

# SLEEP DISORDERS:

## Emerging Health Issues in Old Age

A Study by



**Agewell Foundation**

(In **Special Consultative Status** with the **ECOSOC** at **United Nations** since 2011)  
(In association with **UN-DPI**)

[www.agewellfoundation.org](http://www.agewellfoundation.org)

### **About the Study**

*Agewell Foundation conducted a study on “Sleep Disorders: Emerging Health Issues in Old Age” during the 3<sup>rd</sup> week of May 2023. During this exercise Agewell volunteers spread across the country interacted with over 5000 respondents. The main objective of the research endeavor was to assess the emerging challenges due to sleep disturbances and create awareness about good sleep habits among middle-aged and older persons.*

## Background

Generally, people in the two age groups i.e. middle-aged people (40-64 years) and old people (65 & Above) face sleep disturbances due to various factors like a decrease in cognitive functions, decrease in social interaction, dispassionate interpersonal relations, the occurrence of diseases, particularly old-age related, psychological issues such as loneliness, depression, etc.

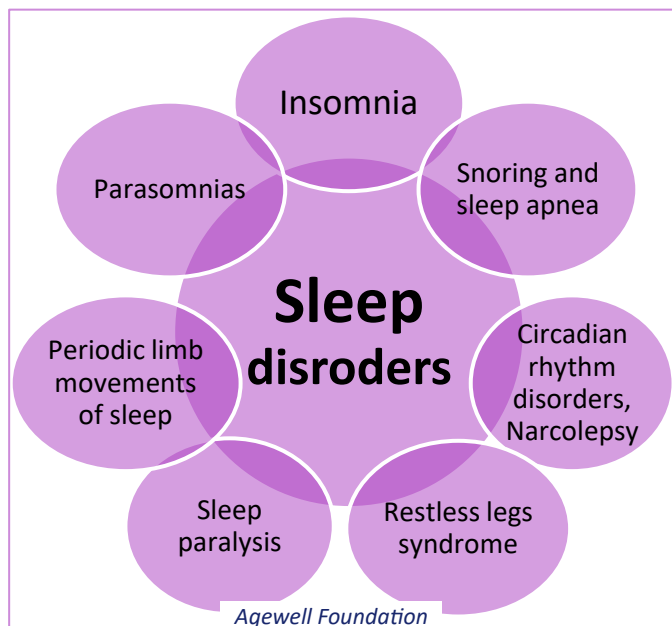


People who live alone and remain socially isolated have to struggle more due to sleep disturbances. In joint families, where younger generations remain self-occupied and rarely interact with their elderly family members. Old people feel loneliness within their families and more often also face sleep disturbances.

Since the change in sleep patterns is also a part of the normal aging process, as people age, they struggle to have sound sleep. As sound sleep is considered an ideal indicator of good health, the importance of sleep is well-known to all.

### The most common sleep disorders include:

- **Insomnia** - Insomnia is the most common sleep disorder, with about 10% of adults having a chronic problem with it and between 30% and 40% dealing with it now and then
- **Snoring and sleep apnea**- People snore because their throat is closing while they sleep. Sometimes, it becomes a more serious cousin—sleep apnea, which is a chronic and potentially serious medical condition
- **Parasomnias** - parasomnias are sleep disorders characterized by abnormal sleep behaviours or physiological events that occur during specific stages of sleep.
- **Sleep paralysis** - It can happen during any transition between sleep and being awake, either as you drift off or as you wake up.
- **Restless legs syndrome** – It is a neurological movement disorder characterized by unpleasant feelings in the legs associated with a need to move. These sensations may include – Aches, Burning, Tingling, Crawling sensations on the legs,
- **Periodic limb movements of sleep** - A movement disorder often associated with RLS



- **Circadian rhythm disorders, Narcolepsy** - Conditions that may result from your internal biological clock being out of sync with external time cues, including the natural dark-light cycle

## Major causes of sleep disturbances

- Unhealthy interpersonal relations between family members/relatives/friends/colleagues/others
- Sedentary/inactive lifestyle
- Negative thoughts like feelings of fear, failure,
- Psychological stress, Depression, Anxiety, apprehension
- Unhappiness, discontent, restlessness
- Unfulfilled family/social responsibilities
- Uncontrolled consumption of alcohol/drugs
- Health conditions like heart disease, diabetes, and conditions that cause discomfort and pain, such as arthritis and fibromyalgia in old age.

It has been observed that in old age, more than 90% of older people take some kind of medical prescription and most of the medicines are not sleep-friendly. Certain prescriptions or medications for high blood pressure can decrease the quality of rest or sleep, while some medicines can cause daytime drowsiness in older people.

Fast-changing daily habits in post-retirement life also play a part in reducing the quality of sleep. Daytime naps, less time spent outside, and low exposure to natural light often disrupt good sleep time. People who feel loneliness due to low social interaction may also feel increased anxiety and stress, and subsequently poor sleep.

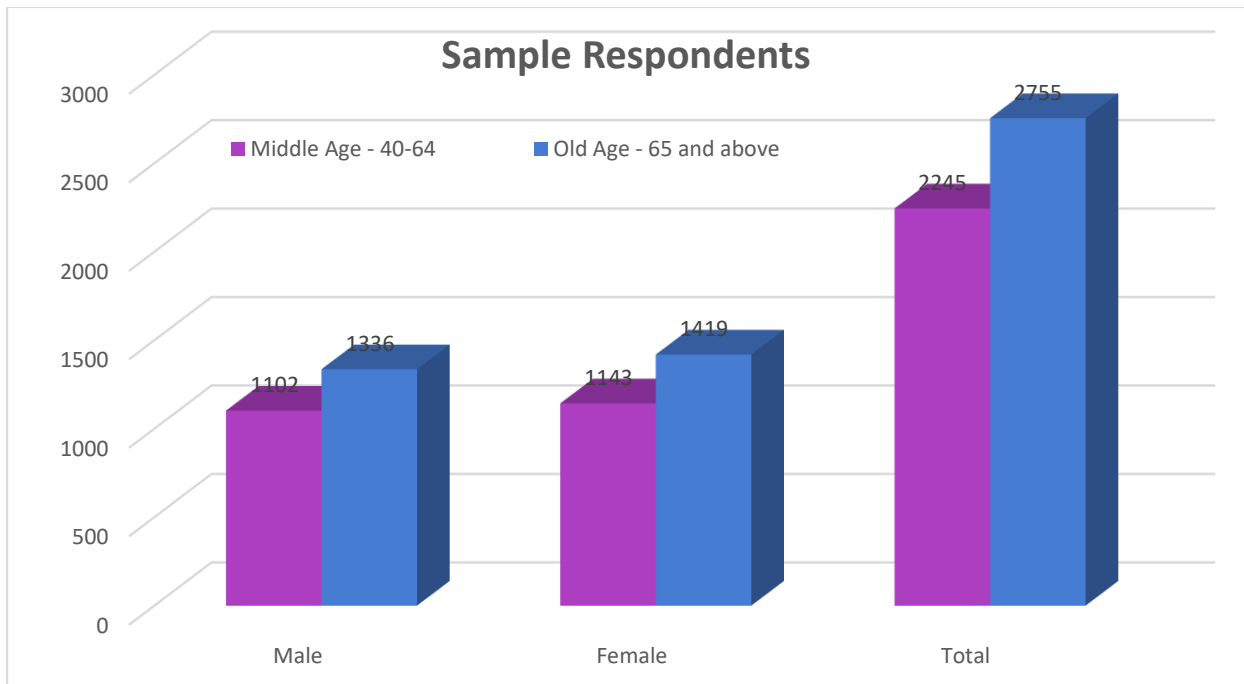
## Sample Size

- During the survey, 5000 respondents from 20 states and Union Territories across the country were interacted with by Agewell Volunteers during mid-May 2023.
- Since sleep disorder is a major problem among middle-aged persons (40-64 years) and older persons (65+), people from these two categories are selected as sample respondents.

Sample Respondents	Male	Female	Total
<b>Middle Age - 40-64</b>	1102	143	2245
<b>Old Age - 65 and above</b>	1336	1419	2755
<b>Total</b>	2438	2562	5000

## Profile of the sample respondents

- Among 5000 respondents, 2245 (44.9%) were middle-aged persons (40-64 years) and the remaining 2755 (55.1%) were older persons (65 & above).

