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Authorship Conflict in Selected Research Institutions in Bangladesh: An Exploratory Study

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ABSTRACT

This study aimed to explore the causes, types, and consequences of authorship conflicts among the researchers of selected research institutions in Dhaka, Bangladesh; and suggest ways to reduce conflicts. A sample of 100 researchers was purposively selected from BRAC, ICDDR,B, and the participants of a training course on research bioethics held in Dhaka. They were given a semi-structured questionnaire to fill out. Of them, 45 responded. The responses were confidential and anonymous. While over two-thirds of the respondents were aware of authorship conflicts, one-third actually faced conflicts with their co-authors. Of them, four faced conflicts with their juniors, while 13 with their seniors/supervisors. The primary causes of such conflicts appear to be unethical claims of authorship, violation of authorship order, and deprivation of authorship. In most cases, the victims had to give up, became frustrated, and avoided direct clash to safeguard their job. Reportedly, four cases were victimized for raising the issue. Conflict was never resolved in seven cases. To reduce conflicts, they suggested that authorship should be decided before the study begins, order of authorship must be determined according to contribution, and standard code of authorship should strictly be followed. Authorship conflicts arise among researchers mostly due to unethical practice of their co-authors, supervisors, and department heads in the absence of any formal authorship policy in the institutions. A standard code of authorship, sensitization of researchers on the problem through open discussions and advocacy, and formation of a grievance redress committee are suggested to minimize such conflicts. However, the findings should not be generalized due to small sample size.

INTRODUCTION

Publication is the key to academic success and career advancement in the field of scientific research and dissemination. The potentials and abilities of researchers are judged by the number of scientific articles they published as well as on the impact factor of the journals in which their articles are published (1). But Altman said that the length of a list of publications was a dubious indicator of ability to do good research (2). A published article is the primary vehicle in communicating research finding or a new achievement. Authorship is an explicit way of giving credit to any intellectual scientific or non-scientific output. Authorship is important for recognition and satisfaction, promotion and career development, grant support and institutional reputation. Some feels that Macleod, the then head of the University of Toronto's Department of Physiology, along with others would have received the 1923 Nobel Prize for medicine. He was acknowledged at the end of the paper instead of putting his name as author. Hoey felt that according to the authorship criteria set by ICMJE Macleod would have been an author of the famous paper of 1922 reporting that pancreatic extract dramatically reduced blood sugar levels in a diabetic patient (3). Authorship of research reports or papers is a crucial issue in communicating science. It establishes accountability and responsibility for the information published. Not all the authors are aware of authorship criteria not only in developing countries but also in developed countries. Thus, the importance of transparent authorship policy is well recognized among researchers all over the world (4). The lack of formal authorship policy or guideline may raise conflict and could be regarded as a dilemma in reporting research findings. Misappropriation of authorship may question the integrity of authorship system. So, Wagena rightly asked, "Why would we need guidelines for authorship if senior faculty behaved fairly?" Dishonest and unfair behaviour of senior faculty regarding authorship has serious consequences for the development of junior researchers (1). A Cuban study revealed that half of the biomedical professionals showed a true knowledge of authorship criteria (5). van Rooyen, et al. attempted to compare whether and to what extent authors' declared contributions to their research conform to the uniform guidelines set by the International Committee of Medical Journal Editors (ICMJE) also known as Vancouver Group, although many authors consider these to be unrealistic and unnecessarily restrictive (6). These guidelines are unknown to many researchers and often disregarded and ignored (7). Bhopal observed that the ICMJE's uniform requirements for manuscripts submitted to biomedical journals were being disregarded by senior authors (4). Kakkar observed that, in India many researchers were unfamiliar with the Vancouver guidelines. In many occasions authorship became a political decision determined by the position of the author in the hierarchy. Not many junior researchers can refuse implicit or explicit requests from their seniors for including them as co-authors, even if their contribution was negligible (8). van Rooyen et al. confirms that the ICMJE guidelines do not reflect current practice among authors. They rather suggested moving away from a perspective approach to authorship to a more descriptive approach, using the declared contributions of authors as a basis (6). Yank also found these guidelines not congruent with the self-identified contributions of researchers (9). A Chinese study on authorship found low rate of authors meeting the ICMJE and JAMA criteria for authorship suggestive of promoting authorship education (10).

