

## NEGLECTED HYDRATION AND ARTISTS' KIDNEY HEALTH

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### **Abstract**

#### **Background**

Adequate hydration is essential for maintaining human health and supporting the proper functioning of vital organs such as the kidneys. However, many artists often neglect regular water intake due to intense concentration and prolonged engagement in creative activities. This study examined neglected hydration and artists' kidney health in Rivers State University, highlighting the potential health implications associated with inadequate water consumption among artists. The study addressed three research questions and three corresponding hypotheses.

#### **Methods**

A descriptive survey research design was adopted for the study. The population comprised theatre and film studies students and lecturers of Rivers State University, from which 120 respondents were randomly selected. A structured questionnaire titled *Questionnaire on Neglected Hydration and Kidney Health of Artists (QNHKHA)* was used for data collection. The instrument consisted of two sections and was structured on a five-point Likert scale. The reliability of the instrument was determined using the test-retest method with Pearson Product Moment Correlation, which yielded a reliability coefficient of 0.82. Out of 120 copies distributed, 110 were retrieved and used for analysis. Data were analyzed using mean and standard deviation to answer research questions, while t-test statistics at 0.05 level of significance were used to test the hypotheses.

#### **Results**

Findings revealed that artists' awareness of the implications of neglected hydration was low, while their awareness of the importance of adequate hydration was moderate. The results also showed that artists moderately practiced hydration strategies, and there was no significant difference between male and female artists in awareness and strategies regarding hydration.

### **Conclusion**

The study concluded that although artists moderately understand the importance of hydration, their knowledge of the health risks of neglected hydration remains limited. It was therefore recommended that health education programs, institutional support for hydration practices, and regular workshops be organized to improve hydration awareness and promote kidney health among artists.

**Key Words:** Neglected hydration, Artist, kidney health

## **INTRODUCTION**

The value and importance of artists in any given society cannot be over accentuated. Apart from the roles they play for their families, they add to the beauty of the environment and contribute economically to nations of the world. For artists to optimally perform their duties and engage the world around them they need to be and stay healthy. Thus, an unhealthy or a sick person cannot function at his best and in many cases, sick people are redundant. The effects of sickness are adverse and undesirable to the sick, his family members and the nation at large. Indeed, the assertion, "health is wealth" is an inconvertible fact.

The U.S. National Academies of Sciences, Engineering, and Medicine recommends a total daily fluid intake (from all drinks and food) of approximately **3.7 liters for men** and **2.7 liters for women**.<sup>1</sup>

Neglected hydration simply means neglecting to drink sufficient water which can lead to chronic dehydration. It connotes a state whereby a person fails to take sufficient water or fluids to meet the body's needs. This often results from lifestyle habits, which can lead to cognitive decline or physical limitations<sup>2</sup> (National Institutes of Health).

Chronic kidney disease (CKD) is an emerging global public health issue affecting more than 10% of the worldwide population in 2015, and places a significant financial burden on both the patients' families and the healthcare delivery system.<sup>3</sup>

Artists habitually neglect to consume enough water for a combination of reasons. The reasons cut across engrossed focus which makes them forget, the logistical inconvenience of abandoning their work, preference for other fluids such as soda, coffee, alcohol and others. Some artists find ordinary water unappealing as a result, they neglect to take enough water (Kettering Health).<sup>4</sup>

Features of neglected hydration include: headache, dizziness, lightheadedness, fatigue, feeling thirsty, decreased urine output, passage of dark colored urine, dry lips and oral mucosa, confusion.