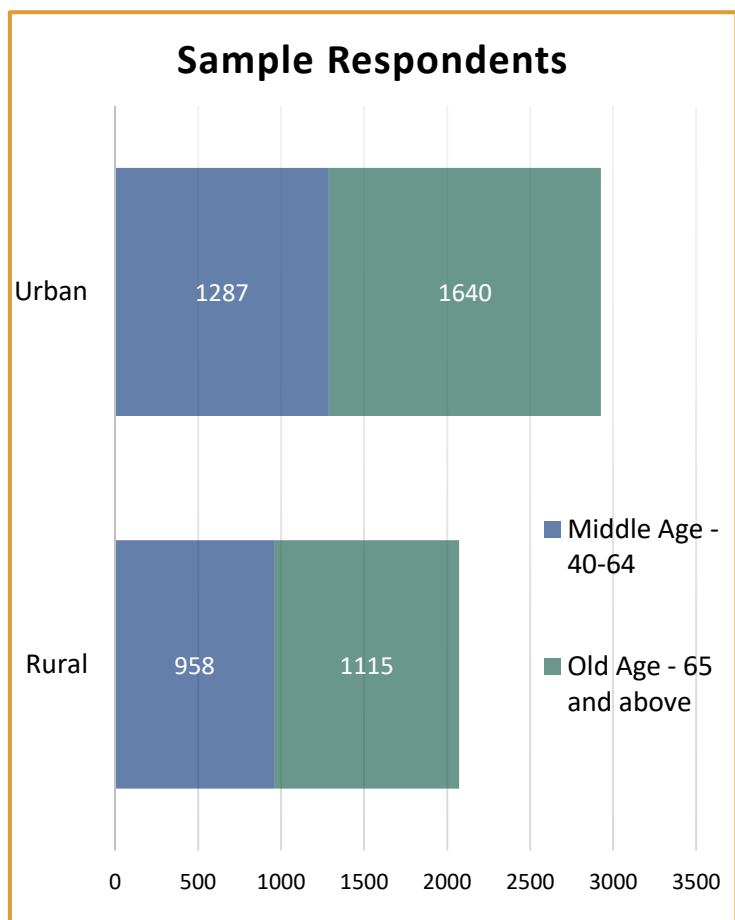


- Gender Wise, there were 2562 (51.2%) female respondents and 2438 (48.8%) were male respondents.

- Among middle-aged respondents, 50.9% were female while 49.1% were male. In the Old Age category, 51.5% of the respondents were female.

- During the survey, it also attempted to have sample respondents with a judicious mix of rural and urban residents. 58.5% of the total respondents were from urban areas whereas the remaining 41.5% of respondents were from rural areas.

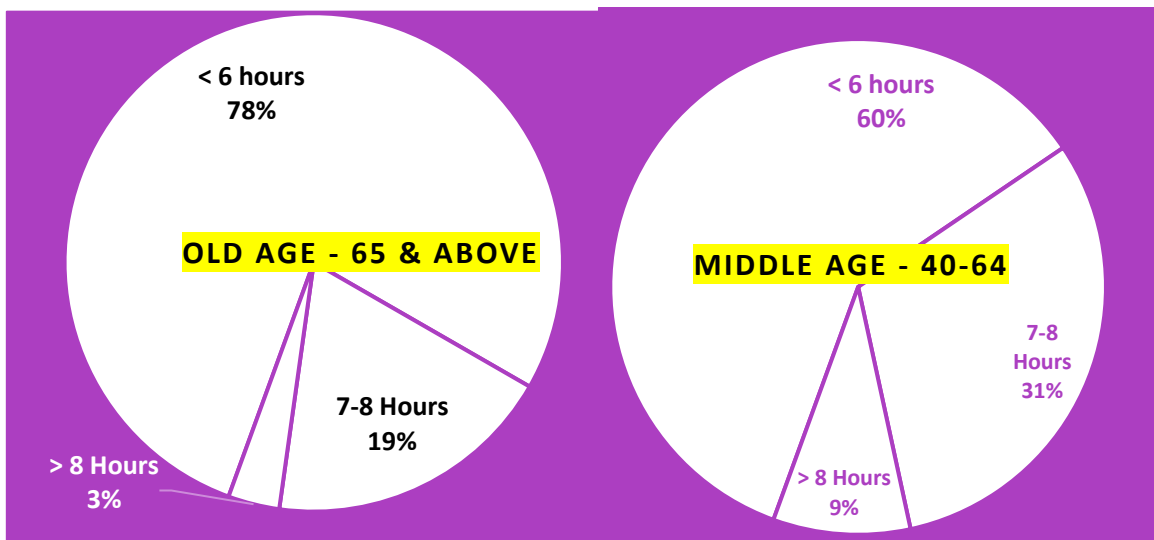
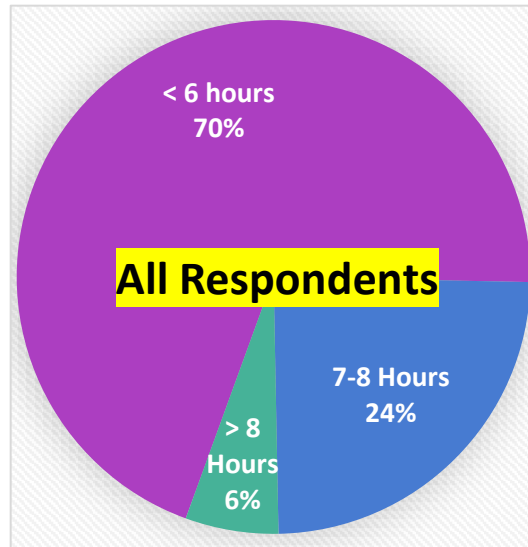
- Among middle-aged respondents, 57.3% were urban respondents. In the Old Age category, 9.5% of the respondents were from urban areas.



# Major Study Findings

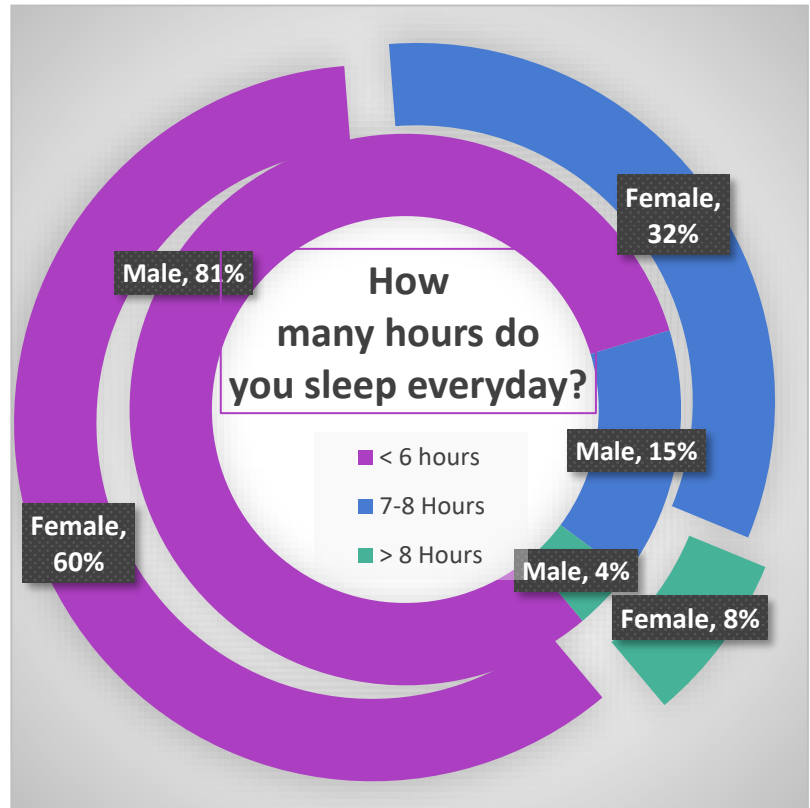
## Sleep patterns and sleep habits of respondents

- During the survey, **overall**, 69.8% of respondents i.e. 3488 out of 5000 respondents, said that generally, they sleep for less than 6 hours every day, while 24.4% of respondents replied that they sleep for 7-8 hours a day and remaining 5.9% said that sleep for more than 8 hours a day.
- **In the Old Age group (65 & above)**, 77.7% of elderly respondents (2142 of 2755 respondents) reportedly accepted that generally, they sleep for less than 6 hours a day. According to 18.9% of elderly respondents, they sleep for 7-8 hours while 3.3% of elderly respondents said that sleep for more than 8 hours.



