Infection Control Implementation At Private Dental Practice In Yogyakarta City

Gambaran Pelaksanaan Kontrol Infeksi Pada Praktik Dokter Gigi Di Kota Yogyakarta

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Abstract

Dentist As A Health Worker Claimed To Be Responsible Widely In A Variety Of Existing Public Health Efforts, Especially In The Dental Clinic. Infection Control Is An Effort To Control And Prevent The Spread Of Infectious Diseases In Practice Setting. This Study Aimed To Describe The Implementation Of Infection Control In Dental Practices In The Yogyakarta City In The Availability And Utilization Of Facilities And Infrastructure. A Cross-Sectional Study Was Conducted In Yogyakarta City With Subjects Of 30 Dentist Who Has Independent Private Practice Chosen By Simple Random Sampling. Observational Techniques Using Check List Was Applied To Assess The Implementation Of Infection Control. Results Showed Existing Deficiencies Of Control Infection In The Components Of Equipment, Dentist, And Room. It Can Be Concluded That The Implementation Of Infection Control In The Yogyakarta City Has Not Gone Well, It Is Source Of Concern As The Possibility Of Infectious Disease Transmission In Dental Clinic Occured. This Because The Level Of Awareness Is Still Lacking And The Dentist Thinks Will Impact The Length Of The Culture Is Still Neglected.

Key Words: Dentists, The Yogyakarta City, Infection Control

Abstrak

Dokter gigi didefinisikan sebagai salah satu tenaga kesehatan yang dituntut untuk bertanggung jawab secara luas dalam berbagai upaya kesehatan masyarakat yang ada, maupun dalam bidang ilmu kesehatan gigi secara khusus di klinik gigi. Kontrol infeksi adalah upaya untuk mengendalikan dan mencegah terjadinya penyebaran penyakit infeksi dalam praktik. Penelitian ini bertujuan untuk mengetahui gambaran pelaksanaan kontrol infeksi pada praktik dokter gigi di kota Yogyakarta dalam hal ketersediaan dan pemanfaatan sarana dan prasarana, serta pelaksanaan kontrol infeksi. Desain penelitian ini adalah *cross-sectional* dengan bentuk *survey*. Cara pengambilan sampel dilakukan secara *simple random sampling* yaitu praktik swasta mandiri di wilayah kota Yogyakarta. Metode penelitian menggunakan teknik observasional dengan instrumen *check list* yang diisi oleh *surveyor* dan *questioner* yang diisi oleh responden. Data yang diperoleh dianalisis secara deskriptif. Subjek penelitian adalah 30 dokter gigi di kota Yogyakarta. Hasil penelitian menunjukkan bahwa ketersediaan dan pemanfaatan sarana dan prasarana, serta pelaksanaan kontrol infeksi masih terdapat kekurangan pada beberapa komponen yaitu kontrol infeksi alat, kontrol infeksi

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dokter, dan kontrol infeksi ruangan. Ceklist yang digunakan untuk pelaksanaan observasi diambil dari Center of Disease (CDC) tahun 2002. Kuesioner untuk menilai pengetahuan dokter gigi dibuat oleh peneliti. Berdasarkan kuesioner yang menilai pengetahuan dokter gigi tentang kontrol infeksi tentang penggunaan autoklave di dapatkan 83,33% drg mengisi telah melakukan, namun dalam observasi yang menilai implementasinya ternyata hanya 53,33% drg yang melakukannya. Begitu juga tentang cuci tangan sebelum dan seudah praktek, di dalam kuesioner sebanyak 90% drg mengisi telah melaksanakannya, namun berdasarkan observasi hanya 53,33% saja yang melakukannya. Dapat ditarik kesimpulan bahwa pelaksanaan kontrol infeksi di kota Yogyakarta belum berjalan baik, dikarenakan tingkat kesadaran dokter gigi masih kurang dan budaya berfikir akan dampak panjangnya masih terabaikan, sehingga kemungkinan penularan penyakit infeksi antara dokter gigi dengan pasien maupun pasien dengan pasien dapat terjadi.

