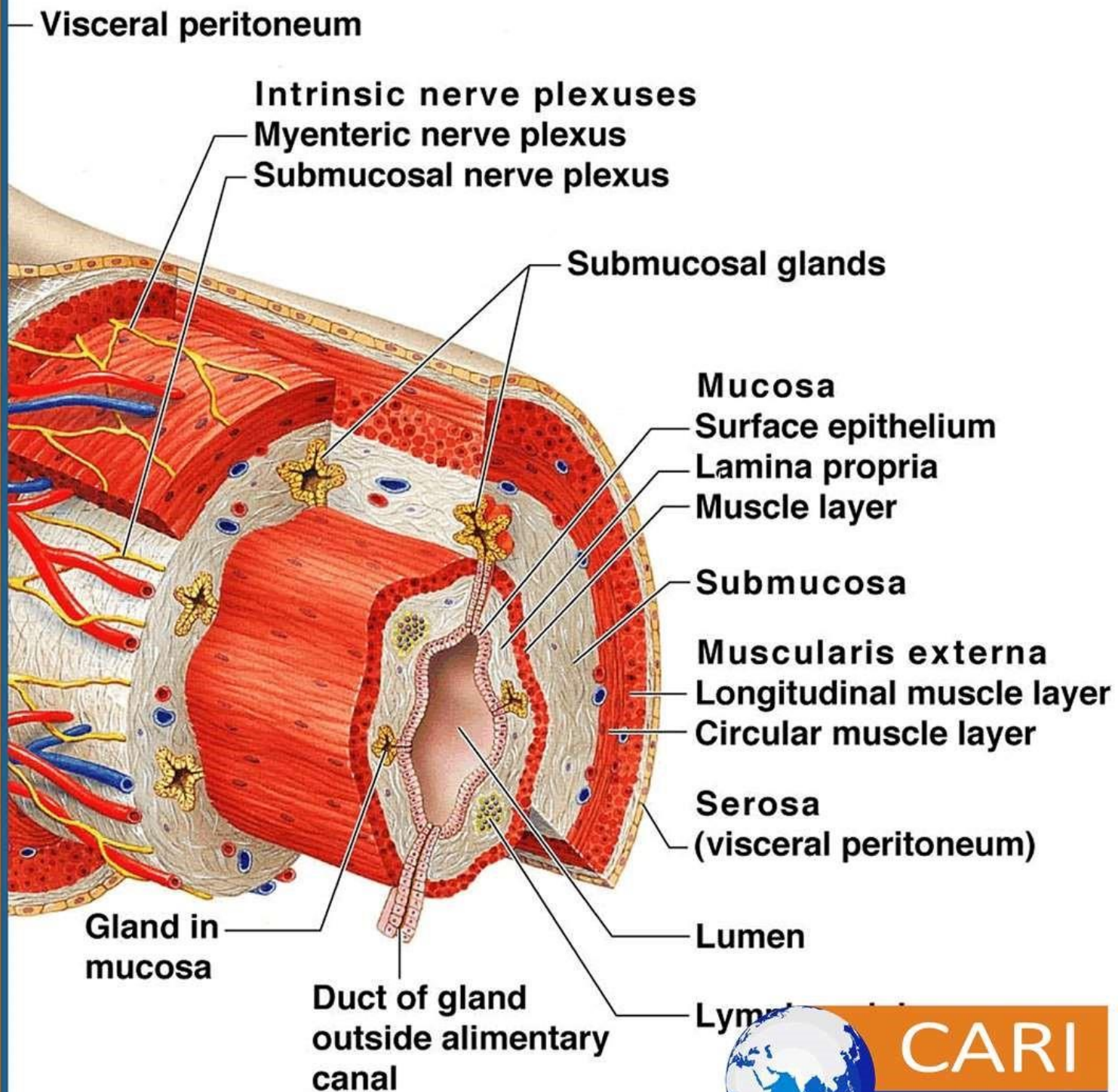


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**CANCER PREVENTION PRACTICES AMONG WOMEN IN THE REPRODUCTIVE
AGE IN KENYA A CRITICAL LITERATURE REVIEW**

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Abstract

Purpose: The purpose of this study to investigate cervical prevention practices among women of the reproductive age in Kenya. Women of reproductive age in Kenya have the highest prevalence rate of cancer of the cervix. Women in their reproductive age face the greatest risk of contracting Human Papillomavirus (HPV) infection in Kenya.