Definition of authorship

Authorship implies both credit and responsibility. The ICMJE (the Vancouver Group) has recommended that the authorship credit should be based on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the

version to be published. Authors should meet all these conditions. Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship. All persons designated as authors should qualify for authorship, and all those who qualify should be listed. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content (11). General supervision of the research group is also not sufficient for authorship. Any parts of an article critical to its main conclusions must be the responsibility of at least one author. A paper with corporate (collective) authorship must specify the key persons responsible for the article; others contributing to the work should be recognized separately. Hewitt recognized, as early as in 1957, the difficulties in designating authorship. He stated that authorship could not be conferred; rather it might be undertaken by one who would shoulder the responsibility that goes with it (12).

Order of authorship

Order of authorship, in most cases, normally goes in descending order of contribution although it has no universally agreed upon meaning. When it deviates, the authorship conflict arises. The issues like honorary or gift authorship and ghost authorship come in the limelight. Honorary authorship is conferred for many reasons, such as to please the supervisor, guide, or head of the institution; pressure to publish; to enhance the face value or authenticity of the research paper for increasing the possibility of publication; to motivate team work; or to maintain working relationship. Honorary authorship is also conferred to a friend or spouse, or sometimes on exchange basis with mutual understanding simply to enhance their list of publications for career development. Honorary authorship is unethical, dishonest, and unacceptable. On the other hand, ghost authors may be defined as individuals not acknowledged as authors who made such contributions that deserves authorship or assisted in drafting the report. Usually, honorary authorship is more common than ghost authorship (13). Based on their study, Mowatt et al. reported that 39% of the Cochrane reviews had honorary authors while 9% had ghost authors. In nearly one-third of the cases the group of authors decide authorship while the lead author decides in 25% of the cases. The prevalence of ghost authorship in Cochrane reviews was similar to that reported for review articles published in peer-reviewed medical journals (13).

The nature of conflict as we experienced

Bhopal reported that most researchers had experienced problems with authorship, most commonly the perception that authorship had been deserved but not awarded (4). Among the researchers of an NGO-based research unit in Bangladesh we observed, during the course of our work, the prevalence of authorship conflict though not much tangible. The grievances as unofficially reported personally were that senior researchers take the lead authorship by virtue of their seniority in the hierarchy, sometimes even authorship deprived arguing that juniors were the data collectors only. The junior researchers sometimes claimed to be associated from planning or designing of the study, collecting and entering data in the computer, analyzing, and in some cases drafting the first report. On the other hand, the seniors/higher management people argue that the first authorship should be vested on the person who initially conceived the research issue or the study concept. Moreover, they also argue that if the conceivers are more than one in one issue then all of them should be included as authors (personal communication). This attitude and perception raise conflicts in ascertaining authorship and order of authorship. In such cases we found order of authorship and deprivation of authorship as the root causes of conflict that leads to frustration. We assume that due to adverse job market the affected/aggrieved party has no other alternative but to accept this notion.

We had similar experiences in an international health research organization in Bangladesh. This organization, with a multi-national research team, conducts more methodical basic research. Though they follow the standard authorship criteria as suggested by the Vancouver Group (ICMJE), the authorship conflicts also exist there. The senior researchers treat their junior colleagues either as apprentice or simply data collector or data processor either in the clinical, laboratory, or field setting. The authorship conflict apparently seems to be low in this organization because of higher chances of losing more lucrative high salaried job. But obviously frustration due to authorship conflict exists there as well (personal communication).

