a team not in silos for effective and efficient delivery of health services<sup>6</sup>.

### Context and setting

In Bangladesh, patient centered healthcare is a challenge to all concerned. Studies reveal that public health sector is plagued by uneven demand and perception of poor quality of care<sup>7</sup>. Unavailability of doctors and nurses as well as their negative attitudes and behaviors, are the majors bottlenecks greatly contribute to patient dissatisfaction. This situation further compounds due to lack of drugs and long waiting time. Therefore, a collaborative effort of all related professionals is essential for improvement of healthcare delivery. In Bangladesh, doctors, nurses, medical technologists and other care givers are supposedly to work in a team. But due to existence of barriers to team work such as conflicting interests, power differentials, competition for resources, lack of mutual

respects, patient care as well as health care is adversely affected. Lack of good co-ordination, cooperation, team spirit, good communication, positive attitude to each other groups among different health professionals (Doctors, nurses & medical technologists) are the major barriers to ensure patient centred care<sup>8</sup>. According to WHO (2010) IPE and collaborative practice can play a significant role in reducing many of the challenges faced by the health systems<sup>9</sup>. Studies indicate that the undergraduate medical teaching in Bangladesh is largely didactic, teacher-centered, and compartmentalized<sup>10</sup>. A recent study (JPGSPH, 2014) on HPE suggests that IPE in a class is occasionally used in either public or private institutes as about 78 percent of the medical colleges informed that it was not at all used<sup>11</sup>. There is very few provision of collective learning of two different professionals. Nominal existence of IPE in different curricula, discipline centred approach to health care which do not focus patient’s need can be regarded as threats for effective patient centred care in Bangladesh. These situations ultimately affect the health care delivery in primary, secondary & even in tertiary care hospitals in Bangladesh. Different studies and concept of IPE also revealed that lack of interprofessional teaching / training competent, coordinated health care delivery is really difficult.

### Purpose of this study

This study aims to define the concept “Interprofessional education” and describes how it can foster patient satisfaction and also to find out ways to apply in Bangladesh as part of strengthening its health care delivery system.

### IPE: Definition and scope

Interprofessional working and learning involves individuals from different professionals with different working backgrounds learn and work together. IPE is seen as a necessary step in preparing a collaborative practice-ready health workforce that is better able to respond to local health needs<sup>12</sup>. John Gilbert, a leader in IPE, states that learning to be an effective collaborative worker requires both a personal transformation in perspective and a change in professional identity<sup>13</sup>. Barr et al proposed three sets of competencies for IPE: Common held by all professions, Complementary distinguish one profession from another & Collaborative necessary to work together effectively<sup>14</sup>. IPE is defined as “Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care”<sup>15</sup>. The key for effective IPE is that the learning must be interactive. IPE is an important step in advancing health professional education for many years and has been endorsed by the Institute of Medicine as a mechanism to improve the overall quality of health care<sup>16</sup>. IPE is an important pedagogical approach for preparing health professions students to provide patient care in a collaborative team environment. Institute of Medicine (IOM) declared that “health professionals should be educated to deliver patient centered care as members of an interdisciplinary team”<sup>17</sup>. IPE is a significant tool to navigate the challenges of delivering care within a complex healthcare system<sup>18</sup>.

“Occasions when (Students) from two or more professions learn with, from and about each other to improve collaboration and the quality of care”<sup>12</sup>.

“Interprofessional education is a necessary step in preparing a ‘Collaborative practice ready’ health workforce that is better prepared to respond to local health needs”<sup>17</sup>.

The need for IPE has been recognized internationally since the mid 1980s. In the United Kingdom, the Center for the Advancement of Interprofessional Professional Education (CAIPE) & was established in 1987, and the Journal for Interprofessional Care was first published in 1986. In Canada, the IPE for Collaborative Patient-Centered Practice Initiative was begun by Health Canada in 2003.

Goals of IPE are to develop unity of professions, to develop knowledge, skills and attitudes that result in interprofessional team behaviors and competence, to learn how to function in an interprofessional team and carry this knowledge, skill, and value into their future practice, to provide patient centered care in a collaborative manner and to produce health providers with one focus- the patient. IPE produces humanistic healthcare professionals who provide and promote collaborative patient-centered care and coordinated health care management.

#### Why the idea was necessary

The Institute Centre for Medical Education (CME) of medicine and WHO reports revealed poor communication among health care professionals and lack of team work are the leading causes for poor patients outcome<sup>19</sup>. Gittle (2009) suggest that team work and relationship building in health care teams leads to quality health care<sup>20</sup>. It is supported by literatures that good team work and good, cordial communication among different health professionals (Doctors, nurses & medical technologists) will facilitate a more patient centered approach to health care.

Centre for Medical Education was acquainted with concept IPE institutionally and was interested to take initiative to plan, design interprofessional educational teaching/training sessions and to implement those. These inter professional educational teaching / training sessions could create a gate way for smooth, congenial, cordial, symbiotic co-existence of doctors, nurses and medical technologists of the country. Through this intervention different institutional and trainees / students capacity could be developed in regards to interprofessional teaching learning. This intervention could develop positive relationship among doctors, nurses, medical technologists which will ultimately ensure effective, articulated, coordinated and competent patient centered health care in Bangladesh.

#### MATERIALS AND METHODS

Development of learning module consisted of basic concept of IPE, role delineation, team work & team building, communication, patient centered care including lessons plans, related activities and power point presentation.

