

Postpartum Dysgalactia Syndrome - Effect of Veterinary Herd Health Management on the Prevalence and the Treatment Incidence

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Introduction

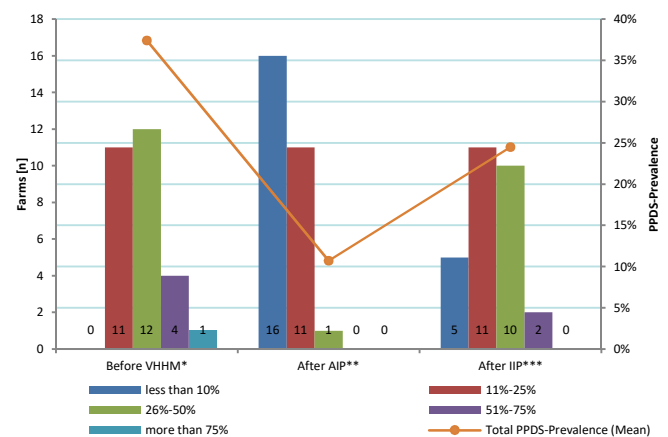
The Postpartum Dysgalactia Syndrome (PPDS) is considered as the most common disease in sows after farrowing. PPDS is a problem not only from the animal health and economic point of view, but also because of the possible development of antibiotic resistance. The aim of this study was to decrease the PPDS prevalence and the treatment incidence (TI) on problem farms with a veterinary herd health management (VHHM).

Material & Methods

VHHM was carried out during 12 months in 28 pig farms with a PPDS prevalence of more than 10%. The VHHM was divided into 2 sections: Assisted Intervention Program (AIP; regular farm visits) and Independent Intervention Program (IIP; independent implementation of measures by farmer; supervision from veterinarian by phone). The antibiotics used were calculated with the TI according to Timmerman et al. (2006).

Results

In 20 of 28 problem farms the PPDS prevalence could be decreased from 37.4% ($\pm 21.8\%$) to 24.5% ($\pm 14.1\%$) in average. The strongest reduction of the PPDS prevalence could be achieved during the AIP ($10.7\% \pm 11.2\%$) (Figure 1). The TI on the farms increased from 4.0 (± 2.8) to 4.7 (± 3.8) on average. A total of 16 measures from the fields of Management and Hygiene (5), Feeding (2) and Optimization of Diagnostics and Treatment (9) were implemented during the Intervention Program. The most effective measures to reduce the PPDS prevalence are listed in Table 1.



*Veterinary Herd Health Management

**Assisted Intervention Program (personal support on site with regular farm visits in one- to three-months intervals)

***Independent Intervention Program (independent implementation of measures by farmer; supervision from veterinarian by phone)

Figure 1: Distribution of farms by PPDS prevalence at the beginning of the VHHM*, after AIP** and after IIP***

Conclusion

With VHHM the prevalence of PPDS could be decreased in 20 of 28 farms. The decrease of the PPDS prevalence during the AIP and the followed increase of the prevalence during the IIP clearly shows that a long-term improvement of animal health can only be achieved with perseverance and intensive veterinary herd health management. The use of a prepartal transition feed with feeding additives (e.g. dietary fibre, acidifiers) is an effective measure to prevent PPDS. In order to avoid misdiagnosis and thus unnecessary antibiotic treatment, apathy, coprostatitis, erythema and induration of the udder, hypogalacty, vaginal discharge, inappetence, and piglet behaviour must be taken into account alongside the body temperature measurement. The use of "Highest Priority Critically Important Antimicrobials" should be avoided. In the treatment of PPDS administration of NSAID and Oxytocin is recommended.

Keywords

PPDS, Veterinary Herd Health Management, Reduction of Antibiotics, Animal Health, Treatment Incidence

References

Timmerman, T., Dewulf, J., Catry, B., Feyen, B., Opsomer, G., Kruif, A.d., Maes, D., 2006. Quantification and evaluation of antimicrobial drug use in group treatments for fattening pigs in Belgium. *Prev Vet Med* 74, 251-263.

Table 1: Most effective Measures of the Veterinary Herd Health Management and the calculated decrease of Risk-Ratio

Measure	Implemented on [n] farms	Calculated decrease of Risk-Ratio
Optimization of PPDS-diagnostic to avoid misdiagnosis	13	50%
Prepartal transition feed (feeding additives e.g. dietary fibre, acidifiers...)	6	40%
Using Oxytocin for treatment	25	20%
Using NSAID for treatment	20	10%