

ABSTRACT

Dairy farmers are vulnerable to infectious disease of diarrhea since they make direct contact with livestock waste containing pathogenic microorganisms such as *Escherichia coli*, *Salmonella*, *Shigella*, *Askaris*, and others. In addition to affecting farmers, livestock waste also affects the quality of livestock products such as milk. The purpose of this study is to analyze the relationship of sanitation hygiene with complaints of diarrhea as well as physical quality and microorganisms of milk in Medowo Village, Kediri, East Java.

The study design used cross sectional study with random sampling technique. Twenty-six respondents were registered as dairy farmers in the Kertajaya Village Cooperative Unit in Medowo Village, Kandangan, Kediri. The independent variables included farmer's hygiene, cage sanitation, milk quality and microorganisms, while the dependent variables included farmer's complaint of diarrhea. Measurement of farmer's hygiene, cage sanitation and complaints of diarrhea are carried out by interview and observation using questionnaires. Quality of milk microorganisms was conducted in the Laboratory to analyze the parameters of Total Plate Count and *E.coli*. Chi Square and Fisher's Exact Test is used for analyze the data with a degree of confidence of 0.05 ($\alpha = 5\%$).

The analysis results showed that most of the dairy farmers were male. They were 15-65 years old with a work periode of between 5-15 hours and the length of work per day were 4 hours. Poor sanitary hygiene condistions, good milk quality of the Total Plate Count, *E.coli* microorganisms and few complaints of diarrhea in dairy farmers. There was no relationship between the parameters of farmers's hygiene, cage sanitation, milk quality, as well as microorganisms and dairy farmer diarrhea complaints in Medowo Village, Kandangan Sub-district, Kediri District. It could be concluded that dairy farmers need to develop the habit of PPE (Personal Protective Equipment) usage and cage sanitation management. It is also necessary for relevant parties to implement training, supervision and dissemination of information regarding hygiene and sanitation-based livestock management.

Keywords: diarrhea, farmer's hygiene, cage sanitation, milk quality.

ABSTRAK

Peternak sapi perah merupakan kelompok yang rentan terkena penyakit infeksi berupa diare, karena mereka melakukan kontak langsung dengan limbah ternak yang mengandung mikroorganisme patogen seperti *Escherichia coli*, *Salmonella*, *Shigella*, *Askaris dll*). Limbah ternak selain mempengaruhi peternak juga mempengaruhi kualitas produk ternak seperti susu. Tujuan penelitian ini adalah menganalisis hubungan higiene sanitasi dengan keluhan diare dan kualitas fisik serta mikroorganisme susu di Desa Medowo, Kediri, Jawa Timur.

Rancangan penelitian menggunakan desain *cross sectional* dan menggunakan teknik *sistem random sampling*. Responden berjumlah 26 yang terdaftar sebagai peternak sapi perah di Koperasi Unit Desa Kertajaya Desa Medowo, Kecamatan Kandangan, Kediri. Variabel bebas penelitian adalah higiene peternak, sanitasi kandang kualitas fisik dan mikroorganisme susu. Variabel terikat penelitian adalah keluhan diare pada peternak. Pengukuran higiene peternak, sanitasi kandang dan keluhan diare dengan wawancara dan observasi menggunakan kuisisioner. Pengujian kualitas mikroorganisme susu dilakukan di Laboratorium untuk melihat parameter *Total Plate Count* dan *E.coli*. Analisis data menggunakan *Chi Square* dan *Fisher's Exact Test* dengan derajat kepercayaan 0,05 ($\alpha = 5\%$).

Hasil analisis menunjukkan sebagian besar peternak adalah laki-laki. Mereka berumur antara 15-65 tahun dengan masa kerja antara 5-15 jam dan lama kerja perhari 4 jam. Kondisi higiene sanitasi buruk, kualitas susu mikroorganisme *Total Plate Count*, *E.coli* baik serta sedikit ditemukan keluhan diare. Sehingga tidak ada hubungan antara parameter kualitas higiene peternak, sanitasi kandang, kualitas fisik dan mikroorganisme terhadap keluhan diare pada peternak sapi perah di Desa Medowo, Kecamatan Kandangan, Kabupaten Kediri. Kesimpulannya adalah peningkatan kebiasaan penggunaan APD (Alat Pelindung Diri) serta manajemen sanitasi kandang perlu dilakukan oleh peternak. Pelatihan, pengawasan dan penyebaran informasi mengenai manajemen beternak yang berbasis higiene dan sanitasi perlu dilakukan oleh pihak terkait.

Kata Kunci: diare, higiene peternak, kualitas susu sapi, sanitasi kandang