Kata kunci : Dokter gigi, kota Yogyakarta, kontrol infeksi

Introduction

Infection Is The Process Whereby A Person (Host) Is Accessible By The Pathogen Agents (Infectious) That Grow And Reproduce Themselves, Which Causing Danger To The Host (Asih And Setiawan, 2000). This Is Important For The Dentist In Relation To The Emergence Of Public Concern With The Increasing Rate Of Hiv, Hepatitis B And Other Infectious Diseases.. Infection Control Is Part Of A Quality Standard In Practice Setting. Dentists Are Obliged To Prevent Cross Infection By Decontaminating The Medical Equipments Appropriately And Correctly (Sunoto, 2005).

Dental Personnel Are Generally Exposed By A Large Number Of Microorganisms From The Patients' Blood And Saliva Infection Control In Dentistry Aims To Treat Patients As If They Were Infected With The Disease That Can Not Be Cured. The American Dental Association (Ada) Has Advocated The Use Of Infection Control Procedures In Dentistry Practice Since Many Years Ago. The Use Of An Effective Infection Control Procedures Within Dental Practices And Dental Laboratories Will Be Able To Prevent Dental Personnel And Patient From The Spread Of Disease Contamination (Yuwono, 2000).

Basic Guidelines For Infection Control Is Based On The Statement "Not To Disinfecting When You Can Sterilizing." Infection Is A Very Real Danger In The Dental Practice And Sterilization Is The Most Important Component Of Infection Control. Sterilization Is Defined As Damage Or Eliminate All Forms Of Life With Special Regard To Microorganisms. Efforts To Sterilize In This Case Is The Main Measures To Avoid Transmission Of Infection (Yuwono, 2000).

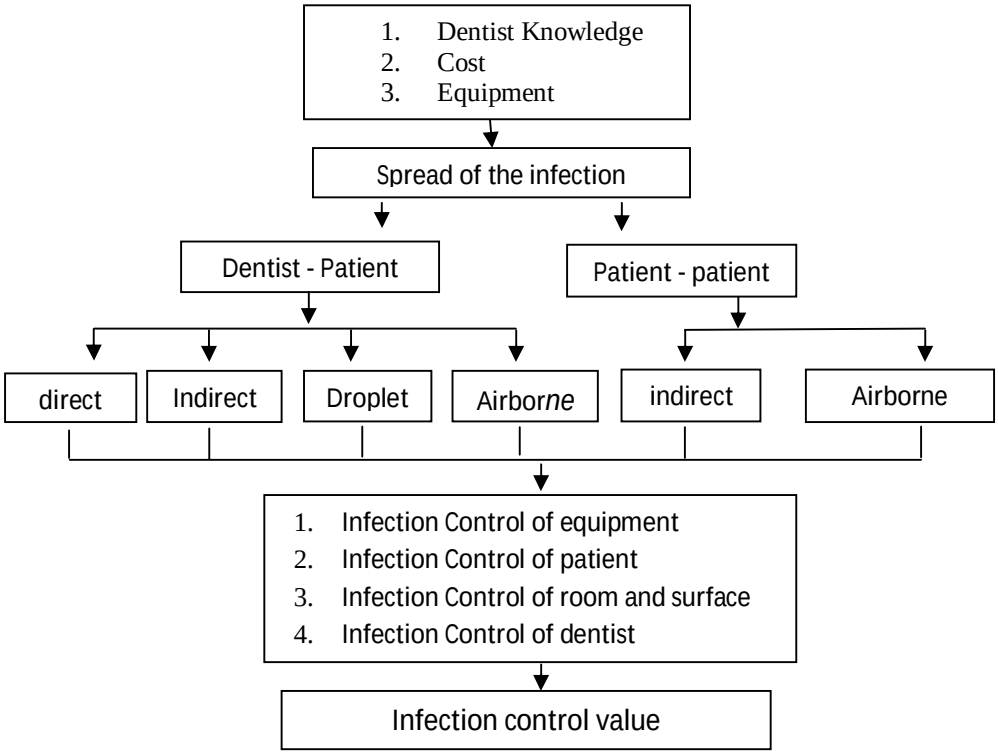
Various Efforts Have Been Made To Increase The Degree Of Public Health Status Through Health Services, Disease Control, Environmental Health, Development Of Community Health Insurance. In Accordance With The Action Plan For Creating A Healthy Yogyakarta City, The Government Has Established A Communicable-Non Communicable Disease Control Program. Based On Data From The Health Profile Of The City Of Yogyakarta In 2007, Infectious Diseases In The City Of Yogyakarta, Such As Hiv, Hepatitis B And Other Infections Is Increasing., The Number Of Hiv Cases Has Increased By 11 Cases (As Many As 15 Cases In 2005, The Year 2006 Becoming 26 Cases). Dentists As A Health Worker Are Required To Participate In Realizing The City Of Yogyakarta Healthy Program 2007 - 2011 (Din Kes Di Yogyakarta Province, 2007).

