Retrospective study of reproductive disorders in dairy cattle in Belgaum

Dr. Kamal Hasan, Dr. Veeresh HB and Dr. Poorna Chandra

Abstract

The present study was undertaken with an objective to record the incidence of reproductive disorders in Veterinary Dispensaries (VD) of Neginhal and Veterinary Dispensary Budihal, Bailhongal taluk of Belgaum District, North Karnataka. A retrospective type of study was conducted from August 2018 to August 2019 in Bailhongal taluk to identify the major reproductive health problems. The study revealed higher incidence of dystocia (43.8%) may be due to foetal pelvic disproportion and maternal causes like uterine torsion. The incidence of Repeat breeder (38.3%) may be due to faulty time of insemination and Retention of Foetal membranes (26.02%). The study enlightened the major reproductive disorders occurring in Bailhongal taluk and steps to take actions regarding improvement in management systems, proper heat detection and proper selection of bulls for breeding could help in minimizing reproductive health problems and hence, improve the reproductive efficiency of dairy cows.

Keywords: Reproductive disorders, dystocia, Bailhongal taluk

Introduction

Reproductive efficiency of a dairy cow is dependent on successful dairy operation and acts as an important component of a profitable dairy farm. Decreased reproductive performance has direct economic losses due to reduced production and additional management cost [4]. The major problems that have direct impact on the reproductive performance of dairy cows are abortion, dystocia, Retained Fetal Membrane, Metritis, prolapse (uterine and vaginal), anoestrus and repeat breeder. Reproductive health problems cause considerable economic loss to the dairy industry due to slower uterine involution, prolonged inter-conceptional and calving interval, negative effect on fertility, increased cost of medication, drop in milk production and early depreciation of potentially useful cows [5]. The differences in management (production) systems and environmental conditions under which cattle are maintained could greatly affect the occurrence of reproductive health problems [6]. The objective of the present study was to determine the Incidence of reproductive health problems and to identify possible risk factors of such reproductive health problems of dairy cattle in Bailhongal taluk of Belgaum District.

Materials and Methods

The present study comprised of clinical cases presented to various Veterinary Dispensary of Neginhal and veterinary dispensary Budihal, Bailhongal taluk of Belgaum District, North Karnataka.

Study Population and Study Design

The study population consisted of dairy cows that were managed under different management system assess the reproductive health problems of cows in the study area. A retrospective type of study was conducted from August 2018 to August 2019 in Bailhongal taluk to identify the major reproductive health problems of dairy cows.

Results and Discussion

In the Present study, out of 73 cases, higher incidence of Dystocia (43.8%) followed by Repeat breeder (38.3%) and Retention of Foetal membranes (26.02%) (Table 1). High incidence of Dystocia may be attributed to factors such as, the age and parity of the dam and foetal-pelvic disproportion i.e., because of calf size or pelvic dimension of dam [2]. Repeated breeding might be due to several factors, including sub-fertile bulls, endocrine imbalance, malnutrition, reproductive tract infections and poor management practices such as wrong time of insemination or faulty heat detection, inappropriate semen handling and insemination techniques [2].

~ 415 ~

Correspondence

Dr. Kamal Hasan
Assistant Professor, Department of TVCC, Veterinary College, KVAFSU, Hassan, Karnataka, India
Table 1: Incidence of various Reproductive disorders

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Reproductive Health Problems</th>
<th>Cows Affected</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Dystocia</td>
<td>32</td>
<td>43.8%</td>
</tr>
<tr>
<td>02</td>
<td>Repeat breeder</td>
<td>28</td>
<td>38.3%</td>
</tr>
<tr>
<td>03</td>
<td>Retained fetal membrane</td>
<td>19</td>
<td>26.02%</td>
</tr>
<tr>
<td>04</td>
<td>Abortion</td>
<td>16</td>
<td>21.9%</td>
</tr>
<tr>
<td>05</td>
<td>Metritis</td>
<td>08</td>
<td>10.95%</td>
</tr>
<tr>
<td>06</td>
<td>Anestrous</td>
<td>15</td>
<td>20.5%</td>
</tr>
<tr>
<td>07</td>
<td>Prolapse (Uterine and Vaginal)</td>
<td>08</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

The incidence of Retained foetal membrane in the present study was 19%, since retention of foetal membranes is associated with calving, therefore seasonal calving pattern in buffaloes may be responsible for high occurrence of retained placenta in rainy and winter season [7]. The incidence of abortion in the present study was 16%. The lower incidence of abortion may be attributed to the increasing practice of artificial insemination in the study area where the semen is collected from bulls free from brucellosis, in addition to management system especially such as feeding and sanitation [3].

The incidence of Metritis and prolapse of uterus is 8% as it might be due to close confinement and lack of exercise and it can be reduced by the proper maintenance of dairy animals in terms of hygiene of previous calving, provision of balanced ration, maintenance of good body score condition should be to avoid pre-partum Cervico-vaginal prolapse in dairy animals [8].

Conclusion
The present study revealed that reproductive disorders in dairy cows mainly because of dystocia, repeat breeder, retention of foetal membrane. The first step towards decreasing reproductive performance is the ability to recognise a problem, determine the incidence, level of severity and cause and then decide management practices for
better Productivity. Thus, conducting a more systematic and comprehensive study to assess the problem in depth and improvements in management systems (such as housing, feeding, and health care), proper heat detection and proper selection of bulls for breeding are recommended.

**Ethical Matters**

In the present study, the clinical cases were presented to the veterinary Dispensary of Neginhal and veterinary dispensary Budihal, Bailhongal taluk of Belgaum District, North Karnataka indicating no ethical issue related in this study.

**Acknowledgement**

All the authors express their gratitude to staffs of concerned VD’s, AHVS department who assisted in treatment and follow-up of the clinical cases.

**Conflict of Interest**

All the authors declares that they have no conflict of interest.

**References**