Methodology: The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes and to extract knowledge gaps.

Conclusion: There is a gap in terms of knowledge level of risk factors of cervical cancer. Therefore, when the population do not understand the risks factors, they less likely take appropriate steps to prevent the disease.

Recommendations: The Kenyan government and relevant stakeholders should implement policies which would help increase the knowledge level of the risk factors for the disease and encourage utilization of cervical cancer screening services.

Keywords: *Disease, mortality rate, pap smear, screening, susceptibility*

1.0 Introduction

1.1 Background of the Study

Globally, cancer of the cervix has the second highest prevalence as compared to any other kind of cancer (Torre, 2015). Nearly 530,000 new cases are registered annually. Each year, the death rate throughout the globe is estimated to be 266,000 deaths. Cervical cancer disproportionately affects the emerging nations since they experience the highest proportions of illnesses and mortalities. Data from Africa continent indicates that over 82,000 people are identified with the disease annually, whereby 61,230 people succumb to the disease (Ndung'u, 2020). Moreover, sub-Saharan Africa has also recorded highest incidence of cervical cancer at 75,100 new cases where by 66.7 per cent of these people die (Ndung'u, 2020). The East Africa also recorded the highest incidences of cervical cancer in Africa with over 52,600 new cases in 2018 and a mortality of 37,017.

In Kenya, cervical cancer records the highest proportion of deaths as compared to other kind of cancers (Ali, 2015). Women of reproductive age in Kenya have the highest prevalence rate of cancer of the cervix. Approximately 4800 women in the country are diagnosed with the disease while more than 3200 lose their lives Institut Català d'Oncologia (ICO) Information Centre, 2019). Women in their reproductive age face the greatest risk of contracting Human Papillomavirus (HPV) infection in Kenya (Kenya National Bureau of Statistics (KNBS 2015)

Cervical cancer is caused by high-risk HPV which is spread through sexual intercourse (McGraw, 2016). According to the WHO, over 80.9 per cent of women harbor HPV infection in the course of their lives (WHO, 2017). The signs and symptoms of this infection occur following a protracted period after infection hence it is quite difficult to understand when an individual was infected (ICO Information Centre, 2017). In Kenya, about 20 per cent and 11 per cent of women and men respectively first take part in sexual intercourse prior to their fifteenth birthday (Leonard, 2015) The frequency of new cases is 25 women per 100, 000 women every year. Cervical cancer is a serious health burden among females aged 15 years to 45 years in Kenya. Essentially, 70 to 80 per cent of cervical cancer cases are identified in the late stages when cancer has seriously spread. Cervical cancer diagnosis at late stages has been linked with low utilization of screening services and low level of knowledge of its progression and risk factors (Sreedevi, 2015)

1.2 Statement of the problem

Cervical cancer in Kenya in the previous year registered 3211 deaths having ranked first with the highest number of deaths followed by breast cancer 3107. The World Health Organization points out that cervical cancer mortality rates in most developing countries have risen over the past 30 years often due to limited access to health services and absence of screening and treatment programs. Uptake of cervical cancer screening still low. Strategies to improve cervical cancer screening in Kenya should be implemented with messages targeting persons with both risky and non-risky lifestyles especially younger women with no formal education living in the rural areas. Majority of the counties in Kenya have documented poor uptake levels of screening for cervical cancer which implicates the nation's action towards cervical cancer awareness and treatment (Muigai, 2015). The rate of uptake of cervical cancer screening services is low among women susceptible for HPV infection (Mugwe, 2015). Health centers have integrated screening services for cervical cancer in the maternal and child health (MCH) departments. Screening services largely use visual tests and sometimes Pap smear tests. Although many interventions have been introduced to contain the rising instances of disease, the prevalence and deaths are continuing to rise (Njiru, 2016).

1.3 Objectives of the Study

The general objective of the study is to investigate cervical prevention practices among women of the reproductive age in Kenya.

1.4 Significance of the Study

The results of this study will benefit the general community members both men and women of the reproductive age in Kenya on cancer prevention practices. These results will also benefit the health care practitioners and the government by improving the awareness of cervical cancer and implementation of policies and guidelines for prevention, treatment and care.

