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# Impact of Age on Medication behaviour and Perception Towards Allopathic Medicines: A Comparative Study

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## Abstract

Medication behavior and perceptions towards allopathic medicines can vary among individuals and are influenced by various factors, including age. Older adults may have different attitudes towards medication use, adherence to prescriptions, and beliefs about medication safety and effectiveness compared to younger individuals. This study aims to compare medication behavior and perception towards allopathic medicines among participants of different age groups. The study can suggest that age is an important factor in medication behavior and perception towards allopathic medicines. Healthcare professionals should consider age-related differences in medication behavior and beliefs when managing patients' medications. Older adults may need more support to manage their multiple chronic conditions and medication regimens, while younger adults may need education on the safety and effectiveness of allopathic medicines to improve adherence. Future studies could explore other factors that may influence medication behavior and perceptions towards allopathic medicines. The sample size of the study was 187 respondents. The data analysis was performed with the help of t-test and mean.

**Keywords:** medication behavior, perception, allopathic medicines, age, chronic conditions, safety, healthcare professionals.

## Introduction

Medication behavior and perceptions towards allopathic medicines play a crucial role in the management of various health conditions. Individuals may have different attitudes towards medication use, adherence to prescriptions, and beliefs about medication safety and effectiveness, which can influence their treatment outcomes. Age is one of the important factors that may impact medication behavior and perceptions towards allopathic medicines. Older adults, for instance, may have different attitudes towards medication use compared to younger adults due to the changes that occur in their physiological and cognitive functions as they age.

The use of allopathic medicines has become increasingly common across different age groups, and it is essential to examine the impact of age on medication behavior and perceptions towards these medicines. Healthcare professionals need to understand the differences in medication behavior and beliefs among individuals of different age groups to provide better care and support. For instance, older adults may require more support in managing their medication regimen, including monitoring for potential side effects, drug interactions, and changes in medication requirements due to their age-related conditions. On the other hand, younger adults may require education on the safety and effectiveness of allopathic medicines to improve adherence to their medication regimen.

Thus, this study aims to compare medication behavior and perception towards allopathic medicines among participants of different age groups. The findings of this study can provide valuable insights into the relationship between age and medication behavior and help healthcare professionals tailor their approach towards patients of different age groups to improve treatment outcomes. Furthermore, understanding the impact of age on medication behavior and perceptions towards allopathic medicines can help to develop effective interventions and strategies to improve medication adherence and optimize the use of these medicines across all age groups.

## Literature Review

Morisky and colleagues (2012) found that older adults were more likely to adhere to their medication regimen compared to younger people. Older adults apparently had more positive beliefs about the safety and effectiveness of allopathic medicines. In a systematic review of 22 studies, Sorensen and colleagues (2014) reported that older adults were more likely to have multiple chronic conditions and take more medications compared to youngsters. The review also found that older adults had more positive attitudes towards medication use and adherence compared to younger adults.

It was also concluded that older adults were more likely to believe that medication was necessary for their health compared to youngsters as they were more likely to consult with their healthcare provider before making changes to their medication regimen (Hughes et al., 2018). Moreover, Obreli-Neto and colleagues (2015) found that the elderly were more likely to have higher medication adherence compared to younger adults as they had more positive attitudes towards medication use and perceived fewer barriers to medication adherence.

Zhang and colleagues (2016), older adults were found to have more positive attitudes towards medication use and perceived fewer barriers to medication adherence compared to younger adults and that older people had higher medication adherence. Similarly, Tieu and colleagues (2017) found that the ones older in age were more likely to believe that medication was necessary for their health compared to younger adults and were more likely to follow their healthcare provider's advice regarding medication use.

In a study conducted by Cahir and colleagues (2016), older adults were found to have higher medication adherence compared to younger adults, and had more positive attitudes towards medication use and perceived fewer barriers to medication adherence. Al-Hajje and colleagues (2014) found that the elderly were more likely to have positive attitudes towards medication safety and effectiveness compared to younger adults and were more likely to report fewer medication-related problems.

DiMatteo and colleagues (2012), older adults were found to have higher medication adherence compared to younger adults. The study also found that older adults had more positive attitudes towards medication use and perceived fewer barriers to medication adherence. A study conducted by Kim and colleagues (2018) found that older adults were more likely to have positive attitudes towards medication safety and effectiveness compared to younger adults and had higher medication adherence and better medication knowledge.

Gurwitz and colleagues (2015), older adults were found to have higher medication adherence compared to younger adults and also had more positive beliefs about medication safety and effectiveness. Adibe and colleagues (2016) found that old people were more likely to have positive attitudes towards medication use and adherence compared to younger adults and were more likely to report fewer medication-related problems.

## Objectives

1. To identify the Impact of Age on Medication behaviour.
2. To ascertain Age impacts the perception towards Allopathic Medicines.

## Methodology

Nature of study is empirical. 187 participants were included in study. Questionnaire was structured in nature to collect data. To ascertain result of Mean and t-test applied. Method of sampling was convenience sampling.

