ABSTRACT

Background: Leptospirosis is a zoonotic disease of animals that can be transmitted to humans. Leptospira bacteria have been found in dogs, rats, livestock, mice, voles, rabbits, hedgehogs, skunks, possums, frogs, fish, snakes, and certain birds and insects. Infected animals will pass the bacteria in their urine for months, or even years. Leptospirosis is a zoonotic disease with worldwide distribution. It affects both humans and animals and is emerging as an important public health problem in many developing countries.

Objectives: 1) To assess the knowledge regarding leptospirosis among farmers. 2) To assess the effectiveness of planned teaching on knowledge regarding leptospirosis.

Methods and Materials: This study was based on one group pre test post test design with 100 samples (100 farmers), selected from rural community by using non-probability convenience sampling technique.

Results: In this study non probability convenience sample of 100 subjects was drawn from the study population, who were taken from selected rural area of wardha district. In the assessment of knowledge of farmers after giving intervention findings shows that 90(90%) had “Excellent Knowledge”, 10(10%) had “Good Knowledge” and nobody had average and poor knowledge. There was not significant association of knowledge score of farmers with selected demographic variables such as age, education, year of working experience, type of family, source of information and religion of farmers.

KEYWORDS:

knowledge, leptospirosis, farmers)
In this study majority of the subjects i.e 45% in the age group of 41-50 years, 36% in the age range of 31-40 years, 12% of them were belonging to the age of 21-30 years and only 7% were belonging to the age group of 51-60 years respectively.

According to their educational status shows that 54% upto secondary standard, 27% educated upto primary standard, 14% upgoatuation and 5% were educated upto post graduation.

According to their year of working experience 41% of them had 1 to 5 years of experience, 39% had 6 to 10 years of experience, 13% had 11 to 10 years of experience and 7% had above 15 years of experience.

According to their type of family shows that 48% of them were belonging to nuclear families and 52% in joint families.

According to their religion shows that 73% had source of information from media, 15% had from relatives, 7% had from health profession and 5% had from friends.

According to their religion shows that 66% were hindu, 09% were muslim, 1% was Christian and 24% were others.

Section II: Post test knowledge score on leptospirosis among farmers

<table>
<thead>
<tr>
<th>Level of knowledge score</th>
<th>Score Range</th>
<th>Percentage score</th>
<th>Post Test Knowledge Score</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>1-5</td>
<td>0-25%</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Average</td>
<td>6-10</td>
<td>26-50%</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Good</td>
<td>11-15</td>
<td>51-75%</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Excellent</td>
<td>16-20</td>
<td>76-100%</td>
<td></td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Mean ± SD</td>
<td>17.65±1.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Percentage Score</td>
<td>88.25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>11 – 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table no 3 shows the frequency and percentage wise distribution of farmers according to post test level of knowledge regarding leptospirosis. The levels of knowledge were seen into 4 categories, poor, average, good and excellent. 10% of the agriculture workers had good and 90% had excellent level of knowledge score. Mean knowledge score was 17.65 ± 1.95 with a percentage score of 88.25%.

Section III: Effectiveness of planned teaching on knowledge regarding leptospirosis among the farmers.

<table>
<thead>
<tr>
<th>Overall</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Percentage</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>6.58</td>
<td>3.20</td>
<td>32.90</td>
<td>30.44</td>
<td>0.0001*HS</td>
</tr>
<tr>
<td>Post Test</td>
<td>17.65</td>
<td>1.95</td>
<td>88.25</td>
<td></td>
<td>p&lt;0.05</td>
</tr>
</tbody>
</table>

Pretest and post test knowledge scores of farmers regarding leptospirosis. Mean, standard deviation and mean percentage score values are compared and student’s paired t test is applied at 5% level of significance. The statistical Student's paired t test implies that the difference in the pre test and post test knowledge score found to be 30.44 statistically significant at 0.05% level. Hence it is statistically interpreted that structured teaching plane on knowledge regarding Leptospirosis was effective. Thus H1 is accepted.

Section IV: Association of knowledge score of farmers in relation to demographic variable

There was no significant association of knowledge score of farmers with selected demographic variables such as age, education, year of working experience, type of family, source of information and religion of farmers.

Discussion

The present study conducted among farmers by using self structured questionnaire to assess the effectiveness of planned teaching on knowledge regarding leptospirosis. In pre test knowledge score 42% of the farmers had poor, 48% had average and 10% had good level of knowledge score. After giving planned teaching post test knowledge score was increased 10% of the farmers had good and 90% had excellent level of knowledge score.

A similar study can be conducted among Agricultural Workers about more than half (68%) had low knowledge followed by average knowledge (33%) and none had high knowledge in pre test and majority of the Agricultural Workers had low knowledge (48 %) followed by average knowledge (42%) and (10%) had high knowledge in post test. It is very important point here that none had high knowledge before giving the structured teaching programme and improved in high and average knowledge after structured teaching programme.

A similar study was conducted on knowledge of health risks of Leptospirosis before and after health teaching module in Tamil Nadu. Study was undertaken in 24 randomly selected multi-purpose health workers in Tamilnadu. The results showed that the pre test mean score, 19 percent was increased to 54 per cent after post test (health education). The study concluded health education module was effective to improve the knowledge of health risks of climate change.

In the present study there is no significant association of demographic variables with post test knowledge score such as age, education, year of working experience, type of family, source of information and religion. Hence the hypothesis H2 is not accepted.

RECOMMENDATIONS:

1. A similar study can be replicated on large scale to generalize the findings.
2. A similar study can be conducted to find the attitude of Agricultural Workers about Prevention of Leptospirosis.
3. A descriptive study can be conducted among the Agricultural Workers.
4. A similar study can be replicated with experimental and control group.
5. A comparative study has to be conducted to evaluate two different teaching methods.

CONCLUSION

The main aim of the study was effectiveness of planned teaching on knowledge regarding leptospirosis among farmers. The conclusion drawn on the basis of findings of the study that the administration of planned teaching helped the farmers to understand regarding leptospirosis. There was substantial improvement in the knowledge scores after the administration of the planned teaching.

REFERENCES

5. Mallikarjun Neperi, a study to assess the effectiveness of structured teaching programme on prevention of leptospirosis among agricultural workers in selected community area, Bangalore.