

# A Study on the National Drug Policies of Bangladesh to Ensure Health for All

Md. Aknur Rahman<sup>1</sup>, Md. Riaz Hossain<sup>2</sup>, Md. Aslam Hossain<sup>1</sup> and Md. Shah Amran<sup>1</sup>

<sup>1</sup>Molecular Pharmacology and Herbal Drug Research Laboratory, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Dhaka, Shahbag, Dhaka-1000, Bangladesh

<sup>2</sup>Department of Pharmacy, Faculty of Pharmacy, University of Dhaka, Shahbag, Dhaka-1000, Bangladesh

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**ABSTRACT:** Bangladesh approved the proposal for a National Drug Policy on May 29, 1982. We know that such drug policies are developed gradually over a period of time and may contain a lot of comprehensive documents. But in Bangladesh, the expert committee worked out the policy, based on 16 standards within 15 days. This vital document, almost unchanged, was made a law on 12 June 1982. A few years later, it can be observed that despite opposition from many concerns, the output of essential drugs has increased from about 30 to about 80 percent, prices have in almost all cases gone down considerably, the domestic industry has grown rapidly, the quality of its production has increased dramatically, and people's awareness about quality medicines has been steadily growing. The World Health Organization (WHO) has stressed the need of a formulated drug policy in every country of the world in 1986. Bangladesh responded very early to this respect. Subsequently, two more national drug policies were promulgated in 2005 and 2016 respectively. Experience over the decades has shown that the said policies could not fulfill the declared objective of ensuring health for all. Our aim is to describe some of the lacunae for which total implementation of drug policy is still struggling. To find the root causes, a total of five hundred volunteers were surveyed by supplying a questionnaire on drug policy. It was observed that most of the participants opined that the incumbent government needs to be more stringent to implement the drug policy into reality by utilizing the public servants and public sectors, especially health personnel to ensure health for all.

**Key words:** National drug policy, Health of people, WHO, Questionnaire.

## INTRODUCTION

The World Health Organization (WHO) defines National Drug Policy (NDP) as "a comprehensive framework in which each component plays an important role in achieving one or more of the general objectives of the policy (access, quality and rational use)".<sup>1</sup> WHO recommends that all countries of the world formulate comprehensive NDP and implement it. A policy is not static and will usually develop over time. A National Drug Policy is a commitment to a goal and a guide for action. National drug policy expresses and prioritizes the

medium to long-term goals set by the government for the pharmaceutical sector, and identifies the main strategies for attaining quality in pharmaceutical sector. The NDP deals with both public and private segments of pharmaceutical issues and comprises all the notable thespians of this medicine-producing arena.<sup>2</sup> Essential Medicine (EM) was defined in 1977 as "medicines that are of utmost importance, and are basic, indispensable and necessary for the health needs of the population".<sup>3</sup>

The Government of Bangladesh is committed to provide effective health care service for the people of the country as per the constitution of the People's Republic of Bangladesh Articles 15 (a), 15(d), and 18(1). Good quality drugs are pre-requisite along with the skilled physicians and standard medical devices and supplies for promoting improved health

**Correspondence to:** Md. Shah Amran  
Moblie: +8801718-617915; Email: amranms@du.ac.bd

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care service. The pharmaceutical industry of Bangladesh is one of the fastest growing sectors. Once where almost 80% demand of drugs was imported, currently more than 98% of medicines are being produced in the country.

NDP of 1982 is an epoch-making event in the history of Bangladesh. Before 1982, there was no NDP in Bangladesh.<sup>4</sup> The medicine market in Bangladesh was filled with unnecessary, harmful, and unsafe medicines before NDP 1982 and multinational companies were controlling the pharmaceutical markets of Bangladesh.<sup>5,6</sup> Only 14 countries, including Bangladesh, had NDP in 1982.<sup>7,8</sup> The second National Drug Policy was formulated in 2005 and the third one was published in 2016.<sup>9,10</sup> A struggle and endeavor has been done in the formulation of NDP 2016 to make the policy much more effective and pro-people.