#### Formation of project team

Faculty members and students of medical, nursing and health technology institutes were selected in consultation and secured permission from different institutes such as Delta Medical college, Dhaka Dental College, City Dental College, Dhaka Nursing College, Institute of Health Technology (IHT), Dhaka. Reviewing of existing IPE assessment and select /adapt assessment tool appropriate for the group.

#### Data collection and analysis

Pretest and post tests were conducted by chosen IPE assessment tool. A three day long sessions on five topics were conducted for the same group of faculty members and students of three professionals groups on developed learning modules as per schedule. Activities of students and faculties during the sessions in regards to their interest, interaction group dynamic, and relationship, attitude to each other and also to IPE session were observed.

Focus Group Discussion (FGD) was conducted with participants at the completion of sessions regarding introducing IPE in Bangladesh to foster patient centered care. FGD revealed that relationship among doctors, nurses and medical technologists are mostly at average level in present Bangladesh. Nearly all the members of FGD expressed their views that there should have some common learning sessions, such as on communication skill, behavioral science, teambuilding, leadership, professional roles and responsibilities for the students of medical, nursing and medical technology institutes. They also agreed that those common sessions in their student’s life will develop positive relationship among them which, will help to feel and honour each others’ professional responsibilities which will help to work in a team in better way in real practicing field. Such common teaching learning sessions in their student’s life will reduce silos in their professional life which will ensure patient centered care in Bangladesh.

Semi structured in-depth interview with the administrators were conducted. In-depth interviews were conducted with the Director General of Health Services, Director of Medical Education & Health Manpower Development under the Directorate General of Health Services, Director, Centre for Medical Education, Registrar, Bangladesh Medical and Dental Council, Registrar, Bangladesh Nursing Council, Secretary, State Medical Faculty of Bangladesh, and Director, Directorate of Nursing Services, about introducing of IPE to foster patient centered care. All the policy level people agreed that if the students of medical, nursing and medical technology institutes are taught for few hours on few selected common topics which will create opportunity to learn each other’s rights and responsibilities. They also expressed common views that IP educational sessions will develop relationship among them which will eliminate professional tribalism. All the policy level persons also gave their views that IPE sessions will develop good team spirit which will ensure patient centered care in real life practicing field.

All the collected data was entered into Statistical Package for Social Science (SPSS), analysis was done to prepare the report.

### Evaluation of the results and impact

This quasi experimental study was conducted in Bangladesh in May 2014. Sample size was 32 out of which 15 teachers and 17 students of medical, dental, nursing, medical technology and allied health science institutes. All the participants attended 5 sessions (Basic concept on IPE, role delineation, communication, teamwork & team building and patient centered care) followed by group work and group activities within three consecutive days. After those 5 sessions views of the participants were sought through self administered structured questionnaire and after data entry and analysis, study revealed, 100% participants viewed that medical, dental, nursing, and medical technologists should have few common sessions (Such as basic concept on IPE, role delineation, communication, teamwork & team building and patient centered care etc) in their student life, 90.7% respondents opined that those sessions will develop positive relationship among them, which will help to feel and honor each other's professional responsibilities viewed by all the respondents. It was also revealed that 96.9% respondents viewed that IPE sessions in student life will help to reduce silos in professional life. Better team work among doctors, nurses and medical technologists will ensure patient centered better health care was viewed by 100% respondents.

Participants of the training programme on IPE agreed about the adequacy of contents, competencies of speakers, positive environment, usefulness of group activities and participants engagement in learning process of conducted five training sessions regarding IPE within three days.

Participants also responded positively about the benefit of attending that training on IPE and they also recommended such training for others and wanted to attend refresher courses on IPE in future. As per the participants views overall organization of the training programme on IPE was excellent of conducted 5 training sessions within 3 days

Results of the pre test and post test showed significant difference in their perception on major five areas/issues such as i) Concept of IPE ( $p < .001$ ) ii) Team building & team work ( $p < .001$ ) iii) Communication ( $p < .001$ ) iv) Role delineation ( $p < .001$ ) v) Patient centered care ( $p < .001$ )

Study recommended introducing IPE in Bangladesh to foster patient centered health care.

### Short term outcomes

- Students and faculty members of medical, nursing and health technology institutes could understand each others' professional roles and responsibilities.
- Administrators, students and faculty members of medical, nursing and health technology institutes and administrators of licensing organisations recognized the importance of IPE and team work in health care.
- Students and faculty members of medical, nursing and health technology institutes thought themselves as member of interprofessional health care team.

### Long term outcomes

- Development of module for IPE in medical, nursing and health technology institutes.
- More efficient and effective interprofessional practices will ensure positive patients' outcome in regards to their satisfaction.
- Engagement of policy level stakeholders of the relevant institutions such as Bangladesh Medical and Dental Council, Bangladesh Nursing Council, State Medical Faculty of Bangladesh, Centre for Medical Education, Directorate of Nursing Services, Director of Medical Education & Health Manpower Development under Directorate General of Health Services, Dean of Faculty of Medicines of All Universities) for incorporation of IPE in different institutes.

### Lessons learned

The IPE sessions had significantly increased knowledge, awareness among trainees of different professionals. IPE sessions developed positive attitude among the participants of three professional group members which helped them to work in a team with mutual respect and honour. Such type of IPE sessions could eliminate tribalism and silos among the members of professionals (Doctors, nurses & medical technologists) groups which were also reflected within sessions, group works, tea breaks etc. The IPE program experience could be implemented or extended in larger scales in different institutes in the country.

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### DISCLOSURE

All the authors declared no competing interest.

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