It is pivotal to note that artists, who are not conscious and mindful of their health as they engage in their work activities may suffer kidney health challenges such as impaired kidney function, formation of kidney stones, among others. As a result of the intense creative passion of artists, they neglect to drink water for long periods of time. This results in significant long-term risks to their kidney health. Chronic neglect of hydration which is common in intense focused artists work activities, compels the kidneys to work harder in filtering of wastes. This potentially causes permanent damage, chronic kidney disease and the formation of kidney stones (Dr Arpit Srivastava...)<sup>5</sup>

The effects of neglected hydration on artists' kidney health are numerous. They include: chronic strain, acute kidney injury, kidney stones, urinary tract infection, and chronic kidney disease. (PK Das Hospita).<sup>6</sup>

Armstrong et al. and Ganio et al. found out that losses of around 2% of body water can contribute to headaches, difficulty concentrating, deficits in working memory, and fatigue as well – all of which would make it more difficult to be productive in the practice room and at one's best on stage.<sup>7,8</sup>

Taking sufficient water is of the simplest and most powerful way to protect your kidneys and overall health (Srivastava, nd).<sup>9</sup>

This work is determined to examine the dangers of neglected hydration and encourage adequate consumption of water by artists. It entails determination of artists' awareness of the implications of neglected hydration, strategies to stay hydrated and examine the extent of their awareness of the importance of adequate hydration.

## **Methodology**

Descriptive research design was adopted in this study. The population of this study comprised all The Theatre Arts students and lecturers of the Rivers State University of which 120 respondents were randomly selected for the study. The respondents were then grouped into male and female respondents, of which 70 of the respondents were male while 30 of them were female. The instrument for data collection in this study was a structured questionnaire titled "Questionnaire on Neglected Hydration and Kidney Health of Artists (QNHKHA)", which was used to obtain relevant information from the respondents. The instrument consisted of two sections. Part A focused on the demographic characteristics of the respondents, while Part B contain items developed in line with the research objectives guiding the study structured on a five point Likert scale of Strongly Agree (SA), Agree (A), Moderately Agreed (MA), Disagree (D), and Strongly Disagree (SD). The instrument was given out to two experts in the field to while test-retest method was employed to determine the reliability index of the instrument. Pearson Product Moment Correlation (PPMC) statistical method was used to determine the reliability coefficient of 0.82 for the instrument. Consequently, 120 copies of the questionnaire were administered, however, only 110 copies of the administered copies of the questionnaire were retrieved and used for data analysis. The data collected through the instrument were analyzed using the Statistical Package for the Social Sciences (SPSS), version 25. Descriptive statistics of mean and standard deviation were used to answer the research questions while the hypotheses were tested using t-test statistical technique, tested at 0.05 level of significance.

## Results

**Table 1: Demographic analysis of the respondents**

Variable	Category	Frequency	Percentage
Sex	Male	70	63.6
	Female	40	36.4
	<b>Total</b>	<b>110</b>	<b>100.0</b>
Age	18–25 years	44	40.0
	26–35 years	30	27.3
	36–45 years	20	18.2
	46 years and above	16	14.5
	<b>Total</b>	<b>110</b>	<b>100.0</b>
Designation	Lecturer	16	14.5
	Student	84	76.4
	<b>Total</b>	<b>110</b>	<b>100.0</b>

The demographic characteristics of the respondents indicate that most of the artists were male 70 (63.6%), while 40 (36.4%) were female. Regarding age distribution, a larger proportion of the respondents were within the 18–25 years age bracket 44 (40.0%), followed by those aged 26–35 years 30 (27.3%). Respondents aged 36–45 years accounted for 20 (18.2%), while those 46 years and above represented 16 (14.5%) of the sample. In terms of designation, the majority of the respondents were students 84 (76.4%), whereas 16 (14.5%) were lecturers.

**Table 2: Mean and standard deviation of the male and female artists on their awareness level of the implication of neglected hydration**

S/ N	Section A: Awareness of the Implications of Neglected Hydration	Male Students (n=70)		Female Students (n=40)		Mean Set	Remark
		Mean	S.D.	Mean	S.D.		
1.	I am aware that inadequate water intake can negatively affect kidney health.	2.1	0.8	2.18	0.7	2.14	Disagreed
2.	I know that dehydration can increase the risk of kidney problems.	2.05	0.7	2.12	0.8	2.09	Low Extent
3.	I am aware that neglecting hydration for long hours during	2.66	0.8	2.58	0.7	2.57	Moderate Extent