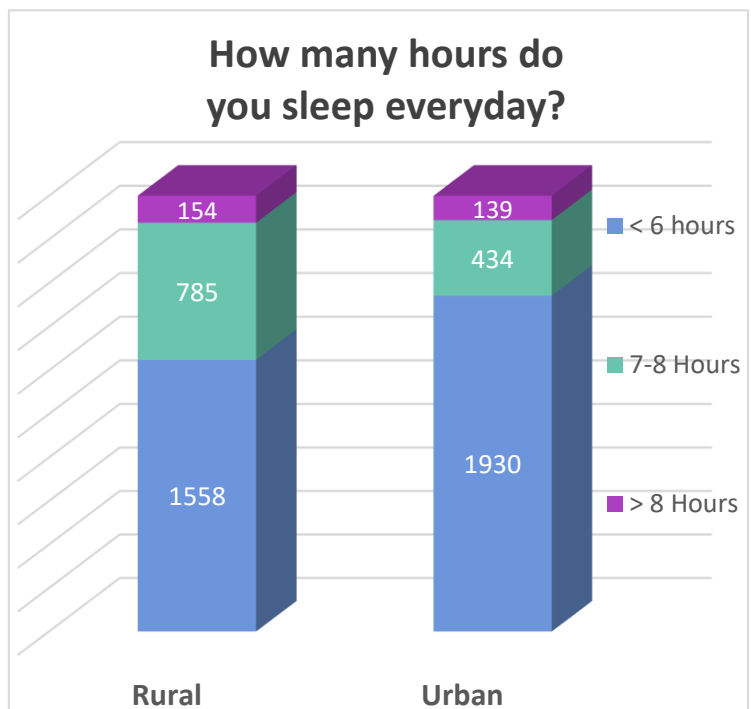
- **In the Middle-Aged group (40-64)**, 60% of elderly respondents (1346 out of 2245 respondents) complained that normally they sleep for less than 6 hours every day. 31.1% of middle-aged respondents were reportedly sleeping for normal 7-8 hours, while 9% of respondents in this category said that they sleep more than 8 hours a day.

- **When survey data was analyzed gender-wise**, it was found that male respondents were facing more sleeplessness as 76.5% of male respondents (1865 out of 2438) in comparison to 63.3% of female respondents (1623 out of 2562 female respondents) claimed that normally they sleep for <6 hours daily.



- Among male respondents, 13.9%, and among female respondents, 34.3% of female respondents said that they sleep for 7-8 hours. 8.1% of women and 3.5% of male respondents said that they sleep > 8 hours every day.

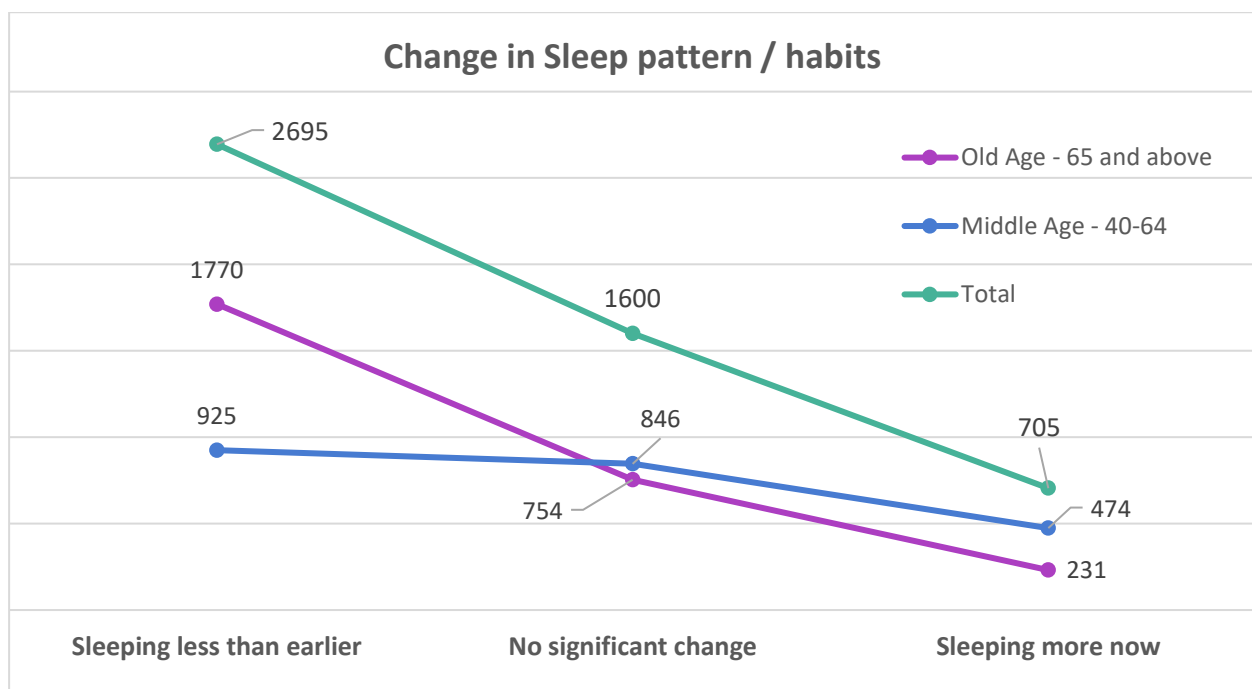
- **In urban areas**, respondents were found facing comparatively more sleep disturbances while in rural areas, people were found enjoying comparatively good sleep. According to 75.3% of urban respondents, they were sleeping less than 5-6 hours a day. 16.9% of urban respondents claimed that normally they sleep for 7-8 hours daily. 5.4% of respondents in urban areas said that they sleep for more than 8 hours



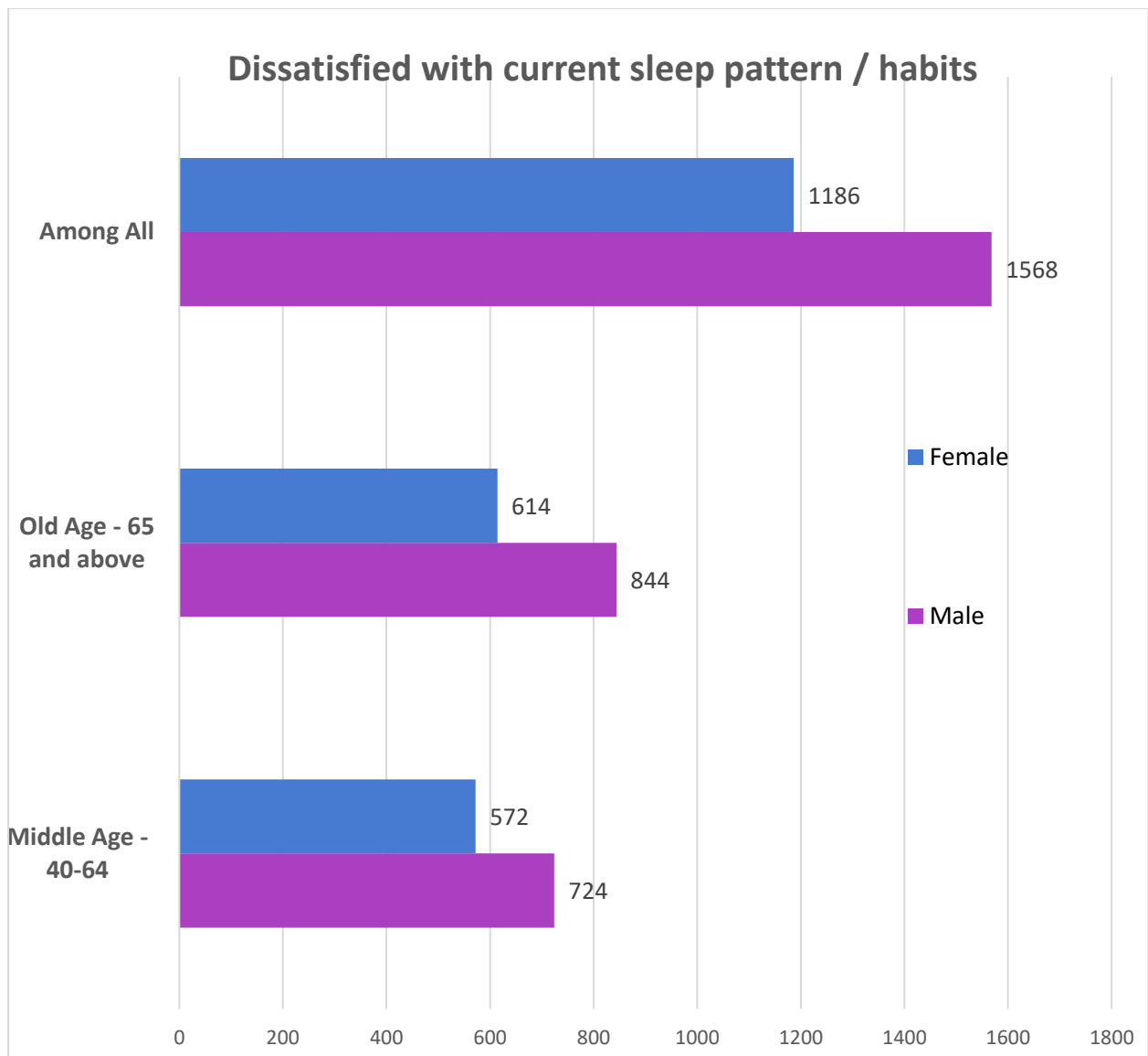
- **In rural areas**, 63.9% of respondents complained that they sleep for less than 5-6 hours and 6.3% of rural respondents said that they sleep for more than 8 hours every day.
- In rural areas, approximately every third respondent i.e. 32.2% of respondents reportedly claimed that they sleep for 7-8 hours every day.