The major objectives of the study were - (i) to check consciousness of related people about National Drug Policy, (ii) to improve the policy by taking some valuable suggestions from the respondents of the survey, (iii) to find out the drawbacks that are in the policy and come out with the strategies to deal with them and (iv) to find out the area of non-cooperation to implement the policy in the ground.

## MATERIALS AND METHODS

Both primary and secondary data were used to conduct the study. The survey (primary) was done to identify the consciousness and thinking of the respondents. The respondents of this study were teachers, students and researchers. Some universities were randomly selected for this purpose. All of the respondents were related to drug sector. Secondary sources of data were from articles, books, webs etc.

**Data collection.** Required information about the study was attained by supplying questionnaire. Respondents' perceptions and suggestions were also taken to fulfill specific purpose of the research. A total of 500 respondents were surveyed (Table 1). They were students, teachers, researchers etc. Primary data was collected using the knowledge of the people about NDP in the country.

**Table 1. List of Universities surveyed.**

Name of Institutions	Number of respondents
University of Dhaka	55
University of Asia Pacific	61
State University of Bangladesh	138
Northern University of Bangladesh	56
World University of Bangladesh	42
Khulna University	148
Total	500

The respondents were asked some questions about National Drug Policy (NDP) as well as the safe use of antibiotics and Rational Use of Drug (RUD).

## RESULTS AND DISCUSSION

For a comparative study, data from 500 respondents were collected followed by supplying questionnaire to the respondents. Then the data were entered into the program of MS Excel Work book. The questionnaire, responses and analysis are presented below.

**Question 1.** Are you acquainted with National Drug Policy (NDP)?

In this question, 460 of the respondents out of 500 answered 'yes' and rest 40 answered 'no' (Figure 1).

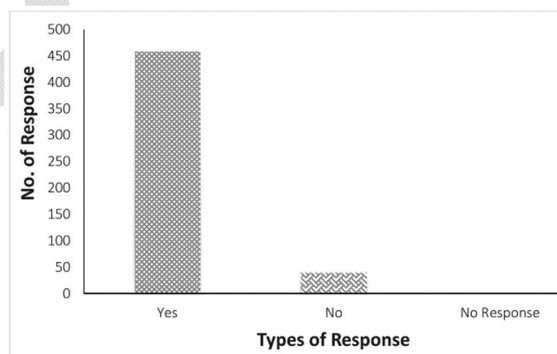


Figure 1. Responses to the question 1.

The above figure showed that 92% of the respondents were acquainted with drug policy and 8% were not acquainted. It means that most of the respondents are acquainted with the NDP. But 100 % of the population related to pharmaceutical sciences should know about the NDP. Drug policy is a

complete life cycle of a drug. It controls every step of drug like production, distribution, advertisement, sell etc. Appropriate knowledge of drug is incomplete without knowing the National Drug Policy of someone's own country.

**Question 2.** If yes, what are your suggestions regarding its appropriateness the way it is now?

Some suggestions regarding its appropriateness the way it is now were given by the respondents. The suggestions of the respondents were - (i) Regulatory authority should take some steps and should be much stricter regarding the issue, (ii) Stakeholders should come forward to ensure the appropriateness of the policy, (iii) Some respondents have suggested to make some strict law about it, (iv) There should be some research work regarding this policy, (v) Drug policy should be updated with time, (vi) This policy should spread among the normal people to increase awareness, (vii) Some people suggested to make it more specified, and (viii) Some people suggested to modify it. The results (responses of 460 respondents) could also be viewed in the following figure.

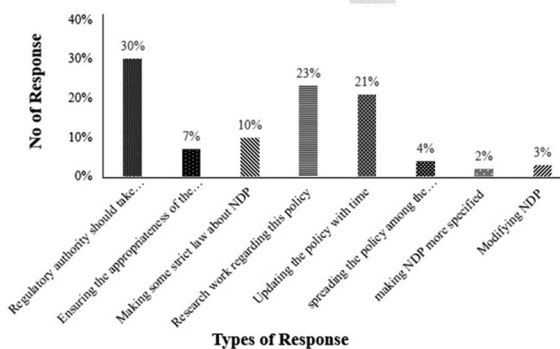


Figure 2. Suggestions regarding NDP's appropriateness the way it is now.

