STUDY OF NUTRITIONAL STATUS APPLICATION DEVELOPMENT IN CORRECTIONAL ASSISTED CITIZENS (WBP) AT LAPAS NARKOTIKA KELAS IIA MUARA BELITI

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ABSTRACT

This research is entitled The study of the development of nutritional status applications in inmates penitentiary (wbp) in Class IIa Prison Narcotics Muara Beliti. The purpose of the research This is to determine the nutritional status of the food consumed by the inmates penitentiary (wbp) in Class IIa Prison Narcotics Muara Beliti. This research using research and development methods, according to Borg and Gall quoted by (Sari, Farida, & Syazali, 2016) research and development is a process used to develop products such as software (devices software) Computers in the form of applications. So, it can be concluded research and Development is a process in creating new products as well as new products developing and validating an existing product. Meanwhile according to (Putra, 2013) Research And Development is a research method that intentionally, systematically, aiming/directed to find, formulate, improve, develop, produce, test the effectiveness of products, models, methods/strategies/methods, services, certain procedures that are superior, new, effective, efficient, productive and meaningful. From the results of anthropometric measurements which include age, height and weight, from 100 inmates who were sampled or the subject of this study, the results can already be stated to meet nutritional standards balanced .. The implications expected from this research prison managers can concerned about the quality of the food they will eat.

Keywords: Nutritional Status; Application; Anthropometry

Introduction

Developments that occur in the field of Information and Communication Technology (ICT) has had a significant impact on life man. Progress in the field of science and technology that is so rapid is not Not only has it resulted in progress, but it has also created various problems complicated, complex and multidimensional The problem of nutrition in population development is still a problem problems that are considered to be the main problems in the population order world.

The problem of nutrition in population development is still an issue that is considered to be a major problem in the world population system. Therefore, this issue has become one of the important points that has become a global agreement in the Millennium Development Goals (MDGs). The anthropometric guidelines for determining nutritional status are the selected and recommended parameters, which include assessment of age and weight, body length or height, and upper arm circumference (DKK, 2007). Body Mass Index (BMI) is recommended as a good indicator to determine nutritional status (Permaisih, 2007). The nutritional status of Indonesian youth shows a lack of macronutrients (carbohydrates, protein, fat) and a lack of micronutrients (vitamins, minerals). Lack of macro and micro nutrients

causes the body to become thin and body weight (BB) drops dramatically, shortness, anemia, constant illness, so that the prospective mother is unhealthy (Gklinis, 2007). According to the results of UNICEF-WHO-The World Bank joint child malnutrition According to the 2012 estimates, an estimated 165 million children under the age of five worldwide are stunted, a decrease compared to as many as 253 million in 1990. High prevalence rates of stunting among children under the age of five are in Africa (36%) and Asia (27%), and often have not been recognized. as a public health problem.

Application software is a form of science and technology (Janner, 2006). An application is a program or a group of programs designed to be used by end users. application service users as well as the use of other applications that can be used by a target to be addressed (Andi 2015). According to the opinion above, it can be concluded that an application is a program that is designed in a structured manner to help work practically and efficiently, to help application work must be supported by several support software.

Software or software (English: software) is a specific term for data that is formatted and stored digitally, including computer programs, documentation, and various information that can be read and written by a computer. In other words, part of a computer system that is intangible. This term emphasizes the difference from computer hardware.

However, is it the ompreng that is provided with a menu and a portion that is the same can be sufficient for the AKG of correctional inmates who have differences in age, weight to height can be met as a whole So it is necessary to develop an application so that it is practical to calculate energy content in the food consumed by correctional inmates. So the researchers took the title Study of Development of Nutritional Status Applications Correctional Assisted Residents (WBP) Lapas Narkotika kelas IIA Muara Beliti

Research and development or better known as Research and Development is a type of research that is currently widely used by researchers, this is considering the effectiveness of research and development in validating and developing products. Product validation, has the meaning that the product already exists, and researchers only test the effectiveness of use the product. Developing products, has the meaning of updating and add items in the product. According to the Borg and Gall quoted by Sugiyono (2016:28) research and development is a process used to develop products. The product in question textbooks, films for learning and computer software in the form of an application. So, it can be concluded that research and development is a process in creating new products as well as developing and validating an existing product.