## Change in Sleep Patterns/Habits

- During the survey, 53.9% of total respondents complained that as they are aging, they are sleeping less than earlier. 2695 out of 5000 respondents said that they are struggling to sleep for more hours now.
- 32% of respondents claimed that they noticed no significant change in their sleep patterns/habits.
- While 14.1% of total respondents also claimed that they are sleeping more now in comparison to their earlier years.



- In the old age category, 64.2% of elderly respondents said that they are sleeping less than earlier while 41.2% of middle-aged respondents agreed that they sleep less now due to their growing age and/or other issues.
- 27.4% of elderly respondents in comparison to 37.7% middle-aged respondents claimed that there is no significant change in their sleep hours/pattern/habits.
- While 8.4% of respondents in the old age group said that they are sleeping for more hours now. The percentage of such respondents in the middle-aged group was 21.1%.
- During the survey, overall 2754 respondents i.e. 55.08% of the total respondents, reportedly claimed that they are not satisfied with their current sleep pattern or condition of sleep. Among these 2754 respondents, 1458 (52.9%) were respondents in the category of Old Age i.e. 65 & above, and 1296 (47.1%) were from Middle Age groups (40-64 years)



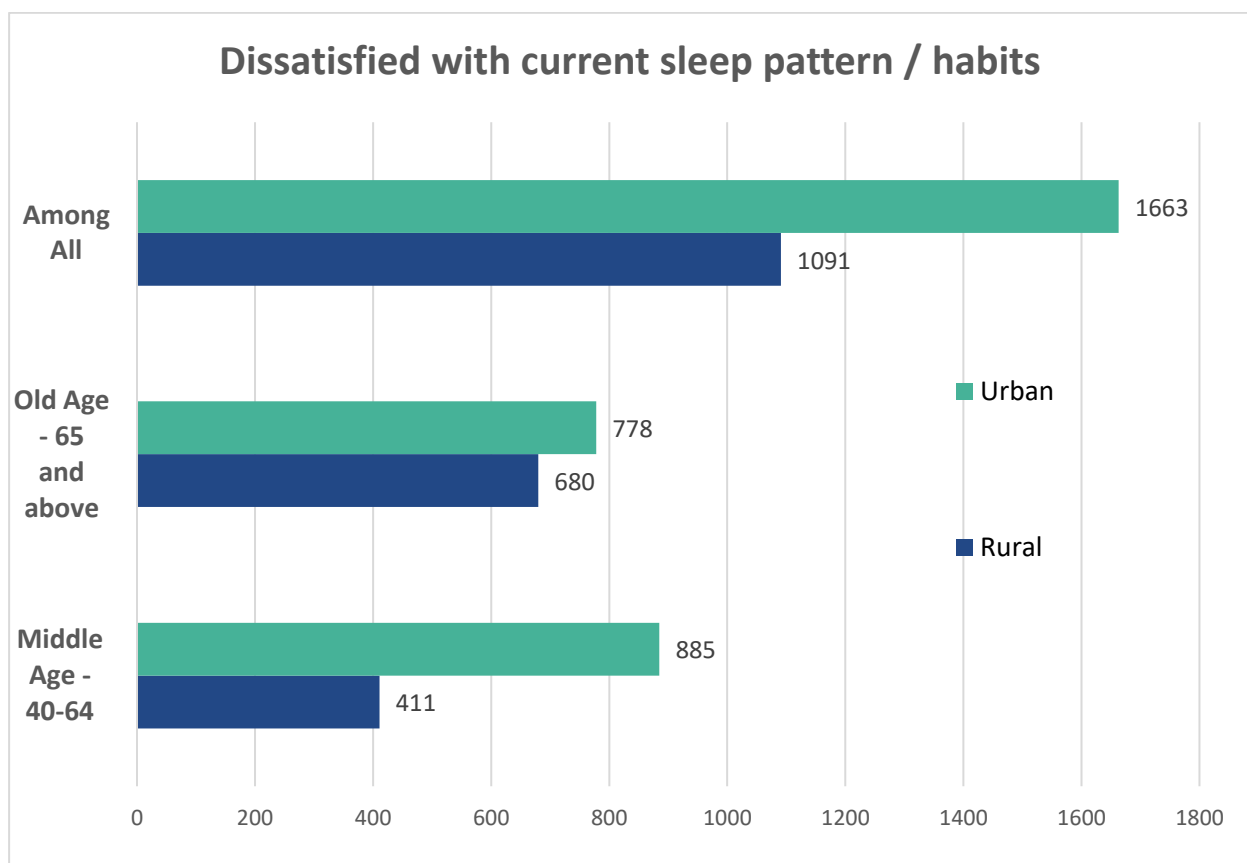
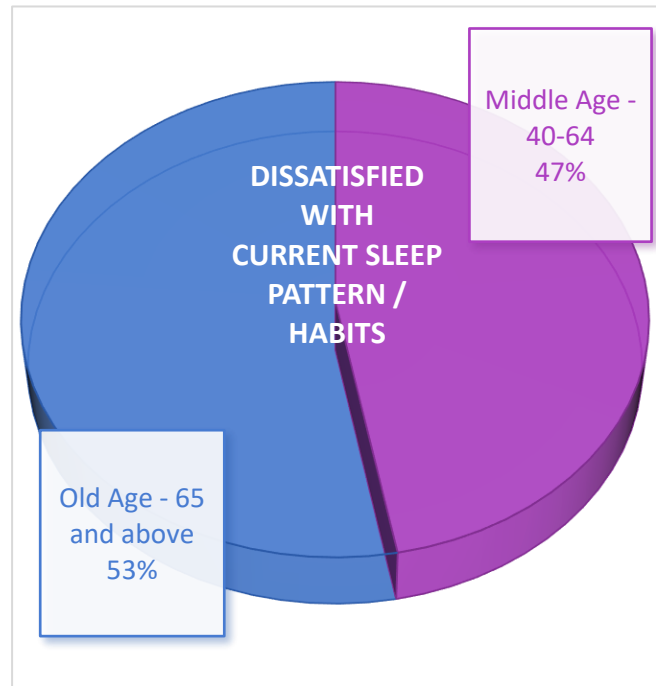
- When the data about affected respondents were analyzed gender-wise, it was found that among male respondents' the percentage of affected persons is 64.3. comparatively higher than female respondents (46.3%).
- Among all dissatisfied respondents, 56.9% were male and 43.1% were female respondents.
- In the Old Age category, 57.9% of male respondents claimed that they are not happy with their sleep
- In the Middle Age category, 55.9% of male elderly respondents were found dissatisfied with their sleep while in the Middle Age category, 44.1% of female respondents claimed so.



