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MANAGEMENT OF THE DRINKING WATER SERVICE AND QUALITY OF LIFE IN THE HUMAN SETTLEMENTS OF LIMA PERU

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ABSTRACT
The objective of the research was to determine the relationship between the Management of the drinking water service and quality of life in the Human Settlements of Lima Peru. Said research has as its theoretical foundation Duguit, L. (2005) who represents theories focused on the public services available within a state, emphasizing an administrative right of every person in a society; likewise to Manfred, M. (1993) who establishes a human scale, referring to the quality of life, as satisfaction and fundamental within a society. The research method is hypothetical deductive, with a quantitative approach, non-experimental cross-sectional design, type of applied research and correlational descriptive level, the population was large, undetermined (infinite) and a probabilistic sample of 340 inhabitants, for the collection of data was used the survey technique and as an instrument a questionnaire with dichotomous response. According to the descriptive analysis and inferential test, it was determined that there is a significant relationship between the variables Management of drinking water service and quality of life in the Human Settlements of Lima Peru
Keywords: Management, Public services, Well-being.

I. INTRODUCTION

Nowadays, access to water service is fundamental in every society, it involves the correct management of this service, drinking water is part of a fundamental need of every person, many of them have this problem in the human settlements where they live. throughout the country, affecting their quality of life. The authorities and entities that regulate this type of services do not give it due attention to be resolved in time, causing discomfort in the population and consequently low quality of life.

Currently, a part of the world population lives in urban areas with rapid growth, the different strategies are aimed at an integrated management to obtain water resources and prevent the risks that occur with lack of water, such as diseases in these populations.

The economic commission for latin america and the caribbean (ECLAC) mentions that the improvement of the quality and coverage of public services has become an important precedent, which must be evaluated when designing social policies allowing its inhabitants of Latin America overcome poverty, improving the quality of life and access to social development. A public service management is obliged to report the functions of the State and its relationship with the public interest, also contemplating an economic development that is important and affects the living conditions of each person (2003). Public services not only they play with the supply and demand of the elements to satisfy the main needs of the population, if it does not become a tool that citizens must possess for their social, economic and humanistic development, in the face of the adversities that life presents.

According to Balcázar, (2008) mentions: Sanitation in the different countries of the world is an issue of great importance that must revolve around an immediate solution, there are countries in Latin America and Africa where it can be observed that there are problems of mismanagement in the drinking water service, this is how in Managua, Nicaragua with a population of 1.2 million people with 350 human settlements representing 40% of the people of Monaco, who survive in high areas without the so-called vital liquid, although it is recognized that they are invaders Due to immigration from the countryside to the city, the settlers execute their own connections arbitrarily, this in turn affecting their safety, quality of life and prone to acquiring some diseases (2008, p. 26)

Santa Cruz de la Sierra (Bolivia), contemplates a serious problem in its management of services, since 59% of citizens have active drinking water connections and can access the service, while 31% have to look for the water by other means. The company Cooperativa de Servicios Públicos Santa Cruz Limitada (SAGUAPAC) which is under the regulations of the Ministry of Water, being in charge of the distribution of express water, that 30% of the inhabitants of Santa Cruz de la Sierra have their needs satisfied , but 70% are homeless with respect to the deplorable facilities that are found. (Balcázar, 2008, p.33). It highlights that, in the face of an imbalance in the supply and coverage of water, the authorities of this country in question, through the companies in charge, have the function of providing a correct supply and service of this resource for the benefit of the development of the population.

Public services, in government and municipal contexts, have tried to modernize their processes of total coverage of water and sewage services for their citizens, however, even in the country there are 4 million 376 thousand 900 Peruvians who represent (13.9 %) of the total population (INEI, 2016) that still does not have the basic water and sewage service, being decisive in the conditions that citizens live day by day and the difficulties they have in obtaining this resource, currently that fact has not changed substantively.