From Figure 2, it was evident that 30% (138) of the respondents suggested the regulatory authority to take some step and be much stricter regarding the NDP. 23% (106) respondents stressed upon the research work regarding the policy. 21% (97) respondents suggested to update the policy in time. The percentages for responses regarding making some strict law about NDP, ensuring the appropriateness of the policy, spreading the policy among the common people to increase awareness,

modifying NDP and making NDP more specified were 10% (46), 7% (32), 4% (18), 3% (14) and 2% (9), respectively. The results shown in the figure were taken from the suggestions given by the respondents in this respect.

**Question 3.** If no, do you think you should have been acquainted?

It was observed that 9 answered 'yes', 7 answered 'no' and 24 had 'no response'. Here, maximum respondents had no responses, which was unexpected. The reasons behind it need to be explored. The result is shown in Figure 3.

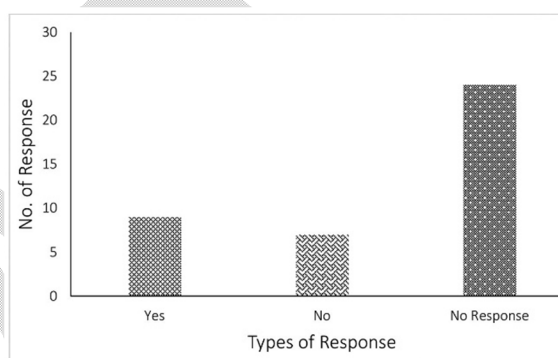


Figure 3. Responses to the question 3.

In the question, whether the unacquainted respondents want to know about drug policy, it was observed that 22.5% of the respondents answered yes, 17.5% answered no and the rest 60% had no response. It showed that maximum respondents had no interest to be acquainted with NDP. But related people should know in detailed about the NDP. Acquaintance means familiarity with or knowing something. The result shows the respondents who have no knowledge (acquaintance) about the drug policy, of them, maximum have no interest to know the drug policy although some feel of no need to know the drug policy. The authority concerned, for example DGDA, should play vital role to make people interest to know about drug policy.

**Question 4.** Do you think the present syllabus (syllabus of B. Pharm and M. Pharm) related to drug policy issue is comprehensive?

In the fourth question, about the present syllabus, 212 respondents out of 500 replied 'yes', 280 replied

'no' and 8 had 'no response'. The responses are shown in Figure 4.

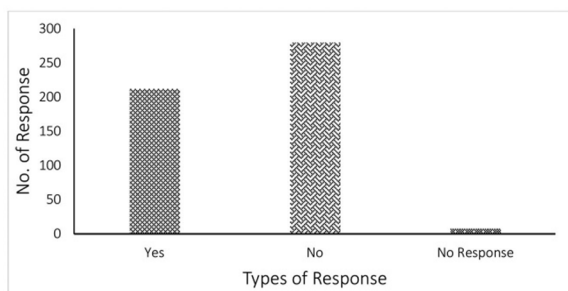


Figure 4. Responses to the question 4.

It was evident that 42% of the respondents answered 'yes', 56% replied 'no' and 2% had no response. Most of the answers were against the present syllabus regarding the "National Drug Policy". In order to have a good population of pharmaceutical knowledge, only traditional knowledge about drug and medicine is not enough. Knowledge of drug policy is also essential as 'drug policy' plays a vital role in all the drug related aspects. From the study, it was inferred that the present syllabus related to drug policy should be revisited, updated and transformed as per the market need.

**Question 5.** If no, what are your suggestions to improve the present syllabus?

In the 5<sup>th</sup> question, some respondents suggested some important points to improve the present syllabus of B.Pharm and M.Pharm. Those were - (i) More topics regarding drug policy should be added, (ii) Should teach us more elaborately, (iii) Irrelevant topics should be discarded, (iv) Topics should not be repeated, (v) Topics regarding drug policy should be added from first year and (vi) Syllabus should be updated with time. The suggestions regarding the improvement of present syllabus were in keeping with the context.