- When survey data was further analyzed, it was found that in rural areas, 52.6 % of rural respondents were struggling with sleep-related issues, and in urban areas, 56.8% of urban respondents reportedly accepted that they are not satisfied with their sleep pattern.

- Overall, 60.4% of elderly respondents living in urban areas complained that they face problems related to sleep more often. The percentage of affected rural elderly was comparatively low (39.6%).

- In the Old Age category, 53.4% of urban respondents and 46.6% of rural elderly were found dissatisfied with their current sleep patterns.

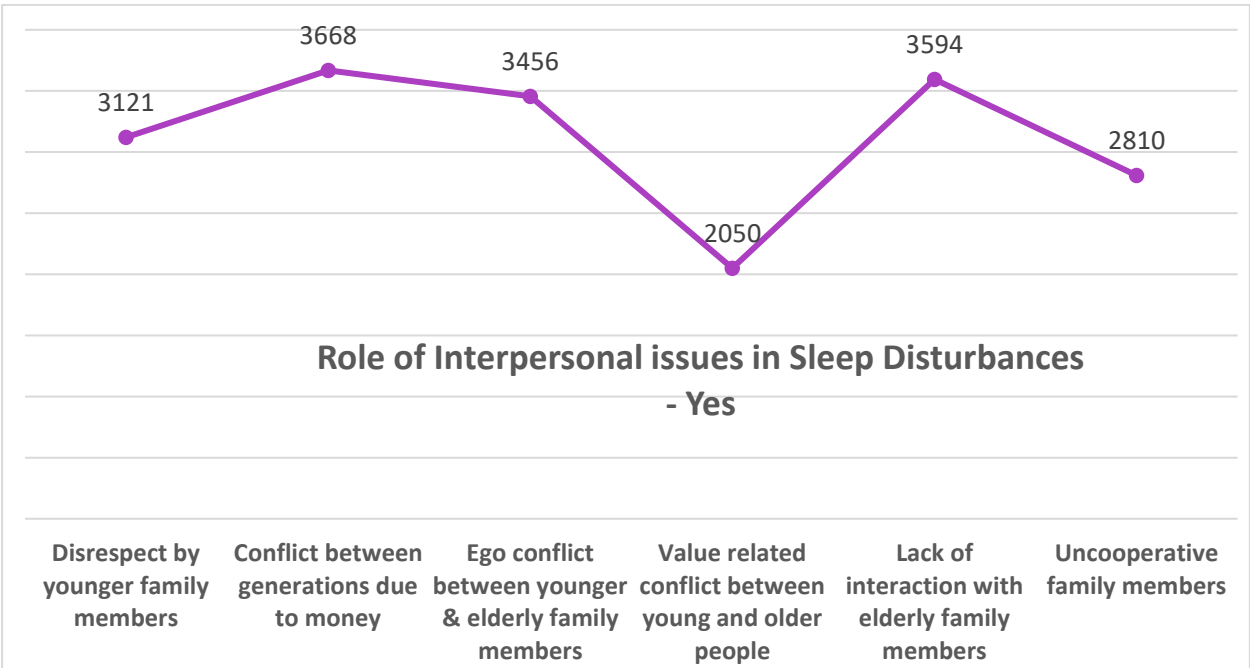


- In the Middle Age category, 68.3% of urban and 31.7% of rural respondents were found living with sleep disturbances.

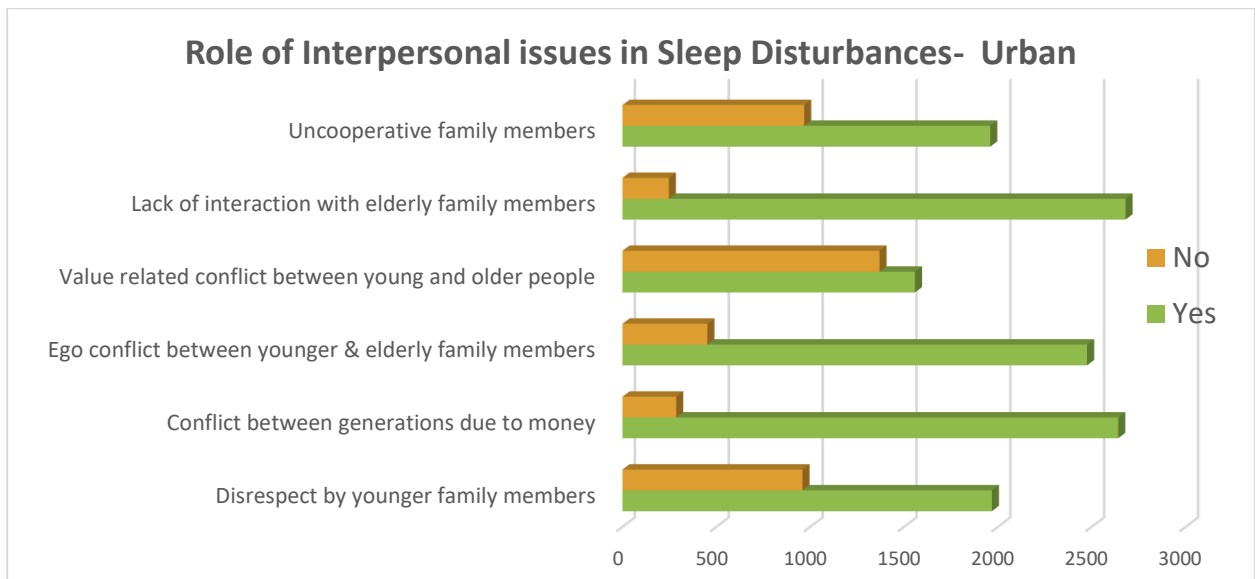
# Interpersonal Issues and Sleep-related issues

During the interactions with respondents, it was observed that interpersonal issues play an important role in sleep disturbances. Interpersonal issues include intergenerational gap, differences in lifestyles of younger and elderly people, changing family and social value system, thought processes of different generations, neglect of elderly family members, etc.

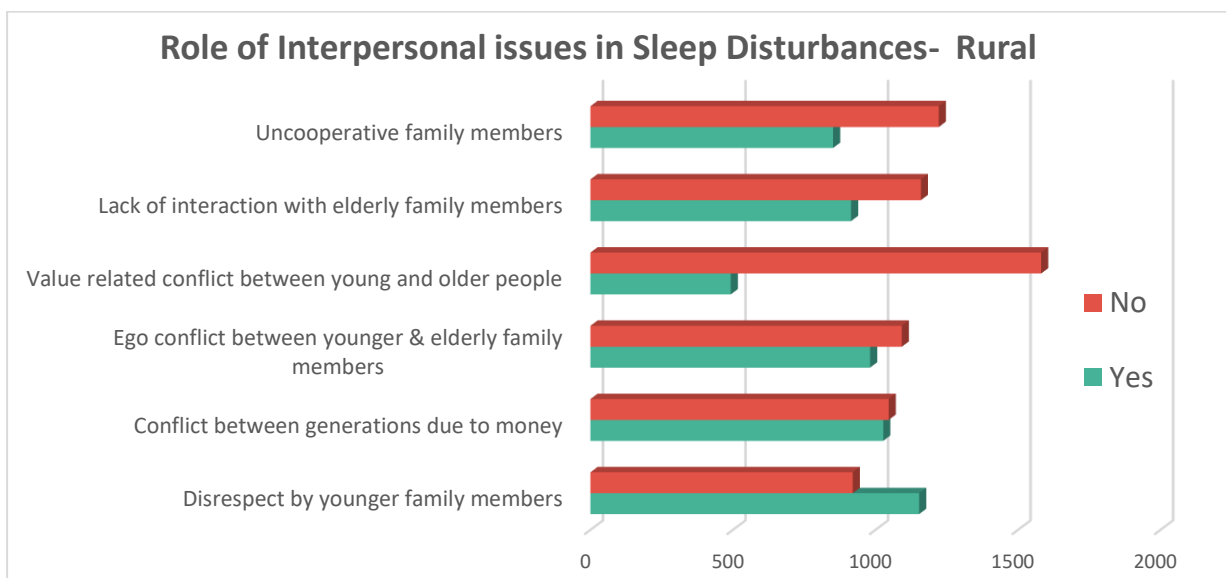
- Overall, 73.4% i.e. 3668 out of 5000 respondents reportedly said that conflict between generations due to money matters is among the major interpersonal issues, responsible for sleep disturbances.
- According to 71.9% of respondents (3594 respondents out of 5000), lack of interaction with elderly family members is one of the major interpersonal issues that disturb sleep patterns.
- 69.1% of respondents complained that ego-related conflict between younger and elderly family members is also among critical interpersonal issues, responsible for poor sleep conditions.
- 62.4% of respondents said that elderly family members remain disturbed due to disrespect and misbehaviour by younger family members, which also makes their nights sleepless.
- During the survey, it also emerged that value-related conflict between younger and elderly family members and non-supportive family members also affects sleep according to 41% of respondents.



