

ABSTRACT

**IMPLEMENTATION OF DECISION TREE FOR SATISFACTION
CLASSIFICATION BY UTILIZING CONTRA WAR APPLICATION TO
FAMILY PLANNING FIELD OFFICERS**

The advancement of science and technology bring great influence on various fields. Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) are the problems that Indonesia is facing. Maternal deaths were caused by bleeding (28%), hypertension / eclampsia (24%), infection (11%), old partus (16%) and uncomplicated abortion (10%). The taken steps to cope by early detection of prospective mothers who will be planning for having a baby or not. The program proposed in 2015 by using of Contraceptive for Women at Risk application or commonly abbreviated as Contra War.

This research uses cross sectional with using Artificial Intelligence (AI) design. The respondent of this research consist of all 98 workers in Family Planning field officers in Malang Regency. The implementation of research activities from May to July 2018. The research predictor variables consist of Perceived Ease of Use, Perceived of Usefulness, Interests, Attitude, Facility Support, Reward and Punishment and Monitoring and Evaluation. Data were analyzed using Decision Tree. The level of consistency of the analysis was assessed by the Kappa Agreement test. The Primary data was collected by interview and direct assessment of the Family Planning Field Officer as the subject of this study.

The results showed that the research respondents have been largely satisfied with the services and features contained in the Contra War. Respondents who are very satisfied with Contra War are 4 (4.1%). Then the satisfied with Contra War as many as 68 people (69.4%). While respondents who are not satisfied with the service or features contained in the Contra War as many as 26 people (26.5%). Final node (End Node) 21 pieces with 8 dissatisfied, 12 satisfied and 1 very satisfied. Accuracy of 89.1% with P-Value 0,002765 and Kappa 0,717900. The sensitivity was 94.9% and the specificity was 79.2% at the satisfied level.

Based on the results of this research, it is recommended for the Office of Population Control and Family Planning in Malang Regency to maintain the support facilities and conducting monitoring and evaluation that has been given. There needs to be a development strategy to improve the installation of contraceptives associated with the Social Security Administrator and developing the application to make it more informative.

Keywords: Family Planning, Decision Tree, Satisfaction

ABSTRAK

**PENERAPAN *DECISION TREE* UNTUK KLASIFIKASI KEPUASAN
DALAM MENGGUNAKAN APLIKASI CONTRA WAR PADA PETUGAS
LAPANGAN KELUARGA BERENCANA**

Kemajuan ilmu pengetahuan dan teknologi akan membawa pengaruh yang besar pada berbagai bidang. Angka Kematian Ibu (AKI) dan Angka Kematian Bayi (AKB) merupakan permasalahan yang sedang dihadapi Indonesia. Kematian ibu hamil disebabkan oleh perdarahan (28%), hipertensi/eklampsia (24%), infeksi (11%), partus lama (16 %) dan abortus terkomplikasi (10%). Langkah yang dilakukan untuk menanggulangnya dengan melakukan deteksi dini pada calon ibu baik yang akan memiliki bayi maupun tidak memiliki rencana memiliki bayi. Program yang diusulkan pada tahun 2015 adalah penggunaan aplikasi *Contraceptive for Women at Risk* atau biasa disingkat menjadi *CONTRA WAR*.

Penelitian ini menggunakan desain penelitian *cross sectional*, dengan rancang bangun menggunakan *Artificial Intellegence (AI)*. Responden penelitian menggunakan seluruh Petugas Lapangan Keluarga Berencana di Kabupaten Malang sebanyak 98 orang. Variabel dalam penelitian ini adalah Kepuasan Petugas, *Perceived Ease of Use*, *Perceived of Usefulness*, Sikap, Minat, Dukungan, Reward dan Punishment serta Monitoring dan Evaluasi. Data dianalisis menggunakan *Decision Tree*. Tingkat konsistensi analisis dinilai dengan uji *Kappa Agreement*. Pengambilan data primer dilakukan dengan melakukan wawancara dan penilaian langsung terhadap Petugas Lapangan Keluarga Berencana yang menjadi subyek penelitian.

Hasil penelitian menunjukkan bahwa responden penelitian sebagian besar telah merasa puas terhadap pelayanan maupun fitur yang terdapat di *Contra War*. Responden yang merasa sangat puas terhadap *Contra War* terdapat 4 orang (4,1%). Kemudian yang merasa puas terhadap *Contra War* sebanyak 68 orang (69,4%). Sedangkan responden yang merasa tidak puas terhadap pelayanan maupun fitur yang terdapat di *Contra War* sebanyak 26 orang (26,5%). Simpul akhir (Node Akhir) 21 buah dengan 8 tidak puas, 12 puas dan 1 sangat puas. Akurasi sebesar 89,1% dengan P-Value 0,002765 dan Kappa 0,717900. Sensitifitas sebesar 94,9% dan spesifisitas sebesar 79,2% pada tingkatan puas.

Berdasarkan hasil penelitian, disarankan bagi pihak Dinas Pengendalian Penduduk dan Keluarga Berencana Kabupaten Malang tetap mempertahankan dukungan fasilitas serta monitoring dan evaluasi yang telah diberikan. Perlu ada pengembangan strategi untuk meningkatkan pelayanan pemasangan alat kontrasepsi yang berhubungan dengan Badan Penyelenggara Jaminan Sosial. Serta melakukan pengembangan aplikasi sehingga lebih informatif.

Kata Kunci: Keluarga Berencana, Decision Tree, Kepuasan