

ORIGINAL ARTICLE

Assessment of the Awareness among Undergraduate of Humanity Specialist Regarding Health Risks of "Zoonotic Parasitic Diseases"

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ABSTRACT

Introduction: It is well recognizing that zoonotic parasites, which transmitted from domestic or wild animals to man, have a high, significant public health and consequent impact on both society fabric and economic elaborating. The aim of present study was to assess awareness of the ZPD among undergraduate university students. **Methods:** The questionnaire applied to one hundred and sixty university students was randomly select for participants in this study. **Results:** TThe giving impression from this result is fluctuated response between perfect, none answer or do not know. A strong significant founded about parasites are living organisms, and diseases that spread from animal to human. Besides significant answers about certain parasites have ability to cause withering disease and even death of infected host, unless received suitable treatment. There is a decline in responses about the more prevalent of 'zoonoses in Iraq. On the other hand, there was a significantly increasing in awareness, noted towards certain protozoa, helminths and arthropods were causes ZPDs. As well as the affected mum with some parasites during pregnancy can transmit this disease to them fetus, this usually related to miscarriage, stillbirth and congenital malformation. **Conclusion:** Based on these findings, education throughout health committees represented the best choices for improving awareness and diminution-mistaken facts, especially when combined with other tools for understand the more facts of these diseases also, to take priority for health protection; human's population and animals together.

Keywords: Health risks, Public, Zoonoses parasites, awareness, Humanization specialization

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INTRODUCTION

Estimated nearly 75 percent of emerging diseases affecting people are diseases of zoonotic origin (1). Health system at international level does not precedence and oftentimes neglects the plurality of zoonotic diseases (2). Amongst neglected zoonoses is parasitic disease (1). Which, remains a hazard despite the readymade effective measurements for preventive, and control due to animal- human evidence. Besides ingestion of infective stage from contamination of environment and socioeconomically health problem, that founded to contribution in the distribution of these diseases (3,4).

In addition, the Niche overlaps between highly excess numbers of factors not only biotic and a biotic, but also the ecosystem diversity, which have an important role in invading of parasite to human from animals (5,6). The disease ranges from mild to serious disorders unto death of infected host, during the last years, these diseases represent a great challenge.

It is important to understand the epidemiology of ZPDs to know the most common means of transmission (7). Besides when and where to break the life cycle of transmission and for develop the necessity prevention and interruption the distributions of these diseases. Higher than six out of 10 and 3 out of 4 diseases, and new emerging diseases which disseminate from animals to humans (8). Dramatically modification of human behavior tends to play an important role with this respect (6). It is priority to certify that effective

functioning systems are in place for early determination and react to zoonotic diseases to achieve the objectives strategies for eradication (1). One-health "works" in this field were further activation as for controlling, should be apply toward preventive against these diseases before establishment.

In Iraq, several studies have been done for reported the infection rates and intensity of ZPDs in different geographically areas. All these studies suggested that ZPDs are still a real threat to population such as; toxoplasmosis, leishmaniasis, *Echinococosis*, *Giardiasis*, cryptosporidiosis, and other (9-11). The aim of present study was to assess awareness of the ZPD among undergraduate university students The aim of present study was to assess awareness of the ZPD among undergraduate university students.

MATERIALS AND METHODS

For current study a survey questionnaire was applied on 160 university students (103 females and 57 males) from humanitarian specialization / Baghdad University/ college of Arts that a randomly selected during 2017-2018, to collect healthy thoughts and opinions concerning ZPD following interpretation of results, calculated and comparing the differences of data for all participants.

Questionnaire consist' from thirteen paragraphs (open and closed questions) that mention within text. All answers converted to numerical values.

The Statistical Procedures; program of "statistical package" SPSS version14 was used for calculated the statistical analysis of collected data either significant or not.

ETHICAL CLEARANCE

This study was carried out after we gave the institute's approval of Medical Technology-Baghdad / Middle Technical University to the college of Arts / Baghdad University No. 3/9/165 on 13/11/2017.

RESULT

The total number of undergraduate students who underwent to current questionnaire was 103/160 (64%), and 57/160 (36%) were males, at age group 18-21 years. They were from Baghdad province 99/160 (61.9%), Al-anbar 53/160 (33.1%), and 4/160 (2.5%) from both Arbeal and Karbala. Mostly of those who lives in urban area 150/160(94%) and the remaining 10/160 (6%) from rural area.

Our findings were concluded that the response was fluctuated among students about questionnaire's paragraph.

Paragraph 4 included the knowledge of the students that parasites are living organisms or not. High frequency 141/160(88%) who showed important significant $P < 0.001$ of the right answer "yes" and the remaining 19/160 (12%) answered "no".