Multiple authorship or single authorship

Most researchers had experienced problems with authorship, the most common being exclusion from authorship, violation in the order of authorship, and unethical approach for authorship without contribution. In a group discussion the researchers were divided on the question of multiple authorship and single authorship. Some researchers expressed strong reservation on conferring authorship unnecessarily without fulfilling authorship criteria. Some others seemed to be too generous to offer honorary authorship, and authorship for mentoring, grooming, and career development of others even if they did not qualify for genuine authorship. In doing so, this group of senior researchers felt that they were not losing anything (personal communication). Although it is debatable, some people believe that the credit of the first author dilutes with the increase in the number of co-authors. They argued that famous creative writings in literature or science were singly authored. The work that cannot be accomplished without joint efforts are done collectively, and hence shared with co-authors (personal communication). The group favouring multiple authorship believed that any major research cannot be properly planned, designed, conducted, and reported without substantial help of others that fulfill authorship criteria. In their opinion it is unethical to deprive them of authorship. This discussion reveals two schools of thoughts – one is conferring authorship generously to avoid conflicts and grooming others, and the other is restricting authorship on the basis of guidelines set by the expert committees. However, this issue needs further in-depth study in the quest for a more acceptable practical policy guideline to minimize conflicts and enhance harmony in the field of scholarly communication.

Objectives of the study

This study aims to explore the causes, types, and consequences of authorship conflicts that exist among the scientists and researchers of selected research institutions in Dhaka, Bangladesh. It also aims to gather a deeper understanding of the problems, their nature, and impact on the researchers and suggest ways to reduce conflicts.

METHODOLOGY

A sample of 100 researchers was purposively selected from the Research and Evaluation Division of BRAC, Dhaka, the largest non-governmental development organization in the world, ICDDR,B: Centre for Health and Population Research, a reputed international research organization in Dhaka, and the participants of a training course on research bioethics held in Dhaka, Bangladesh. The Research and Evaluation Division of BRAC consists of about 50 full-time researchers of different disciplines like social science, economics, public health, education, agriculture, nutrition, environment, and gender. They conduct multi-disciplinary research primarily on BRAC programmes and also on topics of national and international importance. The research findings are widely published in national and international journals. At ICDDR,B national and international scientists of high reputation conduct clinical and laboratory research as well as field research in health and population. ICDDR,B widely publishes its research findings in renowned high-ranking international journals. The training course on research bioethics was organized by Bangladesh Medical Research Council (BMRC) of the government of Bangladesh. Physicians, associate professors of different medical colleges, and senior nursing staff were the participants of the course. A semi-structured questionnaire was given to all either personally or by mail to fill out. The response rate was 45% and the responses were confidential and anonymous. Data were analyzed both quantitatively using SPPS version 11.5 and qualitatively.

FINDINGS

PROFILE OF THE RESPONDENTS

Out of the 100 samples 45 responded. Of them, 22 researchers were from BRAC Research and Evaluation Division, 11 from ICDDR,B, and the rest 12 from a training course on research bioethics organized by the Bangladesh Medical Research Council, Dhaka. They were mostly senior (19) and mid-level (19) researchers with only 7 junior researchers. The respondents were highly educated with masters and doctorate degrees, while 17 were medical graduates (multiple responses considered) (Table 1).

Table 1. Profile of the respondents

Variables	No.
Distribution of respondents	
BRAC	22
ICDDR,B	11
Training course on research bioethics	12
Sex	
Male	35
Female	9
No response	1
Position	
Senior	19
Mid-level	19
Junior	7
Education*	
Doctorate	10
Medical graduate	17
Masters	30
N	45

* Multiple responses considered

AWARENESS ABOUT AUTHORSHIP CONFLICT

Of the 45 respondents, 32 (71%) were found aware about authorship conflicts. The most common conflict they have reported to be known or they had experienced is 'Authorship deprived' (13+12=25 responses), followed by 'Order of authorship violated' (18+5=23 responses). The other types of conflicts they had experienced are 'Compelled to give authorship without contribution' (13 responses), 'Voluntary authorship given to please boss' (9 responses), and 'Authorship claimed unethically' (9 responses). Promotion lingered in five cases due to raising authorship issues (Table 2). Table 2 also shows the types of conflicts experienced by the respondents by perceived ranks.

CONFLICTS FACED WITH CO-AUTHORS

Although 32 respondents had the experience of authorship conflicts happened with or around them, 14 respondents directly faced conflicts themselves with their co-authors. Four respondents did not answer this question. The most common conflicts faced by the respondents with their co-authors are order of authorship violated, authorship claimed unethically, and authorship deprived (Table 3). The seniors suffered more due to unethical claiming of authorship, whereas order of authorship was violated more in case of mid-level researchers. Three respondents were deprived of authorship despite their sufficient contribution. We tried to analyze the types of conflicts faced by length of service of the respondents which shows similar trend (Table 4).