Dental Professional Has A High Risk Of Contaminated From The Infection While On Treatment For Patients. Transmission Of The Disease Can Be Ascertained When Realize That Most Human Microbial Pathogens

Could Be Isolated From The Secretion Of The Oral Cavity. As A Result Of Frequent Exposure To Microorganisms In The Blood And Saliva, The Incidence Of Certain Infectious Diseases Is Clearly Higher Among The Dental Profession Than Other Population. But Many Dentists Fail To Recognize Or Understand The Potential Infection Which Was Carried By Saliva And Blood During The Treatment. Ignoring The Actions And Procedures Can Result Harm To Others, Including Family And Patients This Risk Is Often Overlooked Because Sparks From The Patients' Oral Cavity Are Not Visible (Yuwono, 2000).

In Carrying Out Their Profession, Dentists Have Possibility To Contact Directly Or Indirectly With The Microorganisms In Saliva And Blood Of Patients. This Research Was Conducted To Determine The Dentist's Actions In Preventing Transmission Of Infectious Diseases In Yogyakarta City. This Study Is To Determine The Appropriateness Of The Standard Operational Procedure For Control Infection In Order To Prevent Dental Infections.

Material And Method



Picture 1. Conceptual Framework

Research Design

The Type Of Research Was A Descriptive Method With Cross Sectional Approach.

Location And Time Of Research

This Research Was Conducted In Private Dental Practices In The Yogyakarta City In December 2008.

Population And Sample

The Population Is All Private Dentist In City Of Yogyakarta And Sample Was 30

Private Dental Practices And Choose Randomly.

Instrument

Questionere For Dental Knowledge Infection Control Disease Was Develeop By Writer

Observation For Infection Control It Is From Cdc Check List (2002).

Research Variables

Controlled Variables In This Study Is The Time - The Afternoon Practice. Cost, Facilities, Accessibility Of The Practice Its Not Assesed In This Research.

Research Implementation

There Are Two Phases Of Implementing This Research: First Is The Preparation And Implementation Phases. Preparation Stage Include Development Of Checklist And Questionnaire, Permit To The Related Parties, And Personal Approach To The Respondents. Second Phase Include Direct Observation Of The Implementation Of Infection Control Which Are Performed By Dentists By Fill In A Check List By The Surveyor, And Infection Control Knowledge Questionnaire Fill By The Dentist.

Data Analysis Techniques

Tabel . Data Scoring For Availablity And Utilization Equipment For Control Infection

Interval (%)	Criteria
0 – 33.33	Available
33.34 – 66.66	Available But Not In Use
66.67 – 100	Available And In Use

Tabel . Data Scoring For Implementation Of Infection Control

Interval (%)	Criteria
0 – 33.33	Not Done
33.34 – 66.66	Done But Not Complete
66.67 – 100	Done Completly

In This Study, The Authors Use A Favorable Rating Category. Favorable Category Is Defined As Positive Characteristics Of The Measured Attributes. Results From The Infection Control Knowledge Questionnaire Filled By The Dentists Used To Support The Contents Of The Check List. Descriptive Analysis Was Applied To Calculate The Average Score Of The Implementation Of Infection Control.

Results

Tabel. Implementation Of Control Infection That Did Not Completely Done

Keterangan	Sterilization For Equipment	Self Protection	Patient Protection	Room Sterilization
Implementation Of Infection Control	1. *Autoclave* Or Use Alkohol For Diagnostic Set, Drill And Sharp Equipments 2. Clean And Desinfected *Handpiece, Scaler, Three Way Syringe, Saliva Ejector* Each Patient	1. Handwashing Before And After Treating The Patient 2. Always Use Handscoon And Change It Each Patient 3. Always Use Mask And Change It After Treating The Patient 4. Use Eye Protector/Google And Clean, Desinfected It 5. Use Clothing Practice And Take Off Clothing Practice After Leave Practice Room	–	1. Always Use Cover Protection Or Desinfected The Dental Unit (Button, Lamp Handle) And Bhange It Each Patient 2. Clean And Desinfected Room Before And After Practice 3. Throw Medic Trash(Handscoon, Mask) Into Safety Plastic Place 4. Throw The Medical Liquid Waste To Specific Drain For Sanitation Process