Paragraph 5 showed 118/160 (73.75%) of the students realizing that several emerging infectious diseases in people are recrudescence from domestic reservoirs such as dogs, cats, cattle and horses, while the remaining 42/160 (26.25%) do not know.

Paragraph 6 viewed of the students about several parasites have ability to cause mild to serious disease and even death of infected host, unless received suitable treatment. 126 /160 (78.75%) of students have showed significantly right answer $P < 0.001$. The 34/160 (21.25%) do not know, Figure (1).

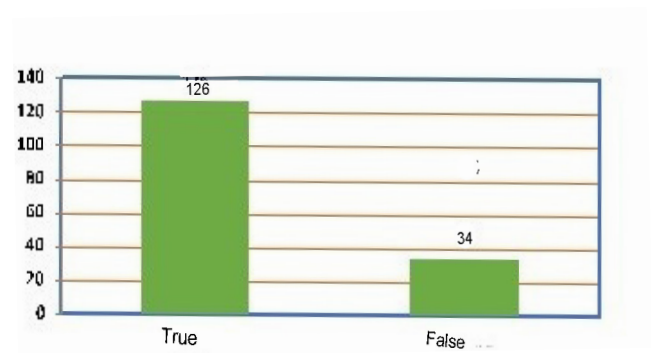


Figure 1: Distribution of the studied samples according to knowledge that zoonoses can cause different illness in people and animals ranging from mild to serious and even death.

Paragraph 7 and 8 shows downwards in the student's answer in their knowledge about of the more prevalent of zoo noses parasitic diseases in Iraq, and those that consist a high proportion of 'emerging infectious disease', respectively. Regarding paragraph 7, the right answers, consisted of 34/160 (21.25%) and 51/160(31.88%) for paragraph 8. While the proportion 30/160 (18,75%) and 34/160(21.25%) for paragraphs 7 and 8, figures (2 and 3), respectively, showed their opinion was wrong. The remainder had no answer 96/160(60%) for paragraph 7

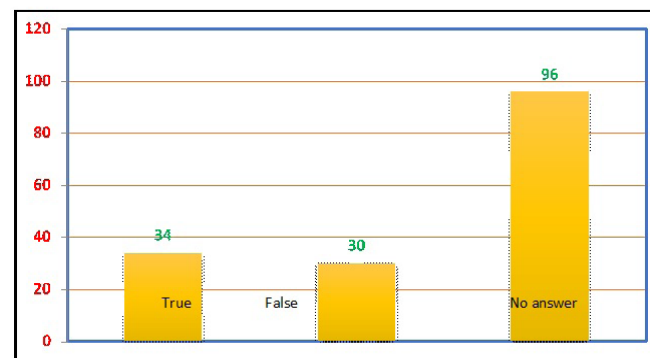


Figure 2: Distribution of studied samples according to knowledge that more parasitic zoonoses prevalence in Iraq



Figure 3: Distribution of studied sample according to their knowledge that zoonotic parasite consist high proportion of emerging infections.

and 75/160 (45.88%) paragraph 8. Right answer have been shown significant level at $P < 0.001$.

Paragraph 9. Concerning the parasites of the eye, the correct answer formed a ratio 104/160 (65%) with significantly at $P < 0.001$. The remaining students were in wrong 56/160 (35%), Figure (4).

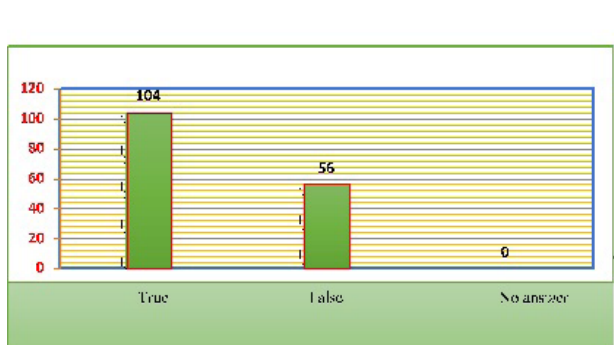


Figure 4: Distribution of the studied samples by their knowledge concerning the parasites of the eye.

Paragraph 10. It was observation that 144/160 (90%) of these students who showed significantly right answer $P < 0.001$. The only 16(10%) of students were wrong, regarding of protozoa, helminthes and arthropods may cause of ZPDs, Figure (5).