2.0 LITERATURE REVIEW

2.1 Knowledge level of the risk factors linked to cancer of the cervix

Empirical evidence has showed that women across the globe are less likely to comprehend the factors linked with risk of contagion of HPV and cancer of the cervix. The findings of study by Chorley, (2017) demonstrated that majority of women have inadequate understanding on the association between sexual behaviors and cervical cancer. Importantly, the majority of women assumed that the disease was related to hereditary, lifestyle, and psychosocial issues as well as

other health factors. Although the respondents of this research had the aspiration to understand the risk factors associated to the disease, they believed that information delivered by health officials and government was inconsistent, unclear and insufficient. Another study conducted by Karadag, (2015) exposed that some interviewees responded that nurses providing screening services failed to deliver information on the risk factors of the disease. The findings of the paper also demonstrated that health practitioners were reluctant to give facts to their customers on the risk factors of the cancer of the cervix since majority of patients did not have the capability to absorb this type of information on cervical cancer.

A similar study by Altay, (2015) noted that mothers normally felt nervousness linked to cervical cancer prevention. A huge percentage of the research participants illustrated a sense of susceptibility in screening and examination of the pelvis. Moreover, such sensation of uneasiness was mainly linked to inadequate knowledge related to the contagion. For this reason, the study proposed that provision of sufficient information on the risk factors was expected to support in dealing with challenges of screening. Essentially, increasing knowledge level on the risk factors would be a key milestone to minimize their anxiety and nervousness.

2.2 Prevention practices for cervical cancer among women of reproductive age

Findings of a past research conducted by Pandey, (2015) indicated that contagion of high-risk human papillomavirus (HR-HPV) can be contained through both primary and secondary prevention interventions. The key aim of primary prevention is to minimize contagion with HPV and other factors that increase the likelihood of progression and acquisition of the virus. According to Elamurugan, (2016) primary prevention of cervical cancer encompasses use of HPV vaccination focusing on adolescent girls to minimize the incidence of cancer of the cervix. The study noted that vaccination program is only effective if it is given to young girls prior to being sexually active, because of high susceptibility of infection following debut of sexual activity and loss of immunization efficacy against already existing infection. Research by Watson-Jones (2015) noted that in Kenya, HPV vaccination targets girls aged below 10 years, who receive two doses of the vaccine in six months interval. The study revealed that effective and safe HPV vaccines can avert nearly 90 per cent of all cases of cervical cancer in the country.

Secondary prevention of cervical cancer entails uses of cervical cancer screening programs. A study conducted by Ministry of Health, Kenya, (2018) argued that since vaccine may not avert over 25 per cent of HPV infections that may contribute to cervical cancer. Therefore, immunized

women are supposed to adhere to screening recommendation just like non-immunized women. According to Njuguna, (2020), even when universal coverage is attained, secondary prevention (screening) would be needed because vaccination does not change the natural history of dominant infections and vaccine does not prevent some infections. In the health centers, screening concentrates on women above 25 years but females below 25 years of age manifesting severe abnormalities in the cervix are screened for cervical cancer. According to Ministry of Health, Kenya, (2018), women who have been diagnosed of HIV, with past abnormal screening outcomes, who had early debut of sexual intercourse undergo screening.

Empirical evidence has highlighted that participation of cervical cancer screening is influenced by different factors such as community and individual issues. According to research conducted by Marlow, (2015), most females who utilized the screening programs in the health centers tended to be over 40 years, had ever used contraceptives, have been previously pregnant, and well educated. A study conducted by Hasahya, (2016) in Uganda countryside suggested that the socio-demographic and socioeconomic profile of females especially residence area, marital status, income level, less education, early marriage affected cervical cancer practices on screening.

2.3 Empirical review

Mbaluka (2020), conducted a study on the utilization of cervical cancer screening services among women aged 30-49 years in Kitui County, Kenya. Cervical cancer is one of the most prevalent cancers in developed countries and the third most common cancer among women worldwide, with an estimated 569,847 new cases and 311,365 deaths recorded in 2018. Cervical cancer is primarily associated with young women. Women aged 50 years and below accounts for 62%, of all cervical cancers. The study sought to investigate the determinants of utilization of cervical cancers screening services among women aged 30-49 years in Kitui West Sub-County. The study population was women aged 30-49 years of age. A stratified random sampling technique was used to obtain 270 respondents from the study population (2542). Data was collected using self-administered semi-structured questionnaires issued to women aged 30-49 years in Kitui west sub-County. The study adopted a cross-sectional descriptive study design. The study used quantitative research methods to obtain data from selected respondents. Data from the respondents was analyzed using statistical package of social sciences (SPSS) in conjunction with Microsoft excel. The study used chi-square test calculated at 95% interval and a margin of 0.05% error to determine the relationship between dependent and independent study variables. The results of the study