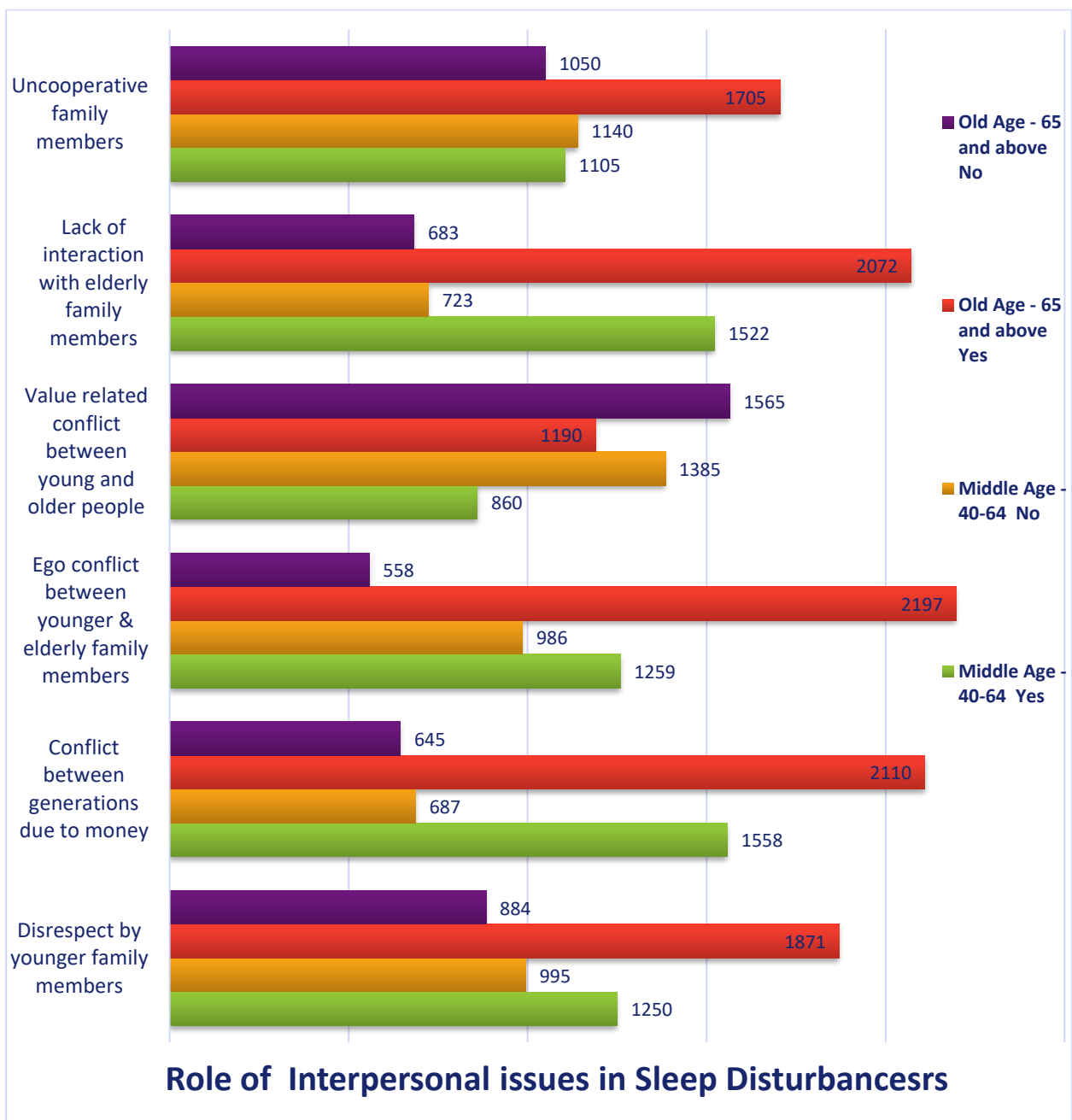
- In urban areas, 91.6% of respondents claimed that the younger generation avoids interacting with elderly family members more often, which is also one of the major interpersonal issues, responsible for sleep disturbances. In rural areas, 44.1% of respondents accepted that generally, people avoid interaction with their elderly family members.
- According to 90.2% of urban respondents, conflict related to the financial requirements of younger family members also affects sleep patterns, whereas in rural areas 49.5% of respondents said that money-related conflict causes sleep disturbances.



- In urban areas, 84.6% of respondents said that conflict related to ego also affects sleep adversely. In rural areas, 47.3% of respondents agreed with this fact.
- 62.4% of urban respondents in comparison to 55.6 rural elderly reportedly opined that sleep in old age also affected by disrespect by younger family members



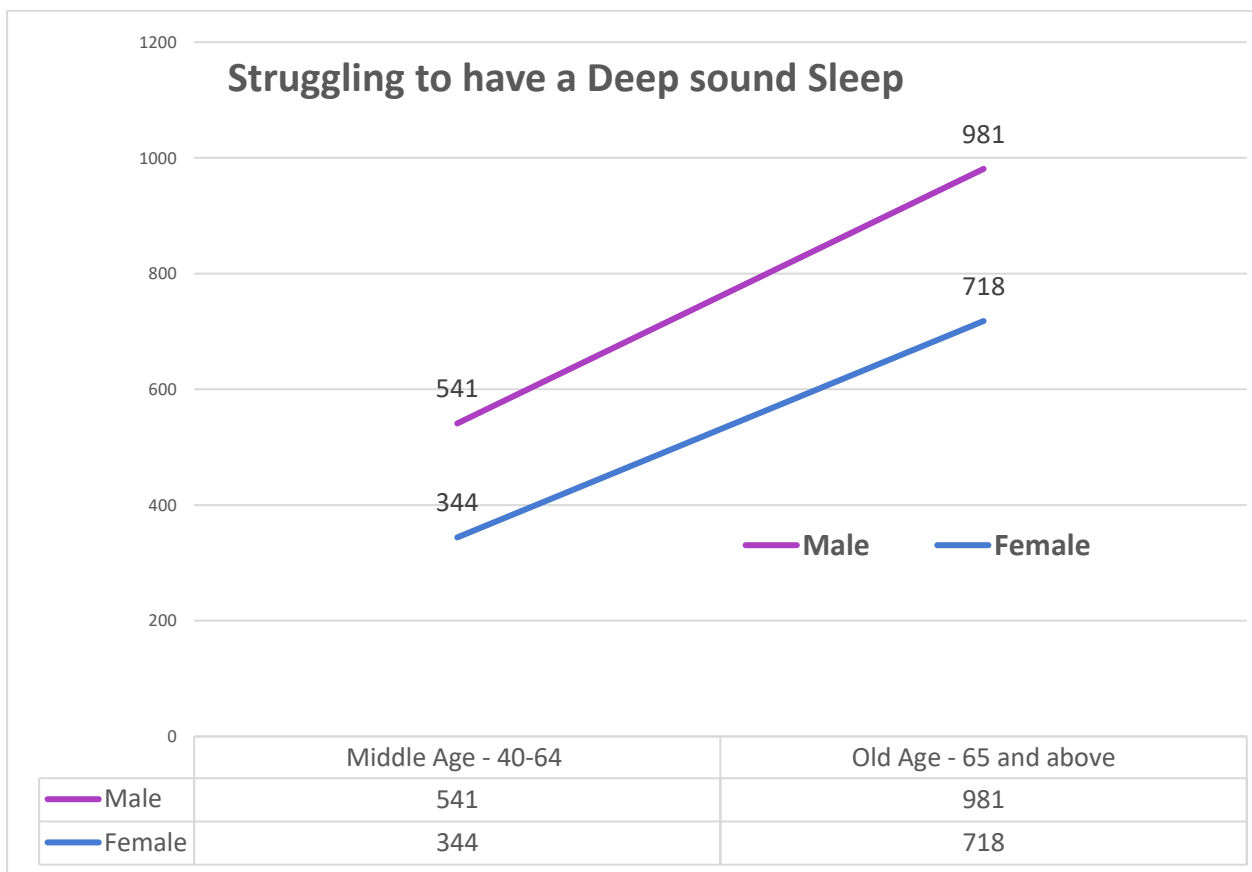
- When data about the role of interpersonal issues in sleep disorders were further analyzed respondents' category-wise, it was found that among the old age group, 67.9% of respondents in comparison to 55.7% of middle-aged respondents held disrespect by younger family members responsible for sleep-related issues.
- Conflict between younger and old generations due to money also causes sleep disturbances according to 76.6% of elderly respondents and 69.4% of middle-aged respondents.
- Among elderly respondents, 79.7% also claimed that ego conflict also matters in sleep disorders, whereas among the middle age group, 56.1% of respondents agreed with them.