Table 2. Type of authorship conflicts experienced by respondents by perceived rank

Type of conflicts	Number of responses by perceived rank			Total
	Senior	Mid-level	Junior	
Order of authorship violated	6	11	1	18
Genuine authorship deprived	5	6	2	13
Compelled to give authorship without contribution	5	5	3	13
Authorship promised, but not given later	4	6	2	12
Voluntary authorship given to please boss	2	5	2	9
Authorship claimed unethically	4	3	2	9
Supervisor/Dept. head/Organizational head became the first author of the report/paper I produced	2	3	-	5
Promotion lingered due to authorship conflict	-	3	2	5
N	14	15	3	32

Note: Multiple responses considered

Table 3. Types of conflicts faced directly with co-authors by rank

Type of conflicts	Number of responses by rank		Total
	Senior	Mid-level	
Order of authorship violated	2	3	5
Authorship claimed unethically	3	1	4
Authorship deprived	2	1	3
It is because of the nature of the job	-	1	1
Attempted to violate authorship order	-	1	1
Attempted to deprive authorship	-	1	1
N	6	8	14

Note: Multiple responses considered

Table 4. Authorship conflicts faced with co-authors by length of service

Type of conflicts	Length of service in years			Total
	1-10	11-20	21-30	
Order of authorship violated	2	2	1	5
Authorship claimed unethically	1	-	3	4
Authorship deprived	1	2	-	3
It is because of the nature of the job	1	-	-	1
Attempt to violate authorship order	1	-	-	1
Attempted to deprive authorship	-	1	-	1
N	5	5	4	14

Note: Multiple responses considered

OUTCOME OF THE CONFLICTS WITH CO-AUTHORS

When asked about the outcome of the conflicts faced with their co-authors the respondents gave various answers which we have grouped into some major themes considering commonalities and multiple answers. We analyzed the outcome both quantitatively and qualitatively since there were some interesting narration of the outcomes which we put verbatim as case studies. Of the 16 responses, we got three responses each for the following four major outcomes – authorship deprived, order of authorship violated, had to accept the decision of the authority, and resolved the problem through discussion (Table 5).

We wanted to know how the respondents reduced tensed relationship with their co-authors. We got multiple responses from 12 respondents which we have grouped considering commonalities (Table 6). Some respondents decided not to fight rather surrendered/tolerated or did not raise the issue further while some others resolved through open discussion. In few cases they discussed but not resolved.

Table 5. Outcome of conflicts with co-authors

Outcome variable	No. of responses
Authorship deprived	3
Order of authorship violated	3
Had to accept the decision of the authority	3
Resolved problem through discussion	3
Ignored the event and got ready for the next event	1
No change	1
Study results not published	1
Authorship given after fulfilling requirement	1
N	13

Note: Multiple responses considered

Table 6. How the respondents reduced tensed relationship with their co-authors

Responses	No. of responses
Did not fight rather surrendered/tolerated/Did not raise the issue further	4
Resolved through open discussion	3
Discussed but not solved	2
Adjusted believing that we would realize authorship soon	1
Kept quite, the author is too junior to me	1
Kept quite, the decision maker is too senior to me	1
The authority resolved the problem	1
N	12

Note: Multiple responses considered

While over two-thirds of the respondents were aware of authorship conflicts, one-third faced conflicts with their co-authors. Of them, four faced conflicts with their juniors, while 13 with their seniors/supervisors. The primary causes of such conflicts appear to be unethical claims of authorship, violation of authorship order, and deprivation of authorship (Tables 7). In most cases, conflicts with seniors were never resolved. Four cases were reported to be victimized due to raising the authorship issue. Some had to accept seniors' argument due to lack of standard code of authorship (Tables 8). Two senior researchers could not solve conflicts because they had conflict with their bosses. Other reasons for not resolving conflicts include no initiative taken by higher authority, avoided clash and enmity to safeguard job, and frustration over the issue. To reduce conflicts, the respondents suggested that authorship should be decided before the study begins based on the contribution of the team members, order of authorship should be determined according to contribution, standard code of authorship should strictly be followed, authors must contribute significantly to justify authorship, unethical claims of authorship must not be entertained, and so on (Table 9).