Our nation is one of the countries that suffers from the lack of drinking water, either due to inadequate management of the state or entities responsible for supplying water. There is a large number of people who do not have access to this resource, harming their development and well-being in society. Clearly it is observed that the provinces far from the cities have this problem and decisions have not yet been made, similarly it occurs in the cones of Lima that also present this problem due to the lack of accessibility of drinking water.

Piura, Lambayeque and Cusco, are some of the departments of Peru that do not have an adequate water and sewage service, Incahuasi is a district of Cusco that has a year of creation, where approximately 5 thousand people live, half of these Inhabitants consume water through springs with poor connections, while the other half through irrigation channels, this town that is far from the department of Cusco does not have the adequate infrastructure for its correct supply of its basic services, where local governments have not yet implemented a management to connect essential networks for their supply and distribution. (Source RPP, 2017).

The districts of La victoria and José Leonardo Ortiz, in the department of Lambayeque have the same problem, affecting more than 81% of the homes in the aforementioned areas that do not have basic water and sewage services, affecting their quality of life. (Pimentel and Palacios, 2017).

In the city of Lima, approximately 60,000 families do not have water. A clear example is the cones of Lima, according to some studies by the Urban Program of (DESCO) the most remote areas of southern Lima such as SJM, VMT and Villa el Salvador, there are approximately 37,457 homes without drinking water. The dozens of families are supplied by the tanker truck service and the water that is distributed does not have sanitation protocols (García, 2007). The Human Settlements of San Camilo, San Albino and the district of Independence are the most affected by the lack of water and sewage connections (EDITORIAL EC, 2017).

In the southeast cone, the districts of Ate and San Juan de Lurigancho, cities of Lima with a high poverty rate, where there are areas without water supplies, such as the Barbadillo farm, Porvenir, the La Encalada housing association, the town center of Santa Isabel and the human settlements Santa Cruz and Unión Perú are the most affected areas that do not have potable water service (EDITORIAL EC, 2017, para. 1). The districts of Ate and SJL are districts of Lima, which have one of the largest populations at the district level, their biggest problem is the shortage of water with factors such as informality in housing, unreported construction in uninhabitable areas located in the streams between hills. Likewise, the Cerro Las Animas human settlement in the Puente Piedra district, where it is observed that the inhabitants live in inadequate conditions due to lack of water and other fundamental services, this district is close to the city of Lima, where both the state and the Different district governments have responsibility for not meeting these basic needs, postponing the impact on the physical health and development of these peoples.

The General and Specific Objectives were: General Objective: Determine the relationship between the Management of the drinking water service and quality of life. Specific Objective: 1.Determine the relationship between the Management of the drinking water service and physical well-being. 2. Determine the relationship between the management of the drinking water service and social welfare. 3. Determine the relationship between the management of the drinking water service and satisfaction.

Justification of the investigation. The research from the theoretical point of view proposes, analyzes, seeks the reasons in a theoretical way, facing the specific problem of deficiency and lack of drinking water service in the AA.HH Las Ánimas, making use of university knowledge and sources related to the problem. Also receiving personalized advice both in scientific research methodology and statistics applied to administration and business. The Methodological justification of this research affects the search for improvement solutions in the management of the drinking water service and the quality of life that every person should have, through the scientific knowledge already studied, evaluating the different dimensions that it was proposed to investigate and contribute to the solution. Likewise through the Practical Justification: The research carried out will result in answers that help to effectively solve all the questions that were raised, providing solutions in decision-making and improvements in the management of the drinking water service and quality of life in AA. HH las Ánimas Puente Piedra district.

The General and Specific Hypotheses: General Hypothesis: There is a significant relationship between the Management of the drinking water service and quality of life. Specific: 1. There is a significant relationship between the Management of the drinking water service and physical well-being. 2. There is a significant relationship between the Management of the drinking water service and material well-being. 3. There is a significant relationship between the management of the drinking water service and satisfaction.