- In the old age group, almost 3/4<sup>th</sup> of all respondents complained that younger family members hardly interact with them while in the middle age group, 67.8% of respondents expressed their consent with this fast-emerging social attitude.

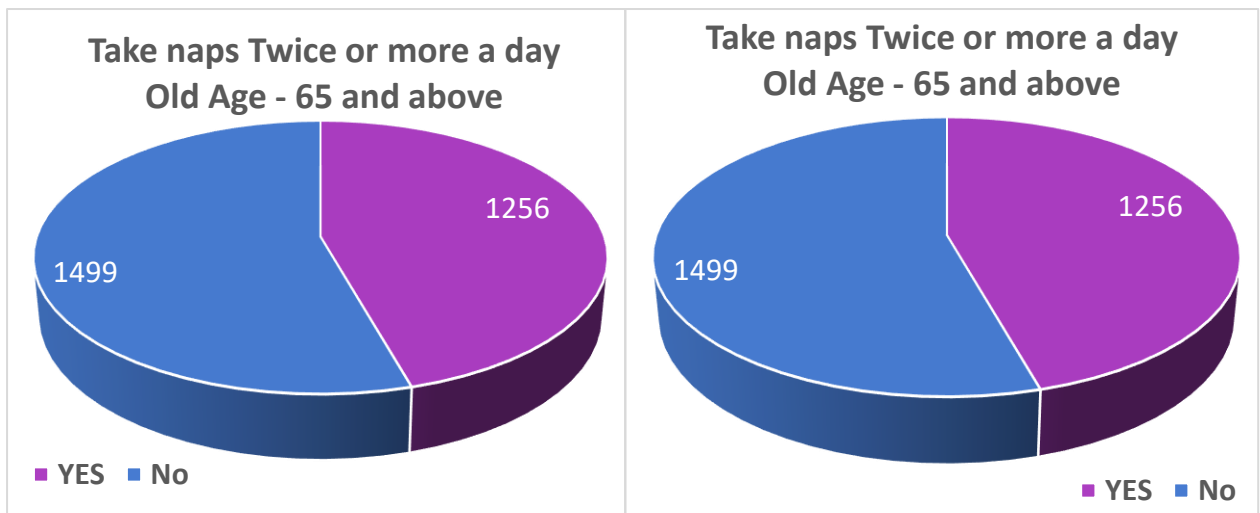
## The Struggle for Sound Sleep

- During the survey, 51.68% of total respondents (59.1% among male and 44.6% among female respondents) reportedly said that they are struggling to have a deep sound sleep. Among all affected respondents, 55.8% were male and 44.2% were female respondents.
- In the Old Age category, 61.7% of elderly respondents claimed that they struggle to have sound sleep.
- In the Middle Age category, 39.4% of respondents said that they face trouble having deep sleep.



- Among all affected respondents, 65.8% were in the category of Old Age while 34.2% of affected respondents were in the Middle-Age category.
- In the Old Age category, 55.8% of the affected elderly were male and 44.2% were female. In the Middle Age category, the percentage of male and female respondents was 61.1 & 38.9 respectively.

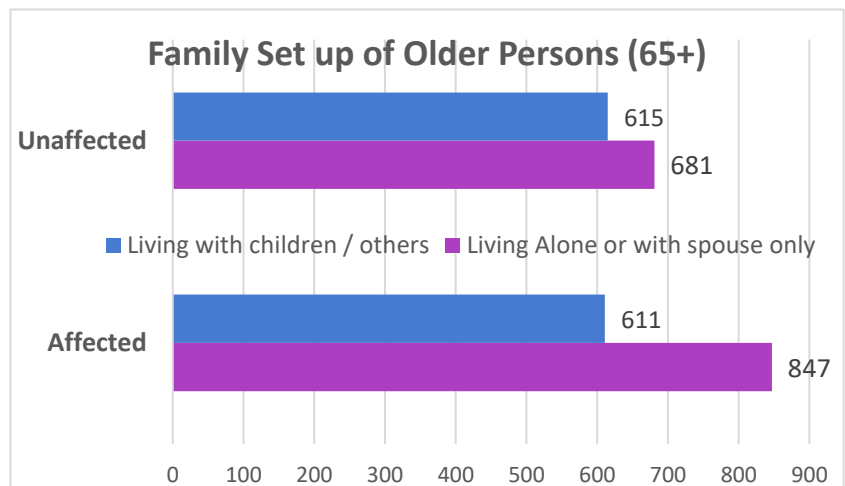
- When data obtained from rural and urban respondents were further analyzed, it was that 52.6% of rural respondents reportedly claimed that they struggle to have a sound sleep more often whereas in urban areas 51% of respondents claimed so.
- Among all affected respondents, 57.8% were from urban areas and the remaining 42.2% were from rural areas.
- In the Old Age category, affected elderly respondents comprised 58.5% of urban respondents and 41.5% were rural elderly.
- In the Middle Age category, among affected respondents 56.4% were urban and 43.6% were rural respondents.
- During the survey, almost 1/3<sup>rd</sup> of respondents (1651 out of 5000 respondents) accepted that they take naps twice or more a day.



- In the Old Age category, 45.6% of elderly respondents said that they take more naps during the day. While in the middle-age category, 21.6% of respondents claimed so.