A. Observation

1. Availability And Utilization Of Facilities And Infrastructure
   a. Equipment Sterilization In General,
   b. Infection Control Equipment Found Is Autoclave Sterilization, Dry Heat Or Alcohol 70%, 16.67% Is Not Available, 0% Is Available But Not Used, 83.33% Available And Used.
   c. Self Protection The Components Of Self Protection Found Are Gloves, Masks, Goggles, Clothing Practices, Washing Hands With Soap, Towels Or Tissue, Hand Washing Facilities Are Not Available 13.33%, 10% Is Available But Not Used, 76.67% Available And Used.
   d. Patient Protection Patient's Infection Control Component Found Are Disposable Cups, Disposable Syringes And Needles, Diagnostic Equipment Which Is Proportional To The Number Of Patients Per Day Is 0% Is Not Available, 0% Is Available But Not Used, 100% Available And Used.
   e. Room Sterilization Room Infection Control Component Found Are Medical Waste Disposal, Protective Surface Of The Dental Unit, A Disinfectant Solution Space Is Not Available 11.31%, 22,2% Is Available But Not Used, 66.67% Available And Used.
2. Implementation Of Infection Control
   a. Sterilization Equipment Use Autoclave Or Dry Heat And Alcohol As A Means Of Sterilizing Materials And Sharp Tools, Diagnostic Set, And Condition For Clean Or Desinfected Bur, Hand Piece, Scaler, Air Syringe, Saliva Ejector In Each Turn Of The Patients Was 1.67% Not Done, 73.33% Done But Incomplete, 25% Done Completely.
   b. Self Protection Always Washing Hands Before And After Treatment, Always Use And Replace Gloves, Always Use And Replace The Mask, Use Of Goggles In Each Treatment And Washing And Desinfecting After Use , Always Use The Practice Clothes And Take It Off When You Leave The Practice Room Is Not Done 34%, 38% Done But Incomplete, 28% Done Completely.
   c. Patient Protection
      Disposable Syringes And Needles, Using A Disposable Cup Or Washing And Sanitizing The Used Glass Is 0% Is Not Done, 0% Done But Not Completely, 100% Done Completely.
   d. Room Sterilization
      Always Use Surface Protective Or Decontaminate Dental Unit (The Unit Button, The Lights Handle) In Every Turn Of The Patient, Clean And Sanitize The Room Before Or After Practice With Liquid Waste Into The Sewer Which Is Connected To The Sanitation System Is 20% Not Done, 15% Done But Incomplete, 65% Done Completely.

B. Questionaire

Tabel 5. Questionare For Dentist Knowledge To Infection Control

No.	Keterangan	Ya (%)	Tidak (%)
1.	Having A Seminar Or Course About Control Infection In Dental.	83.33	16.67
2.	Sufficient Budget For Infection Control In Private Practice	86.67	13.33
3.	Be Aware In Dental Practice Is Potential For Transmission Infectius Dissease	100	0
4.	Understand Potential Risk From Hazardouss Dental Equipment For Transmission Infectius Dissease	100	0
5.	Sterilized The Sharp Equipment, Diagnostic Set, Drill/Bur With Autoclave Or Dry Heat.	73.33	26.67
6.	Sterilized The Drill With Gel Heat Autoclave Or Desinfected With Alkohol 70%.	93.33	6.67
7.	Handwashing Before And After Have Dental Treatment For The Patient.	90	10
8.	Cut The Hand Nail, Maintain In Short And Clean	100	0
9.	Always Usehandscoon For Dental Treatment.	80	20
10.	Change Handscoon Every Turn Of The Patient	90	10
11.	Always Use Mask For Dental Treatment.	83.33	16.67
12.	Change Mask Every Turn Of The Patient	26.67	73.33
13.	Use Google/Eye Protector For Dental Treatment.	10	90
14.	Wash And Desinfected The Google After It Use.	23.33	76.67
15.	Use Dental Practice Clothing For Dental Treatment.	66.67	33.33
16.	Take Off The Dental Practice Clothing After Practice.	66.67	33.33
17.	Clean And Wash Dental Practice Room With Water And Detergent.	93.33	6.67
18.	Clean And Wash Gargle Glass With Water And Detergent.	93.33	6.67
19.	Use Disposable Plastic For Gargling.	23.33	76.67
20	Use Surface Cover And Change It Every Turn Of The Patient (Dental Unit Button, Light Handle).	13.33	86.67
21.	Desinfected Button Surface And Light Handle Every Turn Of The Patient.	26.67	73.33
22.	Clean And Desinfected *Handpiece*, *Scaler*, Three Way Syringe Every Turn Of The Patient.	80	20
23.	Use Disposable *Syringe* And Needle Each Dental Treatment Of The Patient.	100	0
24.	Throw The Medical Waste Like *Handscoon*, Mask, Surface Cover, Needle, Blade Scalpel Into Specific Trash Place.	93.33	6.67
25	Throw The Medical Liquid Waste Into Specific Drain For Sanitation Process.	100	0