In spite of authorship conflicts majority of the respondents preferred multiple authorship, although some preferred single authorship to avoid unnecessary authorship conflicts they suffered (Table 10). Over the last 20 years, the number of *BMJ* authors of original articles

increased, mainly because of the rise of authorship among professors and department chairpersons (14).

Table 7. Nature of conflicts faced with seniors by rank

Nature of conflicts	Number of responses by rank		Total
	Senior	Mid-level	
Order of authorship violated	1	3	4
Authorship deprived by boss/supervisor	2	1	3
Authorship claimed without contribution	2	-	2
Authorship deprived when published	1	-	1
Just robbed the project	1	-	1
Seniors did not give the opportunity to write reports	-	2	2
Seniors took away my final output of the analysis and wrote the report	-	2	2
Preferential authorship given, not looking at the contribution	-	1	1
Authorship deprived although contributed substantially in all stages	-	1	1
N	6	7	13

Note: Multiple responses considered

Table 8. How the conflicts with seniors resolved

Responses	No. of responses
Never resolved	5
Could not solved, victimized	4
Just abided by due to lack of standard procedure	3
Just accepted the senior's argument	2
Divide the paper into two for first authorship	1
Did not give the results	1
Resolved through discussion	1
N	13

Table 9. Respondents' suggestions to minimize authorship conflicts

Type of suggestions	Number of responses by rank			Total
	Senior	Mid-level	Junior	
Authorship should be determined before the study begins	13	6	3	22
Order of authorship should be determined according to contribution	3	6	1	10
Standard code of authorship should be followed	3	4	2	9
All authors must contribute significantly/ substantially	1	4	-	5
Unethical claims of authorship must not be entertained	2	3	-	5
It is difficult while working under or with senior	-	1	-	1
Single authorship should be promoted	1	-	-	1
Institutional vigilance required	1	-	-	1
Authorship conflict redress team should be formed		1	-	1
N	16	18	5	39

Note: Multiple responses considered

Table 10. Comments on multiple authorship by rank

Responses	Number of responses by rank			Total
	Senior	Mid-level	Junior	
Multiple authorship preferred	12	10	6	28
Single authorship preferred	2	3	1	6
Both are necessary at different stages/situation	3	3	-	6
Authorship does not depend on the number of people involved in the research	-	1	-	1
Sometimes multiple authorship is given just to satisfy others unethically	-	1	-	1
Single authorship of good article is creditable	1	-	-	1
Junior researchers are deprived when their boss is involved in a multiple authored study	-	1	-	1
In case of many authors or a team, a group may be formed and can list them at the end	1	-	-	1
N	17	17	7	41

Note: Multiple responses considered

CASE STUDIES

CASE 1

"I was the key person to execute a research work under the principal investigator (PI). I left the project on study leave for about a year once the data collection completed. On my return I found that my name was taken out from the authorship although I was a co-investigator. I talked to the PI and attempted to help him recall my contribution to the project, but he refused to acknowledge my involvement in the project. I requested him to reconsider. I informed this to the Division Head who was also a co-author. At last, my name was included, but the order of authorship was violated. This caused conflict with the PI since he was my supervisor and due to personality clash. The conflict was never resolved. It reflected in my evaluation and I felt professionally threatened. I stayed calm and quiet. I am still trying to solve the conflict, but failed." – *A mid-level researcher*

CASE 2

"In the cases of two papers I produced of which one was based on field experience and the other was on a study, the supervisor became the first author. I was deprived of the genuine authorship. I adjusted myself to that situation believing that soon we would be able to realize who should be the author and co-authors in the study concerned with a strong organizational set up.