Application is a program that is ready to be used and made for carry out a function for users of application services and use of applications that can be used by a target to be addressed. According to the dictionary Computer applications are data processing techniques used to solve problems that race against the desired computation or expected and expected data processing (Juansyah, 2015)

Based For Indonesia, the Nutrition Adequacy Rate (RDA) is currently used nationally is the result of the 2004 National Food and Nutrition Widyakarya (Supriasa, 2002: 112). The average AKG at the level of consumption for the population Indonesia is 2,170 kilocalories (kcal) for energy and 48 grams of protein. Meanwhile, the supply level is 2800 kilocalories (kcal) for energy and 58.5 grams of protein According to Deritana, et al, 2000 (Rismawan,

Irawan, Prabowo, & Kusumadewi, 2008), There are various ways to assess nutritional status, one of which is measurement of the human body known as "Anthropometry". Anthropometry has long been known as an indicator for assessing individual nutritional status or groups. Anthropometric measurements can be done by anyone with just a quick and simple exercise.

Special food for narapida or what is known as in the institution penitentiary (Lapas) namely ompreng. Ompreng is a food ration for inmates are given 3 times a day in the morning, afternoon and evening. In the distribution of food rations for prisoners, it is regulated in Permenkumham Number: M.Hh-01.Pk.07.02 of 2009 concerning guidelines for organizing food for Correctional Families in Correctional Institutions and Detention Centers Country.

Method

Research and development or better known as Research and Development is a type of research that is currently widely used by researchers, this is considering the effectiveness of research and development in validate and develop products. Product validation, has the meaning that the product already exists, and researchers only test the effectiveness of use the product.Developing the product, has the meaning of updating and add items in the product. According to the Borg and Gall quoted by (Sari et al., 2016)) research and development is a process used to develop products. The product in question textbooks, films for learning and computer software in the form of an application. So, it can be concluded that research and development is a process in creating new products as well as developing and validating an existing product. In this study, researchers will take anthropometric measurement data in Class IIA Muara Beliti Lapas, Musi Rawas Regency. What is meant by research subjects, are people, places, or objects that observed in the framework of growth as (Moleong & Edition, 2004). The research subjects in this paper are some of the correctional inmates lapas Narkotika kelas IIA Muara Beliti, Research instruments are tools at the time of research using a method. In this research the instrument to be used is trough anthropometric measurements, namely by recording age, weighing and height measurements entered into the table. Subjects measured height body weight in meters and weight in units kilogram, The stage of data processing results which will later be interpreted in the form analysis to build a conclusion in response to the objectives study. In this research, descriptive analysis was carried out. Where the data obtained from the results of anthropometric measurements will later be processed with using applications that have been made by researchers, and then will be drawn conclusion as an answer to the purpose of this study. In this study a descriptive analysis of the percentage of processing results will be carried out application data.

Discussion

Based on the calculation results using the application as follows listed in table 4.4. above, it can be explained that out of 30 residents the correctional facility tested, the results obtained are as much as 1 people whose nutritional status is in the very poor category or by 3.33% and 5 people whose nutritional status is less or by 16.6% and 12 people in the category moderate or by 40% and 12 people in the good category or by 40%. Based on the calculation

results using the application as follows listed in table 4.5. above, with a total sample of 100 inmates correctional services can be explained by the results, namely as many as 3 people with nutritional status the category is less than once or equal to 3% and 16 people with status malnutrition or by 16%, and 37 people whose nutritional status is Medium or by 37%, 39 people whose nutritional status is good or by 39%, 5 people who nutritional status is very good or at 5%, According to (Supriasa, 2002) level Energy consumption has a direct effect on nutritional status. That energy obtained from carbohydrates, proteins and fats. Energy is needed to growth, metabolism, food utilization and activity Energy is supplied mainly by carbohydrates and fats, while protein is for provide amino acids for the synthesis of cell proteins and hormones and enzymes to measure metabolism, so this has an impact on nutritional status a person. Nutritional status according to (Almatsier, 2005)) is: "The state of the body as due to food consumption and use of nutrients, distinguished between status malnutrition, less, good, and more. Based on this quote it can be concluded that nutritional status is a classification or measure of a person's nutritional status caused by consumption, absorption, and use of food nutrients.

Conclusion

After going through this research process, the researcher draws several conclusions, including: 1. Applications resulting from this development, can make it easier for users in determining the nutritional status to be consumed or to be eaten. 2. From the results of anthropometric measurements which include age, height and body weight, from 100 inmates who are used as sample or subject of this study, the results can already be stated meet nutritional standards.

References

Aini, S. N. (2013). Faktor risiko yang berhubungan dengan kejadian gizi lebih pada remaja di perkotaan. *Unnes Journal of Public Health, 2*(1).

Alamsyah, D., Mexitalia, M., & Margawati, A. (2015). Beberapa Faktor Risiko Gizi Kurang dan Gizi Buruk pada Balita 12-59 Bulan. *Jurnal Vokasi Kesehatan, 1*(5), 131-135.

Almatsier, S. (2005). Prinsip dasar gizi. *Jakarta: Gramedia Pustaka Utama*.