3. Knowledge Related To Infection Control
   a. Equipment Sterilization
      The Research Results Showed That Out Of 30 Subjects, Which Included In Infection Control Tools Are Sharp Sterilize Tools, Diagnostic Equipment, Using Autoclave Or Dry Heat, Sterilize The Bur Using Autoclave Or Desinfect Using 70% Alcohol. Wash And Sanitize Goggles, Clean And Sanitize Handpiece, Scaler, Air Syringes In Every Turn Of The Patient. A Total Of 68.33% Implement Such Action But 31.67 % Does Not.
   b. Self Protection
      The Results Showed That Out Of 30 Subjects, Which Included Infection Control For Doctor Is Attending A Seminar Or To Receive Training Related To Infection Control, Allocating Budget For Adequate Infection Control, Knowing That Dental Clinic Is Potential Place Of The Transmission Of Infectious Diseases, Understanding That Sharp Tools, Diagnostic Tools And Bur Have Potential Transmission Of Infectious Diseases, Washing Hands Before And After Treatment To The Patient, The Fingernails Are Clean And Short, Wearing And Replacing Gloves In Every Turn Of The Patient , Wearing A Mask, Changing The Mask In Each Turn Of The Patient, Wearing Goggles In Each Treatment, Wearing Practice Clothes, Take Off Practice Clothes When Leaving The Practice Room. A Total Of 75.89% Of The Respondents Done The Actions, 11.24% Did Not Perform.
   c. Patient Protection
      Results Showed That Control Infection For Patient Is Washing Gargling Cup Using Water And Detergent, Which As Much As 93.33% Complete This Action. 6.67 % Did Not. 23.33% Provided Disposable Glass 76.67% Did Not. All Dentists Used Disposable Syringes And Needles On Each Turnover Of Patients.
   d. Room Sterilization
      Included In The Control Infection For Room Is Washing And Cleaning The Room Using Water And Detergent, Use And Replace The Protective Surface Of The Lamp Handle And Unit Button On Every Turn Of The Patient, Decontaminate The Lamp Handle And Unit Button On Every Turn Of The Patient, Disposed Of Medical Waste Such As Gloves, Mask, Surface Cover, Needles, Scalpel Blades Into A Strong Plastic Bag, Dispose Of Liquid Waste Into The Sewer System Connected To A Special Sanitary Water Splash. A Total Of 65.33% Perform These Actions, 34.67% Did Not Perform. These Data Show That The Dentist Attention To Infection Control Practices For The Room And Environtment Are Still Lacking.

