

## 6. Summary

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1. A computerized information system containing the information of hospitals, educational institutions and registered pharmacists was created.
2. The pharmacists' database has a total of 13038 entries. The data of registered pharmacists of Delhi (11032) & Chandigarh (2006) was obtained from their respective State Pharmacy Council. The data from the state pharmacy councils of Haryana and Punjab could not be obtained.
3. The data obtained from Chandigarh Pharmacy Council showed a total of 2006 registered pharmacists up to year 2006. Out of these, 54.9% pharmacists were male. In year 2001, one registered pharmacist of Chandigarh served approximately 575 persons. For verification of data captured on registered pharmacists, questionnaires were sent to all of them in Chandigarh. The response rate was close to 13%. An additional 10% questionnaire were received back due to the incomplete or incorrect address.
4. The data obtained from the Delhi Pharmacy Council revealed that a total of 11032 pharmacists were registered with the council upto 2006. The female pharmacists constituted only 14% of the total. In year 2001, one registered pharmacist of Delhi served 1900 persons. For the state of Delhi, the questionnaires were sent to 2000 randomly selected registered pharmacists. A total of 217 pharmacists (11%) returned the updated information as sought through the questionnaire. A total of 97 questionnaires were returned back to the investigator on account of non-delivery.
5. The pharmacy education imparting institutions database had 987 records. This includes institutions offering D. Pharm., B. Pharm. & M. Pharm. courses.
6. The number of institutes offering D. Pharm. in 1950 was 2 only. The number of diploma institutions has risen from 72 (in 1980) to 497 in 2007,

which reflects close to 7-folds increase. The student intake has touched 29855 in year 2007.

7. Likewise, the growth in the number of institutions offering B. Pharm. course from 1947 to 2007 is over 90 folds (from 3 to 272). In 2007, the Pharmacy Council data reflects 15465 admissions to B. Pharm. course.
8. For verification of institute's data, the total numbers of questionnaires sent to the different educational institutions of 4 states (Delhi, Haryana, Punjab and Chandigarh) were 74. Out of total 74 questionnaires sent, only 34 institutions (46%) updated their information by returning back the questionnaires with current information to the investigators.
9. The total number of entries in the hospital database is 2603. The verification of data, which is in the database, was performed using the structured questionnaires. The total numbers of questionnaires sent to the hospitals in Chandigarh was 63. Only 27% (17 hospitals) updated their information.
10. A structured closed-ended questionnaire was sent to the different colleges for the assessment of mismatch between out-turn and deployment of pharmaceutical personnel. Of the 25 colleges chosen for the purpose, 8 colleges responded sent back the updated questionnaire. Approximately 2-40% of the diploma students opened their own chemist shop. Nearly one third of the D. Pharm. students (10-30%) opted for higher studies. A majority of B. Pharm. students opted for higher studies (80%; upper limit). The M. Pharm. Students preferred to go for the jobs in pharmaceutical industry.
11. The analysis clearly demands that the pharmacy education at various levels be re-looked if the pharmacists are to become a meaningful part of the healthcare team. The state pharmacy councils need to be more cautious in maintaining the records.
12. It will be equally useful to elicit inputs from the stakeholders in the healthcare team on the envisaged role of the pharmacists in the next 25 years of time.