II. THEORETICAL FRAMEWORK

The background: Torres (2014) The objective of which was to verify the management of a service for the benefit of a community located in the province of Buenos Aires, town of Saavedra, located in Argentina. The research design has an exploratory - descriptive nature. In conclusion, the durability within a management revolves around a correct participation of the private sector and all the stages of the state, involving the population, in having a progressive interest that seeks dynamism and control. At the same time, provide facilities for the population to participate in decisions about the course of power.

Mendoza (2016) The main objective of which was to determine the effects that urban management has, with respect to a locality, seeking to generate an adequate policy for the benefit of correct access to sewerage and drinking water from the AA. HH Cerro las Animas, from the town of Puente Piedra. The research is based on the pillars of qualitative research. It concludes, within the city of metropolitan Lima, there is no correct design on the management of resources, speaking of the water system, since it was proposed that every structure is thought of only one large operator, who would be in charge of determining the network teacher for the benefit of a city, which led to determine a single scale for the SEDAPAL company or in any case that of a private company that is capable of managing this massive distribution network.

The theories related to public service part of: Duguit is considered the father of the concept of public service, as a fundamental part of Administrative Law as his theory indicates. The importance of the state in the face of an adequate management within a country, makes mention that the state is not, as what has been believed and as at some point it has been believed to be, a power of command, exhibits as a set of public services structured and supervised by the government (Sánchez, nd, p. 633. Likewise, an inclusive management seeks to form and govern under suitable regulations, placing the population as a private company. The state is the one who has to ensure for the needs that a country has, improving, attending to all its needs and verifying the public services that have a correct operation and reach the community in general.

The Home Public Service Theory proposed by Atehortua (2006) Administrative Law: According to Rivero (cited by Atehortua, 2006) Within an organization there are segregative rules that influence activities, whether administrative or private, referring to the people who belong to A jurisdiction, through a public law, […] it is necessary to indicate that home public services are those whose benefits or resources are enjoyed from their homes by users, […] that satisfy their essential needs […], from this perspective it grows to satisfy the demands of citizens as a good or service (p.24). It should be noted that since the state is obliged to provide public services to the entire population, Rivero mentions that within the management of household water, different factors are used around activities, which must be managed within a set of systems, water starts as a fundamental right of society, where different processes participate in order to provide the water service. Management of the drinking water service, belonging to a public or private service essential for human development, must be covered by the drinking water EPS, whose service derives from a concurrence of three elements: All services must be regulated and provided to have a home connection, which is provided through a human or physical distribution network, in order to meet the needs of users, involving the government through a protection in case of administrative falsehood (p. 54). Atehortúa, states that it is the responsibility of the state to see to the needs of its population, providing all the necessary services that satisfy and allow them to cover their essential needs, from the governmental point of view.

According to the National Superintendence of Sanitation Services (SUNASS): EPS (Service Provider Company) within the operational aspect of its services, has as indicators the continuity of the service, coverage of drinking water, percentage of active connections, water consumption and percentage of sewage treatment reveal the characteristics and efficiency of the EPS service (2004, p.31). SUNASS is in charge of regulating, verifying and controlling all the standards provided by the EPS.

The quality of life presents infinities of contexts to define it, according to Ardila, R (2003) refers: In the Latin American Journal of Psychology, an integrative definition is not disclosed, maintaining that Quality of life is a general part, leading to complete satisfaction, rooted in a fulfillment as a person developing various aspects (p.4). It contemplates feelings of the person in front of different stimuli, of how the quality of life is seen from a psychological point of view or perhaps of a need derived from different moments of life.

According to Palomba (2002): Quality of life, as defined by the cited author, implies "having good objective living conditions and a high degree of subjective well-being where both physical, social and psychology enter into", and also includes satisfaction collective needs through social policies "(p. 3). It refers to the subjective and objective, which involves different perspectives in the conceptual, but Palomba maintains that both are correct because they evaluate different perceptions that the person has in a society, both, as well as defines and considers it necessary every person to seek their well-being and conformity to life.

General problems: What relationship exists between the management of the drinking water service and quality of life? Specific problems: 1. What is the relationship between the Management of the drinking water service and physical well-being? 2. What is the relationship between the Management of the drinking water service and material well-being? 3. What is the relationship between the management of the drinking water service and satisfaction?