Tabel . Observation For Implementation Infection Control Versus *Questioner*

No	Category	Observation	%	*Questioner*	%
1.	Equipment Sterilization	Use Autoclave/ Dry Heat Sterilization And Alcohol	53.33	Use Autoclave/ Dry Heat Sterilization And Alcohol	83.33
		Clean And Desinfected *Handpiece*, *Scaler*, Three Way Syringe, *Saliva Ejector* Every Turn Of The Patient.	93.33	Clean And Desinfected *Handpiece*, *Scaler*, Three Way Syringe, *Saliva Ejector* Every Turn Of The Patient.	80
2.	Self Protection	Handwashing Before And After Dental Treatment	53.33	Handwashing Before And After Dental Treatment	90
		Use Handscoon And Change It Every Turn Of The Patient.	36.67	Use Handscoon And Change It Every Turn Of The Patient.	85
		Use Face Mask And Change It Every Turn Of The Patient.	80	Use Face Mask And Change It Every Turn Of The Patient.	55
		Use Goggles/Eye Protection And Change It Every Turn Of The Patient.	6.67	Use Goggles/Eye Protection And Change It Every Turn Of The Patient.	16.66
		Use Dental Practice Clothing And Change It Every Turn Of The Patient.	13.33	Use Dental Practice Clothing And Change It Every Turn Of The Patient.	66.67
3.	Room Sterilization And Environtment	Use Surface Cover And Change It Every Turn Of The Patient. (Dental Unit Button, Light Handle).	20	Use Surface Cover And Change It Every Turn Of The Patient. (Dental Unit Button, Light Handle).	20
		Clean And Desinfected Practice Room Before And After Practice	30	Clean And Desinfected Practice Room Before And After Practice	93
		Throw The Medical Waste Like *Handscoon*, Mask, Surface Cover, Needle, Blade Scalpel Into Specific Trash Place.	3.3	Throw The Medical Waste Like *Handscoon*, Mask, Surface Cover, Needle, Blade Scalpel Into Specific Trash Place.	93.33
		Throw The Medical Liquid Waste Into Specific Drain For Sanitation Process.	6.67	Throw The Medical Liquid Waste Into Specific Drain For Sanitation Process.	100

Discussion

A. Observation

Availability Of Facilities And Infrastructure

a. Equipment Sterilization

Components Included Are Sterilizing By Autoclave Or Dry Heat, And Alcohol, 16. 67% Are Not Available, 0% Is Available But Not Used, 83.33% Available And Used. It Indicates That The Availability And Utilization Of Facilities And Infrastructure On The Sterilization Of Instruments Is Good. This Statement Is Supported By Dentists Through A Questionnaire That 68.33% Respondents Performed Equipment Infection Control. Autoclave Is A Tool Used To Sterilize Objects With Moist Heat Pressure. Alcohol Is Also Used For Simple Sterilization, And Most Of Dentist Use Simple Autoclave For Circulation Of Unwrapping Equipments. This Ma-

chine Has A 12 Minutes Of Sterilizing Time At 134o C And During That Time Should Not Be Opened (Harty And Ogston, 1995). Transmission Of Infection Can Occur Through Blood And Saliva-Exposed Equipment. Therefore, It Is Needed To Inhibit The Transmission Using Sterilization Tools, Such As An Autoclave That Prevent Direct Exposure To All Forms Of Microbial Life (Yuwono, 2000). There Are 16.67% Dentists Does Not Provide Sterilization Equipment, So The Transmission From Patient To Dentist And Patient To Patient Is Vulnerable.

b. Self Protection

Components Included Are Gloves, Masks, Goggles, Clothing Practices, Hand Washing Soap, Towels Or Tissue, 13.33% Hand Washing Facilities Are Not Available, 10% Is Available But Not Used, 76.67% Available And Used. It Is Showed That The Attention Of Dentists In The City Of Yogyakarta Is Good. This Statement Is Supported By Dentists Through A Questionnaire That As Many As 66.67% Dentists Perform Self Protection. Personal Protection Included Washing Hands, Use Gloves, Face Mask, Eye Glass/Google, And A Medical Coat. Hand-Washing Procedures Performed With Antiseptic Soap Under Running Water. Requirements To Be Met; Gloves Are Not Irritate Hands, Leak Proof, And Provide High Sensitivity. Using Masks Is Intended To Protect The Nasal Mucosa And Saliva-Blood Splash Contamination On The Eye Because The Eye Conjunctiva Is One Of The Entry Ports Of Most Viral Infections. While Clothing Practice Is Recommended To Use When Treating Patients Which Should Be Buttoned At All Times (Pintauli.S, 2003). People Who Work In The Field Of Dentistry Having Potential Risk After Treating The Patient. Most Of The Dentist And His Assistant Did Not Recognize The Existence Of Pathogenic Microorganisms In Saliva And Blood During The Treatment. Hands Of A Doctor Or An Assistant Can Be An Effective Tool To Transmit The Infection From Patient To Dentist Or Assistant Vice Versa (Anonymous, 2008). There Were 13.3% Dentists Who Still Does Not Provide And Use Personal Protection. It Shows The Risk Of Transmission In The Practice Room Of A Dentist. Hepatitis B, Tuberculosis, Herpes Simplex Infection Is The Most Common Infectious Disease Caused By Lack Of Self Protection. In Addition, The Swine Flu (H1n1) Disease Has Now Emerged And Become A Pandemic, Can Be Transmitted Through The Hands, Nose, Eyes And Mouth (Anonymous, 2009). So It Is Important For A Dentist To Provide Self Protection For Themselves.