	artistic work may affect body functioning.						
4.	I know that insufficient water intake can lead to fatigue and reduced productivity during artistic activities.	2.33	0.8	2.29	0.7	2.31	Low Extent
5.	I am aware that prolonged dehydration may lead to kidney stones or other kidney complications.	2.16	0.7	2.24	0.7	2.2	Low Extent
6.	I know that artists who ignore hydration may develop long-term health issues.	2.26	0.8	2.3	0.8	2.28	Low Extent
7.	I am aware that drinking enough water helps maintain proper kidney function.	2.08	0.7	2.14	0.7	2.11	Low Extent
8.	I understand that dehydration can reduce concentration and performance in artistic tasks.	2.61	0.8	2.57	0.8	2.59	<b>Moderate Extent</b>
	<b>Grand Total</b>	<b>2.28</b>	<b>0.8</b>	<b>2.30</b>	<b>0.8</b>	<b>2.29</b>	<b>Low Extent</b>

The data on table 1 above showed that artists awareness of the implication of neglected hydration is low (Mean=2.29). The mean set values: 2.14, 2.09, 2.31, 2.20, 2.28 and 2.11 showed that the knowledge of the artists were low, except that they have moderate awareness about drinking enough water to help maintain proper kidney function as well as neglecting hydration for long hours during artistic work for effective body functioning as revealed by the mean values 2.57 and 2.59 respectively. Comparatively, the level of awareness of female artists on the implication of neglected hydration (Mean=2.30, SD=0.80) is slightly higher than the level of awareness of their male counterparts (Mean=2.28, SD=0.80).

**Table 3: Mean and standard deviation of the male and female artists employ to stay hydrated**

S/N	Section B: Strategies Artists Use to Stay Hydrated	Male Students (n=70)		Female Students (n=40)		Mean Set	Remark
		Me an	S.D.	Mean	S.D		
9.	I make conscious efforts to drink water regularly while working on artistic projects.	2.65	0.91	2.72	0.86	2.69	Moderately Agreed

10.	I keep a bottle of water close to me while working to remind myself to drink water.	3.78	0.87	3.85	0.82	3.8	2	<b>Agreed</b>
11.	I take short breaks during artistic activities to drink water.	2.9	0.8	2.96	0.78	2.9	3	Moderately Agreed
12.	I set reminders or alarms to ensure that I drink water regularly.	3.05	0.76	3.1	0.81	3.0	8	Moderately Agreed
13.	I consume fruits or beverages that help maintain hydration during work.	3.1	0.83	3.14	0.79	3.1	2	Moderately Agreed
14.	I intentionally increase my water intake when working for long hours.	2.88	0.79	2.94	0.82	2.9	1	Moderately Agreed
15.	I monitor my daily water intake to maintain proper hydration.	3.22	0.85	3.26	0.81	3.2	4	Moderately Agreed
16.	I encourage fellow artists to drink water regularly during artistic sessions.	3.66	0.81	3.73	0.78	3.7	0	<b>Agreed</b>
<b>Grand Total</b>		<b>3.16</b>	<b>0.83</b>	<b>3.21</b>	<b>0.81</b>	<b>3.1</b>	<b>9</b>	<b>Moderately Agreed</b>

The data on table 2 above showed that the strategies male and female artists employ to stay hydrated is moderately agreed (Mean = 3.19). The mean set values 2.69, 2.93, 3.08, 3.12, 2.91 and 3.24 showed that the strategies adopted by the artists to maintain hydration were moderately agreed, except that they agreed strongly on keeping a bottle of water close to them while working to remind themselves to drink water as well as encouraging fellow artists to drink water regularly during artistic sessions as revealed by the mean values 3.82 and 3.70 respectively. Comparatively, the level of strategies employed by female artists to stay hydrated (Mean = 3.21, SD = 0.81) is slightly higher than the level of strategies employed by their male counterparts (Mean = 3.16, SD = 0.83).