showed that majority of the participants 145 (53.7%) were aware of the cancer screening. There was a no significant relationship ($p = 0.054$) between the awareness and cervical cancer screening services among women aged 30-49 years. The study established that 35% of the participants had been screened for cervical cancer while 65% had not been screened at all. The study established that, majority 152 (56.3) of the respondents had low knowledge on cervical cancer and there was a relationship between knowledge on signs ($p = 0.001$) and prevention of cervical cancer ($p = 0.002$) and utilization of cervical cancer screening services. Regarding perception there was a relationship between whether one perceived screening to be necessary ($p = 0.011$), painful (0.0221) and screening was a procedure or commercial sex workers ($p = 0.026$) and utilization of cervical cancer screening services among women aged 30-49 year.

Nyangasi (2017), conducted a study on the determinants of delay in seeking medical care among women with invasive cervical cancer in Western Kenya. Cervical cancer is a disease with tremendous public health significance. It is the leading cause of cancer morbidity and mortality among women in Kenya. In Western Kenya, it is the most common type of cancer affecting women. Patient delay accounts for a large proportion of those who present with advanced disease in developing countries. Reducing the time from onset of first symptoms to diagnosis will effectively improve quality of life and prognosis of cervical cancer patients. This cross-sectional study was conducted to explore the process of symptom appraisal and determine socioeconomic, psychosocial, and cultural and health system factors that contribute to patient delay in seeking medical care for cervical cancer among women in two county referral hospitals in rural Kenya. In the setting where the study was carried out, the prevalence of HIV/AIDS is relatively high. There were 274 respondents who participated in the study. Face to face interviews using a pretested structured questionnaire and medical records review were carried out. Data was collected from all those who met the inclusion criteria and had given their informed consent with the option of voluntary withdrawal from the study at any stage. Descriptive and inferential statistics were analyzed using Statistical Packages for Social Sciences version 21 (SPSS Inc, USA). Chi square test and logistic regression was used to derive relationships between variables; results were considered significant with p value ≤ 0.05 . Outcome measures were a description of determinants of late presentation and diagnosis of cervical cancer. The results of the study showed that 55% of patients waited more than three months before seeking medical care mainly because they did not appraise the symptoms as serious warranting medical attention. This was despite majority (85%) of them having good access to medical facilities. Psychosocial factors such as beliefs and

perceptions held by the patients about initial symptoms and availability of social support networks were the most significant predictors of delay in seeking medical care. Age of patient, education level, employment status, access to insurance, beliefs about traditional medicine, knowledge of cervical cancer and preventative health orientation of the respondents also contributed to delay in seeking care.

Ambani (2012), conducted a survey on knowledge, attitudes and screening practices on cervical cancer of Dagoretti women in Nairobi. Cancer of the cervix is the commonest female malignancy accounting for 24% of all cancers in women in the world. Yet this disorder can be prevented by deploying both primary and secondary preventive measures such as genital hygiene practices, use of barrier methods like condoms, avoiding early sexual intercourse, postponing marriage to a later age, avoiding many sexual partners and having regular pap smear screening. This was a cross-sectional study designed to establish the level of knowledge, perceptions, beliefs, attitudes screening, and preventive practices of cervical cancer among women in Dagoretti Division, Nairobi. Four hundred and sixty-two (462) respondents aged 20-59 were interviewed using structured questionnaire in addition to three Focus Group Discussions (FGDs). Sixty of the 462 and sixty respondents (13%) had knowledge on cervical cancer and only 7.4% sought screening services. The results of this study showed that, there is inadequate knowledge on cervical cancer and screening and very few women practices screening. There is little communication between medical personal and clients since most of them were not counseled on screening. The women had positive attitude even though they had inadequate information. There is need to raise awareness of knowledge and screening for cervical cancer among women. Further research needs to be undertaken to find out the prevalence of cervical cancer or cervical dysplasia among women residents of Dagoretti Divisions and in Kenya.