**Question 6.** In your opinion, is Adverse Drug Reaction Monitoring (ADRM) an important issue?

In the question on ADRM, 490 of the respondents replied 'yes', 2 replied 'no' and 8 had no response. Responses can be found in Figure 5.

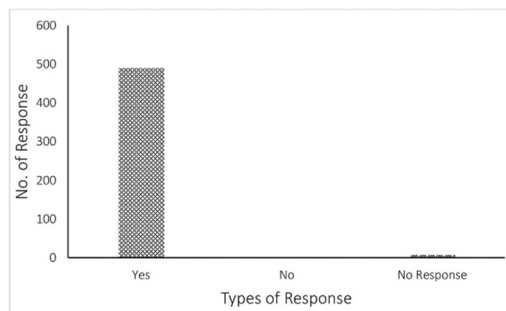


Figure 5. Responses to the question 6.

It was observed that 98% of the respondent agreed with the issue of ADRM. On the other hand, 2% of the respondents didn't agree with this issue. This indicated that ADRM was given importance by all concerned because it is very much related to maintaining good health of people.

**Question 7.** Do you think that Rational Use of Drug (RUD) is an important issue today?

490 out of 500 respondents answered 'yes', 4 answered 'no' and 6 had no response. The responses are shown in Figure 6.

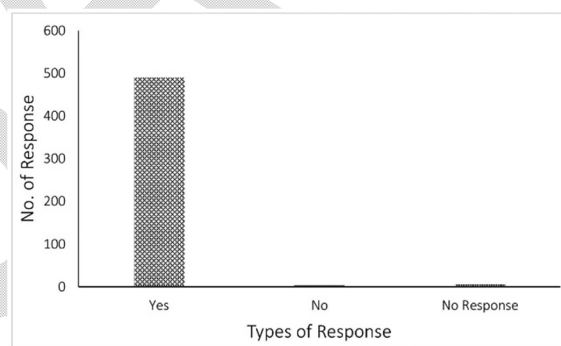


Figure 6. Responses to the question 7.

From the figure, it was seen that 98% of the respondents said that RUD was an important issue. Only 1% respondent replied 'no' and 1% didn't respond to the question. It means that better treatment can be ensured by practicing RUD. So, the importance of RUD can clearly be understood by the relevant people. But the bitter truth is that RUD is not maintained properly in our country. So, according to the respondents' opinion, more care should be given about the right quality, right quantity, right time, right dosage form, right application of drug and at right price. Because, overuse, polypharmacy and incorrect

use of drugs are the most common problems of drug use today; RUD should be given priority.

**Question 8.** It is widely known that abuse of antibiotics is very common all over the country. Do you think RUD can prevent abuse of antibiotics?

It was evident that 495 out of 500 respondents opined in favor of practice of RUD to prevent abuse of antibiotics, 2 respondents answered 'no' and 3 had no response. The responses could also be viewed in Figure 7.

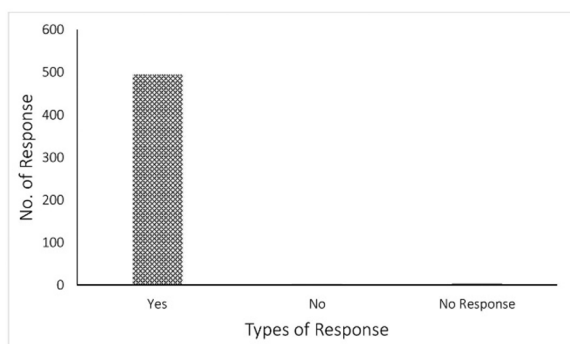


Figure 7. Responses to the question 8.

It was observed that 99% of the respondents thought that RUD can prevent the abuse of antibiotics. Less than 1% replied 'no' regarding the question. The result indicated that right use of drug practice can prevent abuse of antibiotics. So, training and awareness building endeavors regarding RUD might be fruitful to combat abuse of antibiotics in the country. Rational Use of Drugs is ensured when patients receive medications at the appropriate needs, in right doses, at the right time, and at the right cost. Overuse, polypharmacy and incorrect use of drugs are the most common problems of drug use today. In case of antibiotics, they happen every now and then and so, RUD regarding antibiotics has been emphasized in the study. A lot of factors, such as, budget, life style, awareness, knowledge etc. can contribute to the proper use of antibiotics besides RUD.