**Table 4: Mean and standard deviation of the male and female artists awareness level of the importance of adequate hydration**

S/N	Section C: Awareness of the Importance of Adequate Hydration	Male Students (n=70)		Female Students (n=40)		Mean Set	Remark
		Mean	S.D.	Mean	S.D.		
17.	I believe that adequate hydration is essential for maintaining good health.	3.15	0.77	3.21	0.8	3.18	Moderate Extent
18.	I believe that proper hydration improves physical and mental performance.	3.25	0.86	3.29	0.84	3.27	Moderate Extent
19.	I understand that drinking enough water helps regulate body temperature during artistic activities.	3.05	0.82	3.1	0.79	3.08	Moderate Extent
20.	I believe that proper hydration helps prevent health complications such as kidney disease.	2.83	0.78	2.88	0.8	2.86	Moderate Extent
21.	I recognize that adequate hydration supports energy and concentration during artistic work.	3.3	0.88	3.34	0.85	3.32	Moderate Extent
22.	I believe that artists who drink enough water are more productive in their work.	3.12	0.8	3.16	0.83	3.14	Moderate Extent
23.	I understand that maintaining hydration helps remove toxins from the body.	2.88	0.83	2.92	0.79	2.9	Moderate Extent
24.	I believe that adequate hydration is important for long-term kidney health.	3.20	0.79	3.22	0.81	3.21	Moderate Extent
<b>Grand Total</b>		<b>3.10</b>	<b>0.82</b>	<b>3.14</b>	<b>0.81</b>	<b>3.12</b>	<b>Moderate Extent</b>

The data on table 3 above showed that artists' awareness of the importance of adequate hydration is moderate (Mean = 3.12). The mean set values 3.18, 3.27, 3.08, 2.86, 3.32, 3.14, 2.90 and 3.21 showed that the awareness level of the artists regarding the importance of adequate hydration were moderate in all the items presented. Comparatively, the level of awareness of female

artists on the importance of adequate hydration (Mean = 3.14, SD = 0.81) is slightly higher than the level of awareness of their male counterparts (Mean = 3.10, SD = 0.82).

**Table 5: Summary of t-test on the difference between the mean ratings of male and female students on implication of neglected hydration**

Gender Respondents	of	N	Mean	S.D.	df	t-cal	t-crit	Decision
Male		70	2.28	0.8	108	-0.13	1.98	Not Significant
Female		40	2.3	0.8				

The data on table 4 showed that since the **calculated t-value (-0.13) is less than the critical t-value (1.98)** at 0.05 level of significance and 108 degrees of freedom, the null hypothesis is accepted. This means that there is no significant difference between male and female artists in their awareness of the implications of neglected hydration. Thus, both male and female artists generally exhibit similarly low awareness levels regarding the health implications of neglected hydration.

**Table 6: Summary of t-test on the difference between the mean ratings of male and female artists on the strategies to stay hydrated**

Gender Respondents	of	N	Mean	S.D.	df	t-cal	t-crit	Decision
Male		70	3.16	0.83	108	-0.31	1.98	Not Significant
Female		40	3.21	0.81				

The data on table 5 showed that Since the calculated t-value (-0.31) is less than the critical t-value (1.98) at 0.05 level of significance and 108 degrees of freedom, the null hypothesis is accepted. This means that there is no significant difference between male and female artists in the strategies they employ to stay hydrated. Therefore, both male and female artists moderately practice similar hydration strategies during artistic activities.

**Table 7: Summary of t-test on the difference between the mean ratings of male and female artists on the strategies to stay hydrated**

Gender Respondents	of	N	Mean	S.D.	df	t-cal	t-crit	Decision
Male		70	3.10	0.82				
Female		40	3.14	0.81	108	-0.25	1.98	Not Significant

The data on table 6 showed that since the calculated t-value (-0.25) is less than the critical t-value (1.98) at 0.05 level of significance and 108 degrees of freedom, the null hypothesis is accepted. This implies that there is no significant difference between male and female artists in their awareness of the importance of adequate hydration. Therefore, both male and female artists possess a similar moderate level of awareness regarding the importance of adequate hydration for health and productivity.