Anggraeni, R., & Indrarti, A. (2010). Klasifikasi status gizi balita berdasarkan indeks antropometri (BB/U) menggunakan jaringan saraf tiruan. *UniversitasGunadarma*.

Arrahman, H. (2018). *Uji Kandungan Karbohidrat pada Nasi putih dari Beras Cianjur dan Garut yang Dimasak dan Disimpan Menggunakan Magic Jar.* FKIP UNPAS.

Basrah. (2010). Survei status gizi dan motivasi berolahraga pada pengunjung samson gym kota makassar.

Beddu, S. (2015). Hubungan status gizi dan usia menarche dengan dismenore primer pada remaja putri. *SEAJOM: The Southeast Asia Journal of Midwifery, 1*(1), 16-21.

Dhuhita, W. M. P. (2015). Clustering Menggunakan Metode K-mean Untuk Menentukan Status Gizi Balita. *Jurnal Informatika Darmajaya, 15*(2), 160- 174.

Ekawati, A. (2016). Penggunaan Software Geogebra dan Microsoft Mathematic dalam Pembelaran Matematika. *Math Didactic: Jurnal Pendidikan Matematika, 2*(3), 148-153.

Ernawati, E., Halida, H., & Djewarut, H. (2013). Pengaruh penyuluhan kesehatan terhadap peningkatan pengetahuan ibu tentang status gizi balita di posyandu wilayah kerja puskesmas antang perumnas makassar. *Jurnal IlmiahKesehatan Diagnosis, 2*(2), 6-10.

Fahrudin, A., Purnama, B. E., & Riasti, B. K. (2012). Pembangunan sistem informasi layanan haji Berbasis web pada kelompok bimbingan ibadah haji Ar rohman mabrur kudus. *Speed-Sentra Penelitian Engineering dan Edukasi, 3*(1).

Gozali, A. (2010). Hubungan antara status gizi dengan klasifikasi pneumonia pada balita di Puskesmas Gilingan Kecamatan Banjarsari Surakarta.

Hakim, L. (2018). *Bahasa Pemrograman (C# dan EmguCV)*: Deepublish. Hermaduanti, N. (2008). *Sistem Pendukung Keputusan Berbasis SMS untuk*

Menentukan Status Gizi dengan Metode K-Nearest Neighbor. Paperpresented at the Seminar Nasional Aplikasi Teknologi Informasi (SNATI).

Juansyah, A. (2015). Pembangunan aplikasi child tracker berbasis assisted-global positioning system (a-gps) dengan platform android. *Jurnal Ilmiah Komputer dan Informatika (KOMPUTA), 1*(1), 1-8.

Moleong, L. J., & Edisi, P. (2004). Metodelogi penelitian. *Bandung: Penerbit Remaja Rosdakarya*.

Nurrizky, A. (2018). Perbandingan antropometri gizi berdasarkan bb/u, tb/u, dan imt/u siswa sd kelas bawah antara dataran tinggi dan dataran rendah di kabupaten probolinggo (studi pada sdn negororejo 1 kecamatan lumbang dan sdn tongas wetan 1 Kecamatan Tongas Kabupaten Probolinggo). *JurnalPendidikan Olahraga dan Kesehatan, 6*(1).

Pahlevi, A. E. (2012). Determinan status gizi pada siswa sekolah dasar. *KEMAS: Jurnal Kesehatan Masyarakat, 7*(2), 122-126.

Pamungkas, G. A., Isnanto, R. R., & Martono, K. T. (2016). Pembuatan Aplikasi Panduan Gizi Seimbang Berbasis Android Dengan Menggunakan Metode Backward Chaining. *Jurnal Teknologi dan Sistem Komputer, 4*(2), 369-379.

Rismawan, T., Irawan, A. W., Prabowo, W., & Kusumadewi, S. (2008). Sistem pendukung keputusan berbasis pocket pc sebagai penentu status gizi menggunakan metode knn (k-nearest neighbor). *Teknoin, 13*(2).

Saijah, S., Lestari, S., & Yusuf, A. (2015). Peningkatan Pemahaman Gizi Seimbangpada Anak Usia 5-6 Tahun di Taman Kanak-kanak. *Jurnal Pendidikan dan Pembelajaran Untan, 4*(9).

Septikasari, M. (2018). *Status gizi anak dan faktor yang mempengaruhi*: UNY Press.

Supriasa, I. (2002). Prinsip Dasar Ilmu Gizi. *Jakarta: Kedokteran EGC*.

Utomo, A. P. (2015). Penerapan Konsep SAAS (Software as a Service) Pada Aplikasi Penggajian. *Simetris: Jurnal Teknik Mesin, Elektro dan Ilmu Komputer, 6*(1), 137-142.