### Loneliness and Sleep Disturbances

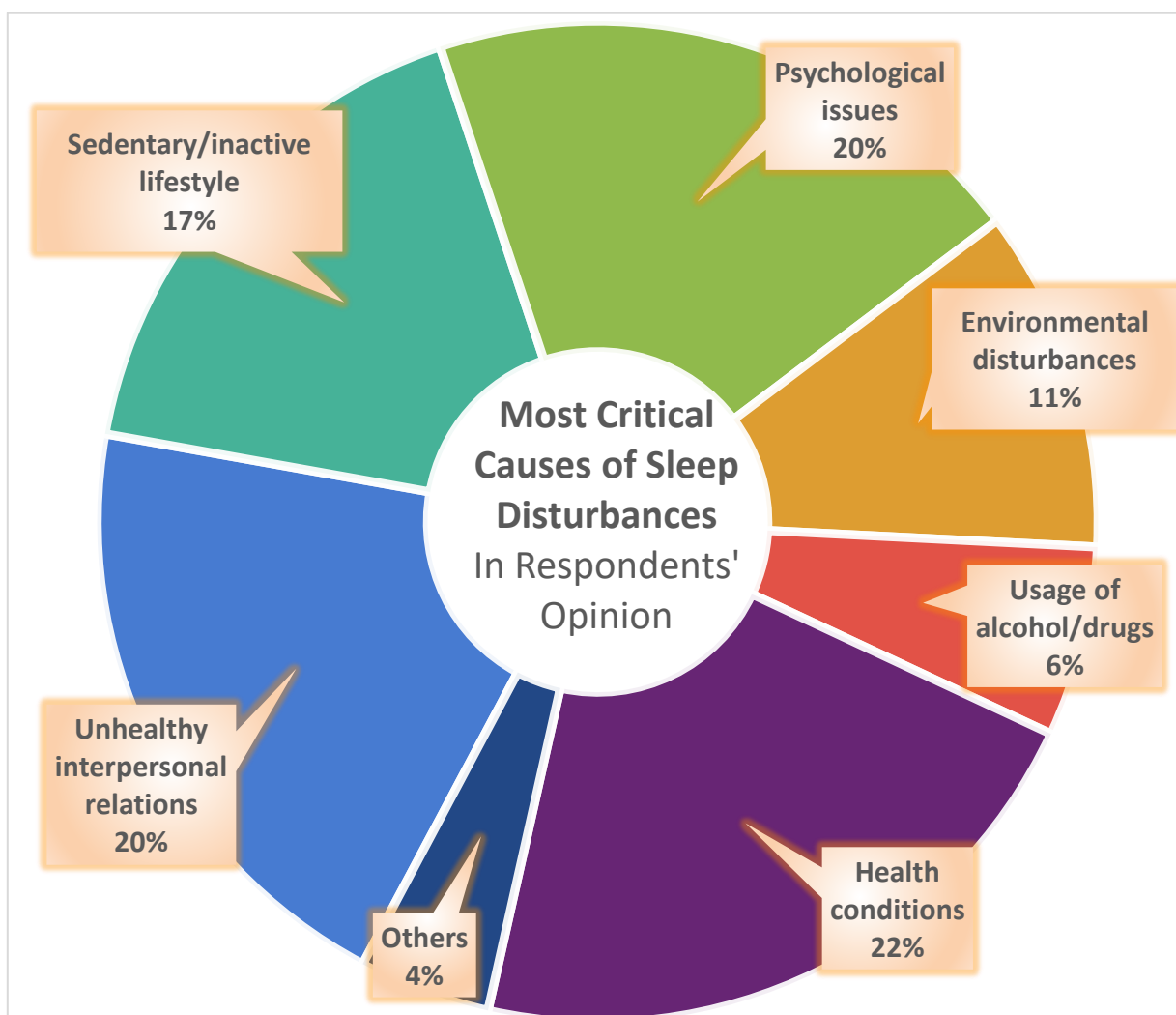
- Survey data also revealed that **out of a total of 1458 affected elderly respondents, 847 (58.1%) respondents were living alone or with a spouse only.**



- 41.9% of elderly respondents were living with their children/others.

## Most Critical Causes of Sleep Disturbances

- When selected respondents were asked about their awareness of major causes of sleep disturbances, it was found that health conditions were the most critical cause according to 21.6% of respondents. They said changing health conditions with growing age is the top reason for sleep disturbances.
- According to 20% of respondents, unhealthy interpersonal relations between family members/relatives/friends, etc. are the most critical causes of sleep disturbances.
- 19.8% of respondents, claimed that in their opinion psychological issues are the top most responsible factor for sleep-related issues.



- According to 17.1% of respondents, people with sedentary/inactive lifestyles have to face issues related to sleep disorders more often than others. In their opinion, it is the most critical cause of sleep-related problems in aging people.
- Environmental disturbances and usage of alcohol/drugs were also tagged as the top most important causes of sleep disturbances by 11.1% and 6.2% of respondents respectively.

# Observations

Observations conclude that the prevalence of sleep disturbance is higher in old age. Due to sleep disturbances older persons have to suffer many health issues like hypertension diabetes mellitus, renal failure, respiratory diseases such as asthma, immune disorders, gastroesophageal reflux disease, physical disability, dementia, pain, depression, anxiety, etc. In old age, Insomnia and other sleep disturbances are symptoms of many psychiatric conditions.

It has been widely experienced that insomnia is one of the major issues among older people. Sound sleep plays a key role in maintaining mental and physical health. Usual sleep deprivation also increases the risk of significant health conditions including depression, heart disease, obesity, diabetes, digestive issues, stroke, and even dementia. Poor sleep may be a sign of ill health and a trigger for processes related to disease and biological aging. Severely disturbed sleep may be an early signal of impending dementia.

## General useful tips for Older Persons

- Have a light bedtime snack like warm milk
- Avoid stimulants such as caffeine for at least 3 or 4 hours before bed.
- Avoid taking naps during the day.
- Do not exercise within 3 hours of your bedtime.
- Practice relaxation techniques at bedtime.
- Avoid watching television or using a computer/cell phone in the bedroom.
- Try to go to bed at the same time every night and wake up at the same time each morning.
- Avoid smoking before sleep.
- If you cannot fall asleep after 20 minutes, get out of bed and do a quiet activity, such as reading or listening to music. When you feel sleepy, get back in bed.
- Avoid alcohol, because it can make you wake up later in the night.



Have  
a  
Good  
Sleep



## ***Expert's Feedback***

### **Older People should have Social Security to avoid sleepless nights in Old Age**

More than 50% of our working population is involved in the unorganized sector like agriculture or self-employed with no retirement benefit or social security schemes. When people retire from their jobs/services, without any retirement benefits, they have to face a lot of challenges.

At this juncture, when they can't change their lifestyle overnight and can't find a post-retirement job, they have to depend upon their savings or resources, if any. Gradually they end up without money, they have to depend on others for even their basic needs and are forced to compromise with circumstances. Ultimately, their life turns into a catastrophe.

They have more than 25-30 years to live in old age but without any solid social security. They depend on Government or government-sponsored social security and healthcare schemes, which hardly serve any purpose. Resultantly, they are more prone to old age-related diseases, poverty, unemployment, and poor health condition. Due to this, they have to go through sleepless nights in old age

Hence, people in the middle age category are advised to save money during their active service life and invest it for post-retirement life. They must plan for their retirement well in advance. There are several Pension plans, run by public as well as private banks/companies. Any suitable plan can be opted out as per their convenience and requirements.

Anyone can start a retirement plan. But for lower-income people, it is a must. To make ends meet, more older persons are looking for gainful engagement opportunities in old age, particularly during their 60s and 70s. On the other hand, more than 1/3<sup>rd</sup> the elderly population needs long-term care. But an analysis found more than 40% of older persons could not afford long-term, in-home care.

Older people are also advised to work, even in their old age, and keep themselves gainfully engaged and active as long as they can. It will not only help them remain self-dependent but also ensure better life and dignity in old age. Additional years of work also deliver another chance to build retirement savings, rather than deplete them.

In case, older persons are not able to work and have no money left with them to take care of their daily requirements, they can take reverse mortgage loans from banks as a last resort.

# Recommendations

Based on survey findings, our observations, and comments from experts, older people are advised to follow these recommendations;

## Maintain good sleep discipline

Maintain your active daily routine and encourage sleepiness by following a nightly routine. Go to bed at a regular time each night. Have a bedtime routine where you practice a relaxing activity like reading, taking a bath, or stretching. Keep yourself away from technological devices an hour and a half before bed. Avoid substances like alcohol or tobacco.

## Make your bedroom sleep-friendly

Your bedroom should be a distraction-free zone that limits sleep disruption and encourage sound sleep. It should also be dark and cool. Cover windows with curtains and reduce light in your bedroom as much as possible. You may equip your bedroom with all comforts for body, mind, and soul like the soothing music of your choice, pain-relieving equipment, medicines, etc.



## Exercise regularly

Just 30-40 minutes a day of exercise can help promote better sleep. Walking is one of the best physical exercises in old age. It can also ensure improved mental health, disease prevention, and increased social engagement.

## Participate in social activities and engage yourself

Anxiety is a huge hindrance to sleep. If you feel lonely and low, explore possibilities to participate in social activities of your choice. Spending time with others can help improve well-being, decrease the risk of depression, and enhance the quality of sleep.

## Keep stress at bay

For sound sleep and good health, you should also keep all your tensions at bay. By adopting stress management techniques like meditation, etc. you can manage your stress well. Say goodbye to stress and have a Good Night with sound sleep!