**Question 9.** Sustainable Development Goals (SDGs) contain some specific goals regarding use of drugs to improve public health. Do you think that it is important to incorporate SDGs in our current drug policy?

It was seen that 441 respondents out of 500 endorsed incorporation of SDGs in the current drug policy, 13 answered 'no' and 46 did not respond (Figure 8).

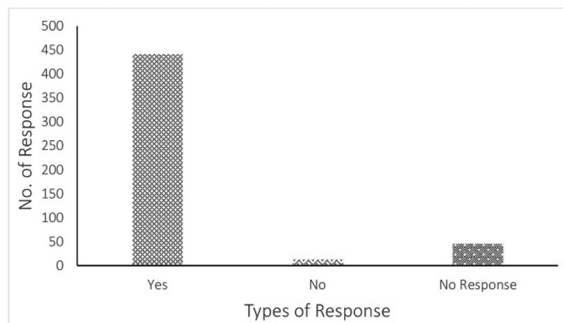


Figure 8. Responses to the question 9.

In the query of incorporation of SDGs into the drug policy, 88% said 'yes' and 3% said 'no' where 9% of the respondents didn't respond to the question. So, maximum felt the importance of incorporation of SDGs in the drug policy to keep pace with the global market.

**Question 10.** Do you have any idea about essential drug program in Bangladesh?

In response to the question regarding idea of essential drug program, 372 out of 500 respondents said 'yes', 110 answered 'no' and 18 did not respond (Figure 9).

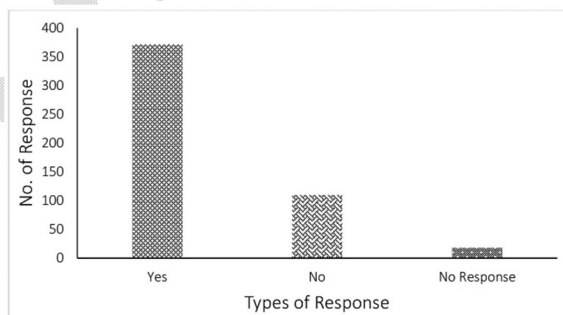


Figure 9. Responses to the question 10.

It was observed that 74% of the respondents answered 'yes', 22% answered 'no' and 4% did not respond. It was observed that maximum respondents had the idea about essential drug program.

**Question 11.** How many drugs are included as essential drugs in NDP 2016?

Well, it was a little bit tricky question as the right answer of the question along with wrong answers were given as options. The right answer was 285. Only 26 respondents were able to give the right answer among 500 respondents (Figure 10). 442 participants gave wrong answer and 32 did not respond.

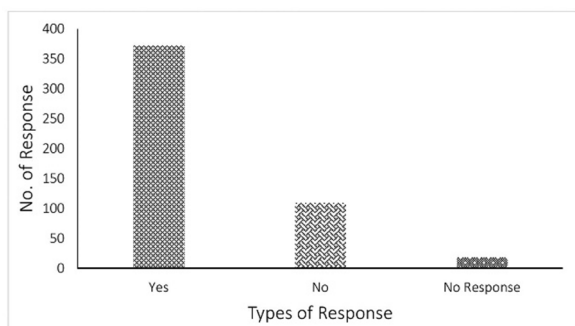


Figure 10. Responses to question 11.

It was seen that the percentage of right answerers was only 5% where percentage of wrong answerers was 85% and 10% gave no response. Everyone related to drug and medicine should know the essential drug list. So, it was an important point to study why this information of essential drug list was not known to all concerned. It is to be mentioned that anybody can find the said essential drug list in the drug policy.

**Question 12.** Do you think that the fund allocated in the national budget for research and education on drug is sufficient?

It was displayed in the figure 11 that 445 out of 500 respondents said 'no', 40 said 'yes' and 5 did not respond.