2.4 Research Gaps

A knowledge gap occurs when desired research findings provide a different perspective on the issue discussed. For instance, Nyangasi (2017) who conducted a study on the determinants of delay in seeking medical care among women with invasive cervical cancer in Western Kenya. This cross-sectional study was conducted to explore the process of symptom appraisal and determine socioeconomic, psychosocial, and cultural and health system factors that contribute to patient delay in seeking medical care for cervical cancer among women in two county referral hospitals in rural Kenya. Face to face interviews using a pretested structured questionnaire and

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Secondly, a methodological gap can be identified from the research, for example Ambani (2012), conducted a cross sectional study as a survey on knowledge, attitudes and screening practices on cervical cancer of Dagoretti women in Nairobi. The study was designed to establish the level of knowledge, perceptions, beliefs, attitudes screening, and preventive practices of cervical cancer among women in Dagoretti Division, Nairobi. Four hundred and sixty-two (462) respondents aged 20-59 were interviewed using structured questionnaire in addition to three Focus Group Discussions (FGDs). Sixty of the 462 and sixty respondents (13%) had knowledge on cervical cancer and only 7.4% sought screening services. The results of this study showed that, there is inadequate knowledge on cervical cancer and screening and very few women practices screening.

3.0 METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to cancer prevention practices among women in the reproductive age in Kenya. Three sorting stages were implemented on the subject under study in order to determine the viability of the subject for research. This is the first stage that comprised the initial identification of all articles that were based on cancer prevention practices among women in the reproductive age in Kenya. The search was done generally by searching the articles in the article title, abstract, keywords. A second search involved fully available publications on the subject on cancer prevention practices among women in the reproductive age in Kenya. The third step

involved the selection of fully accessible publications. Reduction of the literature to only fully accessible publications yielded specificity and allowed the researcher to focus on the articles that related to cancer prevention practices among women in the reproductive age in Kenya which was split into top key words. After an in- depth search into the top key words (disease, mortality rate, pap smear, screening, susceptibility), the researcher arrived at 3 articles that were suitable for analysis.

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4.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

There is a gap in terms of knowledge level of risk factors of cervical cancer. Therefore, when the population do not understand the risks factors, they less likely take appropriate steps to prevent the disease. Besides, inaccurate knowledge about the risk factors of a disease can affect screening behavior contributing to underutilization of screening programs. The study also concluded that examination of cervical cancer screening practices has detected gaps in terms of utilization of screening services. It is a widely known fact that early screening of cervical cancer is the foundation of control and prevention of this type of cancer. Therefore, it means more persons in the population do not know their cervical cancer status which is a hinderance to the control of the disease. In addition to that, there are perceived barriers such as lack of information of the disease, embarrassment and attitude of health workers which potentially acts as a hinderance to screening for cancer of the cervix.

4.2 Recommendations

The Kenyan government and relevant stakeholders should implement policies which would help increase the knowledge level of the risk factors for the disease and encourage utilization of cervical cancer screening services. Although the health facilities normally conduct health education to women who visited health facilities, the national and county government should implement mass health education. Policies should be enacted which can increase the level of screening for cancer of the cervix. To deal with low level of screening in rural areas, the government should introduce screening programs in rural areas because it will help to eliminate additional expenses such as transport.

Further studies should be conducted to determine whether perceived susceptibility of an individual has an effect on the rate of screening. The study should focus on whether psychosocial variables influence health seeking behaviors.

REFERENCES

- Ali, F., Kuelker, R., & Wassie, B. (2015). Understanding cervical cancer in the context of developing countries. *Annals of Tropical Medicine & Public Health*, 5(1).
- McGraw, S. L., & Ferrante, J. M. (2015). Update on prevention and screening of cervical cancer. *World journal of clinical oncology*, 5(4), 744.
- Mmbaga, E. J., Leonard, F., & Leyna, G. H. (2015). Incidence and predictors of adolescent's early sexual debut after three decades of HIV interventions in Tanzania: a time to debut analysis.
- Ndung'u P. M. (2020). Cervical cancer prevention practices among women of the reproductive age in Kiambu County, Kenya.
- Ombech, E. A., Muigai, A., & Wanzala, P. (2015). Awareness of cervical cancer risk factors and practice of Pap smear testing among female primary school teachers in Kasarani division, Nairobi Kenya. *Afr J Health Sci*, 21(2), 121-132.
- Sreedevi, A., Javed, R., & Dinesh, A. (2015). Epidemiology of cervical cancer with special focus on India. *International journal of women's health*, 7, 405.
- Torre, L. A., Bray, F., Siegel, R. L., Ferlay, J., Lortet-Tieulent, J., & Jemal, A. (2015). Global cancer statistics, 2012. *CA: a cancer journal for clinicians*, 65(2), 87-108 Soc. Environ. 15:85-93.