III. METHOD

Research design was non-experimental, cross-sectional and the level of research was descriptive-relational, based on Hernández, Fernández and Baptista (2003). The type of research was applied, According to Rodríguez (s.f.) The research approach is quantitative, based on Pérez, Gonzales and Quintanal (2016; p.1). Population, the work was carried out in the AA. HH LAS ÁNIMAS of Puente Piedra-Lima where there is a large undetermined (infinite) population. Representative sample consisted of 340 people. Sampling: It was determined using probability sampling for large and infinite populations (not known). Data collection techniques and instruments, validity and reliability: The data collection techniques was the survey. The instrument used for data collection was the questionnaire, with a dichotomous response and 27 questions, made based on the indicators. The questionnaire was validated by expert judgment made up of 3 specialists. Reliability was made using the data collected from the pilot sample that had 26 collaborators, using the KR20 (Kuder-Richardson) statistics in parallel with Cronbach's Alpha statistic, obtaining as a result 0.913, which according to Hernández, Fernández and Baptista (2014) is Very high reliability and applicable since it is greater than 0.60, coinciding with Fornell and Larcker (1981) and equivalent with Hair, Black, Robin and Anderson (1998)

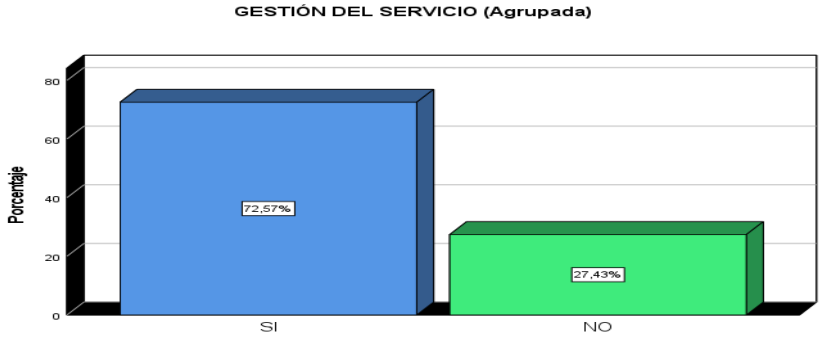
IV. RESULTS

Descriptive analysis of the results

Variable 1: DRINKING WATER SERVICE MANAGEMENT

		Frequency	Percentage	Percentage Valid	Accumulated percentage
Válid	YES	246	72,4	72,6	72,6
	NOT	93	27,4	27,4	100,0
	Total	339	99,7	100,0	
Lost	Sistem	1	,3		
Total		340	100,0		

Source: Data collected from the sample

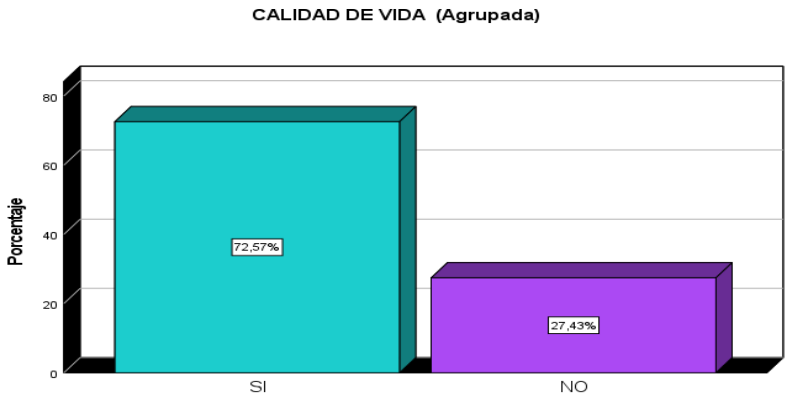


Interpretation and analysis: it is observed that 72.60% of those surveyed consider that there is inadequate management of the drinking water service, while 27.40% state that there is no good management by the EPS. This last fact is due to the fact that the liquid element service does not reach the homes of this considerable percentage of inhabitants.