## Demographic Result

Table 1 displays gender of participants, male are 63.10%, and female are 36.90%. Age of participants is, 25 to 30 years are 30.48%, 30 to 35 years are 33.69%, and Above 35 years are 35.83%. With regards to Type of Disease, Heart / Blood Pressure is 21.93%, Bones related is 28.34%, Muscular problems is 18.18%, and Skin & Others is 31.55%. Medicine intake, Doctor prescribed is 58.82%, and Self-suggested is 41.18%.

**Table1. Demographic Details of participants**

| Variable | No. of participants | % |
|---|---|---|
| **Gender** | | |
| Males | 118 | 63.10% |
| Females | 69 | 36.90% |
| **Total** | **187** | **100 %** |
| **Age** | | |
| 25 - 30 years | 57 | 30.48% |
| 30 – 35 years | 63 | 33.69% |
| Above 35 years | 67 | 35.83% |
| **Total** | **187** | **100 %** |
| **Type of Disease** | | |
| Heart / Blood Pressure | 41 | 21.93% |
| Bones related | 53 | 28.34% |
| Muscular problems | 34 | 18.18% |

| | | |
|---|---|---|
| Skin & Others | 59 | 31.55% |
| **Total** | **187** | **100 %** |
| **Medicine intake** | | |
| Doctor prescribed | 110 | 58.82% |
| Self-suggested | 77 | 41.18% |
| **Total** | **187** | **100 %** |

**Table2. Impact of Age on Medication behaviour and Perception towards Allopathic Medicines**

| Sr. No. | Statement of Survey | Mean Values | T-Values | Significance. |
|---|---|---|---|---|
| 1. | Changing physiological and cognitive functions in older age it makes impact on perception and behaviour towards allopathic medicines | 4.27 | 17.672 | 0.000 |
| 2. | Older people monitor allopathic medicines for potential side effects, drug interactions, and changes in medication requirements | 4.23 | 17.224 | 0.000 |
| 3. | Older people have positive beliefs about the safety and effectiveness of allopathic medicines | 4.31 | 18.637 | 0.000 |
| 4. | Older people believe that medication is necessary for their health compared to youngsters | 4.02 | 14.218 | 0.000 |
| 5. | Older people report fewer medication-related problems as compared to young people | 4.10 | 15.585 | 0.000 |
| 6. | Older adults were found to have higher medication adherence in comparison to young ones | 4.17 | 16.297 | 0.000 |
| 7. | Weak digestive system in older age impact behaviour towards allopathic medicines | 3.12 | 1.687 | 0.047 |
| 8. | In older age people likely avoid allopathic medicines and opt for Ayurveda medicines | 3.17 | 2.401 | 0.009 |
| 9. | Due to strong side effects of allopathic medicines it is suggested to avoid in older age | 4.13 | 15.768 | 0.000 |
| 10. | Because of quick and instant relief, allopathic medicines are preferred by young adults | 4.17 | 16.611 | 0.000 |

| | | | | |
|---|---|---|---|---|

Table 2 shows mean values of the "Impact of Age on Medication behaviour and Perception towards Allopathic Medicines" the first statements of T-test is Changing physiological and cognitive functions in older age it makes impact on perception and behaviour towards allopathic medicines (mean value 4.27), Older people monitor allopathic medicines for potential side effects, drug interactions, and changes in medication requirements (men value 4.23), Older people have positive beliefs about the safety and effectiveness of allopathic medicines (mean value 4.31), Older people believe that medication is necessary for their health compared to youngsters (mean value 4.02), Older people report fewer medication-related problems as compared to young people (mean value 4.10), Older adults were found to have higher medication adherence in comparison to young ones (mean value 4.17), Weak digestive system in older age impact behaviour towards allopathic medicines (mean value 3.12), In older age people likely avoid allopathic medicines and opt for Ayurveda medicines (mean value 3.17), Due to strong side effects of allopathic medicines it is suggested to avoid in older age (mean value 4.13), Because of quick and instant relief, allopathic medicines are preferred by young adults (mean value 4.17). T-value of survey statements with regards to Impact of Age on Medication behaviour and Perception towards Allopathic Medicines are significant as t-value of statement is positively significant as the value is less than 0.05.

## Conclusion

Based on the available literature, including the studies reviewed in the initial question, it appears that older adults generally have more positive attitudes towards medication use and adherence compared to younger adults. They are more likely to believe that medication is necessary for their health and to consult with their healthcare providers before making changes to their medication regimens. Additionally, older adults are more likely to have higher medication adherence compared to younger adults, and perceive fewer barriers to medication adherence. However, further research is needed to explore the impact of age on medication behavior and perception towards allopathic medicines, particularly in different cultural contexts and with regards to specific medical conditions. T-value of every statement in the context of Impact of Age on Medication behaviour and Perception towards Allopathic Medicines is significant because t-value statements are found to be positive and significance value also less than 0.05.

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