A study of which the report is yet to complete where I contributed significantly in all steps of research and writing to be the first author, but one of the seniors in the group claimed to be the first author though he contributed very little. I discussed many times about the order of authorship with the senior concerned. At last, the concerned senior agreed to give me the first authorship. It was too late to complete the report timely which led my promotion lingered." – *A mid-level researcher*

CASE 3

"Differences in claiming authorship (scientific leadership) came after completion of the study as using the funds (procuring benefits, jobs, materials, etc.). The important work and the results of expensive study could not be published. Discussed, but not solved as they change condition after funding.

Seniors just robbed the projects. Conflict is the misuse of power and job vulnerability. Divided the paper into two sections for first authorship. The conflict could not be solved yet, did not give results.

Junior was helped by other seniors stimulated by political beliefs/jealousy. I gave up the claim of credit. Some projects were not published as the philosophy was mine, but the publication was claimed by the people of other discipline as fourth author. – *A senior researcher*

CASE 4

"One of my colleagues revised one of my basic research report preserved in the library. Due to my time constraints and the particular researcher's interest I agreed to involve the researcher in revising the report. But when it appeared as a monograph I found my name as the second author. When checked my colleague said that our editor advised to do so. Remained unresolved and I forgot it. Since the monograph is published there is no way to resolve it. If we could have standard norms, based on those the issue could be resolved.

One of my colleagues collected and partly analyzed the data of a study, and then left for other function. The authority asked to hire external experts to fully analyze and write the report. A mid-level study coordinator rather assigned me to do the task. I did it, and this became a chapter of a book. The initial researcher was given the second authorship of the book chapter. Later on, a journal paper was prepared wherein the initial researcher had no contribution. After publication, the initial researcher lodged a complaint. I narrated the whole course of the problem and produced the accomplishments the initial researcher done. Afterwards, the authority probably discussed with the initial researcher, and he was convinced. To me, it could be unethical if I did not give the researcher authorship in the book chapter although he did not contribute even in the book chapter. The authority resolved the issue and they found no problem with me. Perhaps my colleague continued to get dissatisfied in disguise.

The seniors just assigned the study topics. I myself designed, implemented the studies, processed, analyzed, and wrote the draft reports. The seniors edited and put their names as first authors. When reacted faced consequences persistently. The issues never resolved properly. I had just abided by, because we have no standard procedure to follow. Mentality, attitudes and development orientation are also factors that could prevent the seniors from committing fault and injustice. We lack these very much." – *A senior researcher*

DISCUSSION AND CONCLUSION

In this study we found that authorship conflicts arose among researchers mostly due to unethical practice of their co-authors, supervisors, seniors, and department heads in the absence of any formal institutional authorship policy. The junior researchers are afraid of confronting with their seniors over authorship decisions for many reasons. If confronted they have to face consequences persistently, like negative reflection in annual evaluation, lingering of promotion, personality clash, enmity, etc. Wagena firmly said, "I can testify that life can be made very difficult for a junior researcher who raises questions about whether a more senior colleague demanding co-authorship has made the substantive contribution to a project upon which authorship would be justified (1). Authorship conflicts exist in our society which needs to be addressed before it flares up as a crucial problem in the field of education, research and dissemination. Authorship disputes are increasingly frequent globally. In a study in the Ombuds Office of Harvard Medical School, Dental School, School of Public Health, and affiliated hospitals in the USA, Linda Wilcox found that disputes increased from 8 (2.3%) of 355 issues brought to the office in 1991-1992 to 59 (10.7%) of 551 issues in 1996-1997. She suggested that institutions should increase enforcement of published authorship standards (15). In a small survey of fulfillment of authorship criteria in published medical research in the UK Goodman found that about one-third of the authors did not contribute substantially to the intellectual content of the papers (16). A study from the USA also reported similar findings (17). Our study also suggests that research organizations should have standard code of authorship of its own and should strictly follow that. The researchers need to be sensitized on this problem through open discussions and advocacy. The editors can help researchers by requiring explicit and signed information describing the contribution of each author. Offering or demanding authorship without contribution should be prohibited in every research and academic institution. The head of the organization may play a vital role in implementing this rule. A grievance redress committee may be formed to minimize authorship conflicts. However, the findings should not be generalized due to small sample size. In a growing society like Bangladesh, it is always better to develop appropriate policies well ahead of any problem gets crucial shape. Well-defined policies help avoid conflicts.

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