Variable 2: QUALITY OF LIFE

		Frequency	Percentage	Percentage Valid	Accumulated percentage
Válido	YES	237	69,7	69,7	72,6
	NOT	103	30,3	30,3	100,0
	Total	340	100,0	100,0	
Lots	Sistem	0	0		
Total		340	100,0		

Fuente: Datos recogidos de la muestra



Interpretation and analysis: it is observed that 69.70% of those surveyed state that they do have an adequate quality of life within the population, while 30.30% report that they do not have a considerable quality of life in the population. In conclusion, this last percentage shows that a third of the total does not have adequate services, mainly drinking water, to cover their needs and live adequately, this implies that the EPS must improve its services.

Inferential proofs

The variables that intervened in the research were qualitative, with categorical data, being measured in the dichotomous nominal scale, the non-parametric Chi-Square statistic was used.

General Hypothesis Test

Ho: There is no relationship between the management of the drinking water service and quality of life

Ha: If there is a relationship between Management
of drinking water service and quality of life.

Conditions and Decision Rule: Significance p = 5%; Limit point Z = 1.96

a) SigE <p, then Ho is rejected; b) SigE> p, then Ho is accepted

Chi-square test statistics

	SERVICE MANAGEMENT	QUALITY OF LIFE
Chi squared	69,053[a]	52,812[b]
gl	1	1
Sig. Asymptotic	,000	,000

a.0 cells (0.0%) have expected frequencies lower than 5. The minimum expected cell frequency is 169.5

b.0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 170.0.

According to the inferential analysis and taking into account the conditions and decision rule, the Chi square correlation coefficients for the variables are (69,053 and 52,812), which are located in the rejection zone of the null hypothesis, that is, they are located at the right side of Z = 1.96. The significance is (0.000 <0.05) in both cases, so the null hypothesis Ho is rejected and the alternative hypothesis Ha is accepted. In conclusion, it is verified that the general hypothesis is true, as follows: There is a significant relationship between Management of the drinking water service and quality of life.

Specific hypothesis 1

Ho: There is no significant relationship between the Management of the drinking water service and physical well-being. Ha: There is a significant relationship between the Management of the drinking water service and physical well-being.

Chi-square test statistics

	SERVICE MANAGEMENT	PHYSICAL WELL-BEING
Chi squared	69,053[a]	85,000[b]
gl	1	1

Sig. Asymptotic	,000	,000

a.To. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 169.5.
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 170.0.

According to the inferential analysis and taking into account the conditions and decision rule, the Chi square correlation coefficients for the variables are (69,053 and 85,000), which are located in the rejection zone of the null hypothesis, that is, they are located at the right side of Z = 1.96. The significance is (0.000 <0.05) in both cases, so the null hypothesis Ho is rejected and the alternative hypothesis Ha is accepted. In conclusion, it is verified that the specific hypothesis 1 is true, as follows: There is a significant relationship between the management of drinking water service and physical well-being.
Specific hypothesis 2.
Ha: There is a relationship between the Management of the drinking water service and material well-being. Ho: There is no relationship between l Drinking water service management and material well-being

Chi-square test statistics

	SERVICE MANAGEMENT	WELFARE MATERIAL
Chi squared	69,053[a]	52,812[b]
gl	1	1
Sig. Asymptotic	,000	,000

a. to. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 169.5.
b. b. b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 170.0.

It is observed that both Chi square values are (69.053 and 52.812), they are those that are located in the rejection zone of the null hypothesis. Since it is on the right side of Z = 1.96. The asymptotic Sig. (0.000 and 0.000 <0.05), therefore, the null hypothesis Ho is rejected and the alternative hypothesis Ha is accepted as true; In conclusion, the specific hypothesis 2 is true; Thus, there is a significant relationship between the Management of the drinking water service and material well-being
Specific hypothesis 3
Ho: There is no relationship between the management of the drinking water service and satisfaction.
Ha: There is a relationship between the management of the drinking water service and satisfaction.