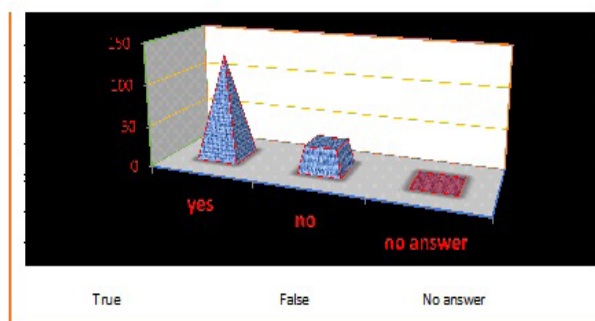


Figure 5: Distribution of studied samples according to the knowledge that protozoa, helminthes and arthropods are the cause of ZPDs.

Paragraph 11. A pie chart below gives 144/160 (90%) were significant record at $P < 0.001$. answer of students who showed right knowledge about ZPD may be

transmitted by meat and other animals' product which represent a high risk to human health. The others were wrong 16/160 (10%), Figure (6).

The proportion of students 124/160(77.5%) who showed significant right answer $P < 0.001$ of miscarriage, stillbirth and congenital malformation might relate to parasites transmitted from mother to their fetus. The remaining 36/160 (22.5%) were wrong. Also 120/160 (75%) of students showed the correct answer, with significant differences $P < 0.001$. while the other 40/160 (25%) they were wrong answer in several parasitic infection may be required isolated the patient from (1-3) week. Figure (7).

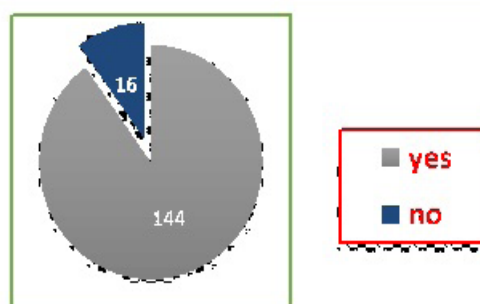


Figure 6: Distribution of the studied samples according to their knowledge about ZPDs transmitted by meat and other animal's product are risk to human.

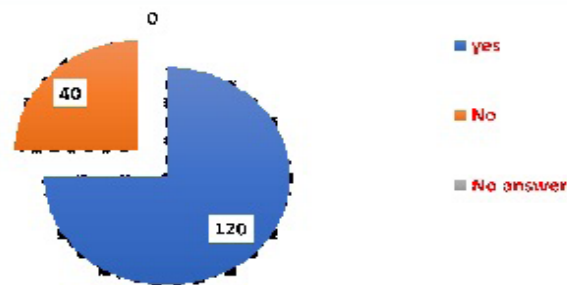


Figure 7: Distribution of the studied samples according to their knowledge about parasitic infection may be required isolation of the patients from 1-3 weeks.

DISCUSSION

In Iraq sundry parasites announced to be a communicable to man, it has crucial public health problem (9). Usually health, getting concern a necessity of the population; as well as it is a global human right (12). In Iraq, there is increase in reported cases of ZPD from several areas (13). An actually parasitic disease is still a threat of public health due to sundry reasons catalyst the incidence; whereas responsible for emergence these diseases like; deteriorate environmental, population density, 'pathogen modulation, also to tradition and religious help to a high level of infection (5). It is well known that movement of animals and disease vector, besides changes in human behaviors day after day may be the more specific reasons associated to given opportunities for get disease, Here; highlights role of society health education (6,14).

Many reports demonstrate that social contribution will support to do much better what they are doing not only for managing the life, but also provides information about an ecosystem (15). Education will make a benefit impact when it linked by better employment a good change towered best health. So, more attention should be given to planning 'the effective strategy for control ', but not only deal with parasite alone, might prepare suitable chance for solve the roots of disease, thereafter, eradication become a reality (11).

None significantly differences regarding sex were founded in present study. This finding disagreement with (16), was show the impact of age on the level of awareness regarding ZPD. (17) was showed that exposed to parasitic infection will make health awareness in a higher position.

The study revealed the types of living areas do not have influence on the level of health knowledge. This finding supported with (15), whilst the review data show urban, populations have great opportunities to risk rather than rural areas , wherefore prophylactic measurements exemplify; vaccination, sanitation and public awareness, should be take. In addition, another disease may go on asymptotically that, play major defies for control programs due to difficulty to diagnosis rather than if infectiousness assured (18). Pawlowski (19) was suggested that sanitation would take lengthy period ranged from '15–25' years to achieve control of parasites in an ecosystem, whilst the drugs and health education, would be reduce this to a more manageable between 'five to ten years. Also, enough roles for earlier discover of infections, have crucial role to prevent spreading of pathological agents (20). These planning should be supported by means of media field and health messages from varies sources; for ongoing improve awareness of the community.

CONCLUSION

Health committees have significantly role particularly when combination with other projects and tools for more understand the ecology of disease and investigation the efficient dynamic for suitable knowledge and awareness among all population to protect themselves against ZPD particularly vulnerability parasitic diseases.

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