



[J Pharm Bioallied Sci](#). 2010 Apr-Jun; 2(2): 151.

doi: [10.4103/0975-7406.66998](https://doi.org/10.4103/0975-7406.66998)

PMCID: [PMC3147102](https://pubmed.ncbi.nlm.nih.gov/PMC3147102/)

PMID: [21814452](https://pubmed.ncbi.nlm.nih.gov/21814452/)

## Attitude of doctors towards physical characteristics of solid oral dosage forms

[A. A. Hasamnis](#),<sup>1</sup> [S. S. Patil](#),<sup>2</sup> [B. K. Mohanty](#),<sup>3</sup> [Kyaw Thu](#),<sup>4</sup> and [Arun Kumar](#)<sup>5</sup>

<sup>1</sup>Departments of Pharmacology, AIMST University, Malaysia. E-mail: [ameyadoc@rediffmail.com](mailto:ameyadoc@rediffmail.com)

<sup>2</sup>Departments of Community Medicine, AIMST University, Malaysia

<sup>3</sup>Departments of Pharmacology, AIMST University, Malaysia

<sup>4</sup>Departments of Community Medicine, AIMST University, Malaysia

<sup>5</sup>Departments of Pharmacology, AIMST University, Malaysia

[Copyright](#) © Journal of Pharmacy and Bioallied Sciences

This is an open-access article distributed under the terms of the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Sir,

Solid oral dosage forms are some of the least expensive, most popular and convenient methods for drug delivery.[1] The general appearance of solid dosage form is its visual identity. The overall 'elegance' is essential for consumer acceptance, and has an impact on the compliance of the treatment.[2] The general appearance of solid oral dosage forms involves evaluation of attributes such as a tablet's size, shape, color, odor and taste.

In the present study, the doctors of AIMST University, Malaysia were given a questionnaire to know their preferences regarding the physical characteristics of oral solid dosage forms (tablets). The study was approved by Institutional Ethics Committee and the identity of doctors was kept confidential. AIMST University is a leading private university in Malaysia employing doctors from all over Malaysia and abroad. In this land mark study conducted in Malaysia, the selected sample of doctors represented medical faculty from Asia, Europe and Africa. Knowledge of doctors' preferences and ideas about clinical pharmacy related attributes would help in designing better oral solid dosage forms for the world community in the future.

Of the 50 doctors who participated in the study, 32(64%) were males and 18(36%) were females. They were in the age group between 30 and 70 years. The health care sector is flooded with many brands of the same drug molecule. The high-power

salesmanship plays a key role in prescribing a particular brand of a drug molecule by the doctors. When doctors participating in the present study were asked to reveal important reasons for selecting a particular brand of the drug molecule, it was observed that 23 (46%) doctors gave preference to the low cost of a particular brand. This was followed by 14 (28%) doctors who prescribe drugs knowing the manufacturer's profile. The remaining 13 (26%) doctors prescribe a particular brand of drug molecule due to its availability in the local market.

The favorite two-dimensional shape of solid dosage form as per the results of the study was oval (32, 64%) followed by circular (12, 24%) and the least preferred shape was square (4, 8%) and rectangle (2, 4%). Majority of the doctors 42 (84%) were of the opinion that they should not take into consideration the shape of the tablet and patients' own preference regarding the shape of the oral solid dosage form before prescribing. The rest of the doctors (8, 16%) strongly disagreed with the same.

Majority of the doctors 45 (90%) felt that the size of the oral solid dosage form should be small enough to swallow it easily. Five (10 %) doctors had no specific view on the size of the tablet and answered neutral to the concerned question. The top two colors preferred by doctors for solid dosage forms were white (35, 70%) and blue (12, 24%). The rest of the doctors (3, 6%) had no preference for color of solid oral formulations. Forty five (90%) doctors were of the opinion that the color of the solid dosage form is important for compliance of the drug treatment and that acceptability of the product is increased by making the tablet visually more elegant. The rest of the doctors (5, 10%) either disagreed or had neutral opinion about the concerned point.

Smell is an important factor in making the solid oral dosage form more palatable and this was agreeable to 38 (76%) doctors. The rest 12 (24%) did not agree with the same. Majority of the doctors (48, 96%) felt that tasteless medications are the best to prescribe. The remaining two doctors answered neutrally to the question. Forty six (92%) doctors felt that attractive packing makes drugs cosmetically more acceptable and that strips (39, 78%) were ideal for storing solid dosage forms as compared to bottles (11, 22%).

In general, 44 (88%) doctors felt that if a solid oral dosage form matching the patients' own physical preferences of color, shape, size, taste and smell is prescribed, it would increase the patients faith in the doctor and will help in improving the compliance of patient toward the treatment prescribed. It was noted in the present study that the preferences for shape, size, color, taste and smell for oral solid dosage forms were almost the same for male and female subgroups.

According to the results of this study, the ideal solid oral dosage form should be small in size, oval in shape, white in color, tasteless and with no obnoxious smell.

## References

Go to:

1. Oral Solid Dosage Forms: Process Monitoring Techniques and Challenges in Scale-Up and Technology Transfer. 2009. Available from: [http://www.ispe.org/cs/training\\_courses/unit\\_operations\\_for\\_oral\\_solid\\_dosage\\_forms](http://www.ispe.org/cs/training_courses/unit_operations_for_oral_solid_dosage_forms) .

2. Overgaard AB, Højsted J, Hansen R, Møller-Sonnergaard J, Christrup LL. Patients' evaluation of shape, size and colour of solid dosage forms. Pharm World Sci. 2001;23:185–8. [[PubMed](#)]

---

Articles from Journal of Pharmacy & Bioallied Sciences are provided here courtesy of **Wolters Kluwer -- Medknow Publications**