Chi-square test statistics

	SERVICE MANAGEMENT	SATISFACTION
Chi-square	69,053[a]	2,306[b]
gl	1	1
Sig. Asymptotic	,000	,129

to. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 169.5.
c. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 170.0.

Both Chi square values are (69.053 and 2.306), the same ones that are located in the rejection zone of the null hypothesis. Since it is on the right side of Z = 1.96. Furthermore, the sig. Asymptotic is (0.000 and 0.129) with one case being less and the other greater than 0.05, consequently the null hypothesis Ho is accepted. That is, the alternative hypothesis Ha is rejected as true; In conclusion, there is no relationship between the management of the drinking water service and satisfaction.

IV. CONCLUSIONES

1. Se determinó la relación de la Gestión del servicio de agua potable con calidad de vida en el AA. HH las Ánimas distrito Puente Piedra, 2018.
2. Se determinó la relación de la Gestión del servicio de agua potable con bienestar físico en el AA. HH las Ánimas distrito Puente Piedra, 2018.
3. Se determinó la relación de la Gestión del servicio de agua potable con bienestar social en el AA. HH las Ánimas distrito Puente Piedra, 2018.
4. Se determinó la relación de la Gestión del servicio de agua potable con satisfacción en el AA. HH las Ánimas distrito Puente Piedra, 2018.

V. RECOMENDACIONES

1. Observando los resultados descriptivos, el 72% de la población, mencionó que la Gestión del servicio de agua potable es inadecuada para el AA. HH Las Ánimas, ocasionando serios malestares en los pobladores. Se recomienda gestionar la formación de grupos asociados representativos, para elaborar planes, estrategias, acciones, para proponer a las autoridades pertinentes del servicio de agua potable (EPS) para su ejecución; se sugiere presentar a SEDAPAL, la Solicitud de Acceso a los Servicios de Saneamiento, Copia del DNI, Copia simple de Partida Registral de Inscripción del Inmueble en la que figure como propietario el actual solicitante o Certificado de Búsqueda Catastral emitido por la Oficina de Registros Públicos que certifique que el predio no ha sido inscrito y copia de escritura pública del contrato de compra / venta que asegure como propietario al solicitante. Respecto a la calidad de vida, el 69% refiere que no existe una calidad de vida adecuada en el AA. HH Las Ánimas, en función a este hallazgo se recomienda a los dirigentes, hacer participar a los pobladores con mayor frecuencia, para que proporcionen modelos de desarrollo en temas de servicios, seguridad, implementar proyectos que permitan mejorar la calidad de vida de las personas.
2. En vista que hay relación entre la Gestión del servicio de agua potable y el Bienestar físico, se recomienda implementar una cogestión, con mayor participación social, monitoreo acompañado de un diseño con mejores políticas públicas frente al manejo del recurso hídrico, incorporando módulos de capacitación, prevención, atención y asistencia, frente a los diferentes tipos de problemas que existen en el momento de la prestación del servicio de agua potable. A sí mismo, se debe tener en cuenta la asistencia sanitaria para la población, ésta debe ser vigilada y controlada por los expertos de la salud (MINISTERIO DESALUD).
3. Se recomienda en tanto existe relación entre la Gestión del servicio de agua potable y el Bienestar material, donde el 30% de los pobladores, en relación del Bienestar material manifestaron que las EPS, no brindan las acciones necesarias para mejorar el bienestar material en el AA. HH, en particular al servicio de agua potable en materia de conexiones, tuberías, válvulas, equipos de bombeo, etc. Se recomienda mejorar la infraestructura de las conexiones en cada vivienda, incorporando herramientas tecnológicas para la fijación de los puntos reales a mejorar, implementar protocolos específicos regulados por la EPS, para desarrollar esta mejora.
4. Debido a que no existe relación entre la variable Gestión del servicio de agua potable y la dimensión Satisfacción, nos abstenemos de emitir recomendación alguna

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