### Summary of Findings

1. Artists awareness of the implication of neglected hydration is low although the level of awareness of female artists on the implication of neglected hydration is slightly higher than the level of awareness of their male counterparts.
2. The strategies male and female artists employ to stay hydrated is moderately agreed keeping a bottle of water close to them while working to remind themselves to drink water as well as encouraging fellow artists to drink water regularly during artistic sessions. Female artists to stay hydrated is slightly higher than the level of strategies employed by their male counterparts.
3. Artists' awareness of the importance of adequate hydration is moderate. The level of awareness of female artists on the importance of adequate hydration is slightly higher than the level of awareness of their male counterparts.
4. There is no significant difference between the mean ratings of male and female students on implication of neglected hydration.
5. There is no significant difference between the mean ratings of male and female artists on the strategies to stay hydrated.
6. There is no significant difference between the mean ratings of male and female artists on their level of awareness of the importance of adequate hydration.

## Discussion

The sociodemographic characteristics showed a male preponderance of 63.6%, most respondents were in the 18-25years age (40%) and 76.4% were students.

The findings of this study revealed that artists in Rivers State University have low awareness of the implications of neglected hydration. This result indicates that many artists are not adequately informed about the health risks associated with inadequate water intake, particularly its impact on kidney function. This finding is consistent with previous studies which reported generally low public awareness of dehydration and its health consequences. For example, research on hydration awareness found that many individuals lack adequate knowledge about recommended daily water intake and the consequences of dehydration, with a large proportion of people drinking water only when they feel thirsty. This supports the present study's finding that awareness of the implications of neglected hydration among artists is relatively low.

The study also revealed that artists moderately employ strategies to stay hydrated, such as keeping water bottles nearby, taking breaks to drink water, and monitoring their fluid intake. This finding aligns with earlier research which suggests that although individuals may have some knowledge about hydration, their actual hydration behaviours are often moderate or inconsistent. A study among university students reported that participants showed moderate awareness of hydration practices but their preventive behaviours, including adequate fluid intake, were still insufficient. This suggests that awareness does not always translate into consistent hydration practices.

Furthermore, the study found that artists' awareness of the importance of adequate hydration is moderate. This implies that while many artists recognize that water is necessary for general health and productivity, they may not fully understand its critical role in preventing kidney-related complications. Scientific evidence supports the relationship between hydration and kidney health, as adequate water intake helps maintain kidney function by supporting filtration processes and waste excretion. Similarly, research has shown that insufficient water intake increases the risk of kidney stone formation and other renal complications.

Another key finding of the study showed that there was no significant difference between male and female artists in their awareness of hydration implications, strategies for staying hydrated, or understanding of the importance of adequate hydration. This suggests that hydration awareness and practices are generally similar across gender groups. Similar patterns have been reported in hydration studies where demographic variables such as gender did not significantly influence hydration awareness or behaviour in some populations.

### **Conclusion**

Based on the findings of this study, it can be concluded that artists generally have low awareness of the implications of neglected hydration, although they demonstrate moderate awareness of the importance of adequate hydration. The study revealed that many artists are not fully aware of the health risks associated with inadequate water intake, such as kidney problems, fatigue, and long-term health complications. However, they show moderate understanding that adequate hydration supports body functioning, energy, concentration, and productivity during artistic activities.

The findings also revealed that artists moderately employ various strategies to stay hydrated while working. Some of the common strategies adopted include making conscious efforts to drink water, taking short breaks during artistic activities to drink water, setting reminders to drink water, consuming fruits and beverages that aid hydration, and monitoring daily water intake. In addition, many artists strongly agreed that keeping a bottle of water close while working and encouraging fellow artists to drink water regularly are effective strategies for maintaining hydration.

The study concludes that although artists moderately understand the importance of hydration and adopt some strategies to stay hydrated, their knowledge of the health implications of neglected hydration remains relatively low, which calls for increased awareness and education on proper hydration practices among artists.

### **Recommendations**

Based on the findings of this study, the following recommendations are made:

1. Health education programs should be organized for artists to boost their awareness level of the health implications of neglected hydration, particularly the risks associated with kidney problems, fatigue, and reduced productivity.
2. Art institutions, studios, and training centers should encourage proper hydration practices by providing easy access to drinking water and reminding artists to drink water regularly during artistic activities.
3. Workshops and seminars should be organized for artists to educate them on the importance of adequate hydration for maintaining health, improving concentration, and enhancing productivity during artistic work.

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