Majority (91%) of the respondents opined that the budget that was allocated for the research purpose was not sufficient. 8% opined that the budget was sufficient and 1% had no response. The result of the study indicates that the present budget allocated to research and education on drug is not sufficient. So, budget on this issue should be revisited and commensurate with the actual need. More budget allocations on research and education on drug can contribute to create the healthy workforce who can give better service to the nation and ultimately

participate in the national economy to a great extent. If this protection measure is taken proactively, it will positively trigger the national health in consequence.

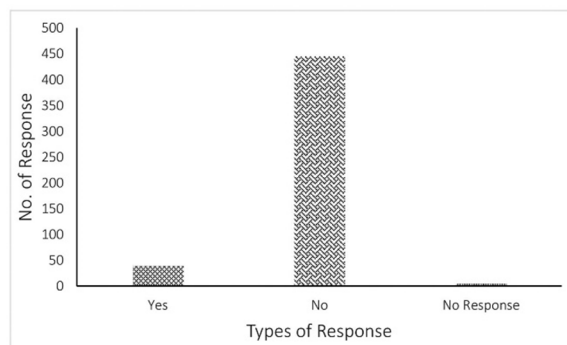


Figure 11. Responses to the question 12.

**Question 13.** If no, give your comment.

Some comments regarding this question are given below - (i) Budget should be increased, (ii) Regulatory committee should be formed regarding this issue, (iii) Investigation should be done why and where to increase the budget.

The study was conducted among the students, teachers and researchers of different universities offering pharmacy education. It has enabled us to realize the understanding and thinking of different respondents about NDP, ADRM, essential drug, sustainable development goals as well as Rational Use of Drugs. From different figures, it was observed that number of positive answers were good. In case of question of ADRM, RUD and safe use of antibiotics, most of the respondents gave positive answers. Maximum respondents (99%) opined that right use of drug practice can prevent abuse of antibiotics. Awareness and training were sought in this respect.

In the investigation, it was found that some of the respondents did not know about SDGs as well as essential drug program. The percentage were 9% and 22% respectively. Surprisingly, it was found that only 26 (5%) respondents out of 500 knew the exact number of essential drugs in Bangladesh. A study by AK Mohiuddin in 2018 observed that although the NDP gives clear guideline to production and distribution of essential drugs with incentives, still

80% of under privileged people doesn't have sustainable access.<sup>11</sup>

Regarding the question of improvement of the drug policy, most of the respondents suggested to make regulatory authority to strictly role/implement the drug policy. Drug policy is usually formulated by the health policy makers and planners, not by the regulatory authority. Drug policy is implemented by regulatory authorities. The goal is to transform the policy into reality. So, it should be spread over widely into the mass population. Also, NDP 2016 clearly spelled out that DGDA has to be strengthened through appropriate expansion of existing human resources and infrastructural facilities to serve as an effective National Regulatory Authority (NRA). The National Regulatory Authority has to be, at least, recognized by WHO and to be a member of PIC/S (The Pharmaceutical Inspection Convention/The Pharmaceutical Inspection Scheme).<sup>12</sup>

Again, almost 91% of the respondents said that budget allocated for research and education was not quite enough and they further suggested to increase the budget as well as to make a committee to look after the matter. According to DGDA, Drug Control Committee (DCC), Standing Committee for Imports of Raw Materials and Finished Drugs, Pricing Committee and a number of other relevant Committees, which comprise of experts of different fields, are there to advice the Licensing Authority and recommend about the matters related to drugs and medicines.<sup>13</sup> But as per the study, it needs some endeavor/improvement in implementation of the policy.

## CONCLUSION

Based on the survey on students, teachers and researchers of different universities, it can be inferred that the idea of transforming national drug policy into reality is not so much difficult. It's just a matter of time. The major plus point has been the positive outlook of all the respondents of relevant areas. A good knowledge about the national drug policy as well as other drug related information is already in place. It should only be nourished and continued.

However, there are some major drawbacks as noticed, like-continuous monitoring of regulatory committee, lack of strict rules and regulation, lack of dissemination of information to the general mass, lack of adherence etc. If these drawbacks are managed, people would be much more benefitted through implementation of the National Drug Policies.

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