c. Patient Protection

Components Included In The Patient's Infection Control Are Using Of Syringes, Disposable Needles And Washing Or Disinfecting Used Gargling Glass, And Diagnostic Tools Which Equal To To The Number Of Patients Per Day. Based On The Availability And Utilization Of Facilities And Infrastructure, Showing That The Attention Of Dentists In The City Of Yogyakarta To The Protection Of Patients Is Good. This Statement Is Supported By Dentists Through A Questionnaire That They Perform Protection For Patients From Transmission Of Infectious Diseases.

d. Room Sterilization

Components Included In Control Infection For Room Is The Medical Waste Disposal, Protective Surface Of Dental Unit, Disinfecting Solution; 11.31% Is Not Available, 2:22% Is Available But Not Used, 66.67% Available And Used. Based On The Availability And Utilization Of Facilities And Infrastructure, Showing That The Attention Of Dentists In The City Of Yogyakarta Is Good. This Statement

Is Supported By Dentists Through A Questionnaire That As Many As 65.33% Respondents Performed Infection Control For Room. The Proper Way To Treat The Liquid Waste Is Directly Linked To The Special Sanitation Systems, Poured With Large Amounts Of Water Splash. This Mechanism Is Intended To Prevent Environmental Pollution (Yuwono, 2000). Surface Dental Protection Shielding Can Be Done By Covering The Surface With Paper, Plastic, Aluminum Foil And Replaced On Every Patient (Oka, 2008). This Closure Is Useful For Reducing The Need For Disinfection Materials And Also Protecting The Surface Of The Dental Unit.

Infection Control For Room Is Important Because Some Diseases Can Be Transmitted Through The Existing Air Space (Airborne), One Of Which Is Currently Considered As Harmful Is Deadly Bird Flu.The Virus Is Still A Close Relative With Type A Influenza Virus. Viruses Can Be Carried In Feces, Saliva, Food And Drinking Water Containers, Pens, And All Surface Soils (Ananta.P, 2007).

B. Implementation Of Infection Control

e. Equipment Sterilization

Of The 30 Dentists In The City Of Yogyakarta, Which Uses An Autoclave Or Dry Heat Or Alcohol As A Means Of Sterilizing Materials For Sharp Tools, Diagnostic Tools, And Clean And Sanitize Bur Handpiece, Scaler, Air Syringe, Saliva Ejector In Each Turn Of The Patients Was 1.67% Not Done, 73.33% Done But Incomplete, 25% Done Completely. Based On Its Implementation, Shows That The Attention Of Dentists In The City Of Yogyakarta On Infection Control Is Poor. This Is Not In Accordance With The Statement Through The Questionnaire That As Much As 68.33% Dentists Performed Equipment Sterilization. It Indicates That The Level Of Awareness About The Dangers Of Dental Disease Is Still Lacking.

f. Self Protection

Of The 30 Dentists In The City Of Yogyakarta Who Always Washing Hands Before And After Treatment, Always Use And Replace Gloves, Always Use And Replace The Mask, Use Goggles And Washing And Disinfecting It After Use , Always Use The Practice Clothes And Take It Off When You Leave The Practice Room Is Not Done By 34% Respondents, 38% Done But Incomplete, 28% Done Completely. Based On Its Implementation, It Shows That The Attention Of Dentists In The City Of Yogyakarta To The Protection Of Themselves Is Poor. This Is Not In Accordance With The Statement Through The Questionnaire That As Much As 75.89% Respondents Performed Protection To Themselves. It Indicates That The Level Of Awareness About The Dangers Of Dental Disease Is Still Lacking. Gloves Is A Means Of Microorganisms Transmission In The Respiratory Tract And Mouth. Mask Works To Prevent Aerosols That Can Infect The Respiratory Tract. Goggles Should Always Be Used Because It Protects The Eyes From The Spray Of Saliva Or Blood Due To The Use Of The Handpiece And Scaler (Sunoto, 2005).

g. Patient Protection

Of The 30 Dentists In The City Of Yogyakarta, Who Use Disposable Syringes And Needles, Using A Disposable Gargling Cup Or Washing And Sanitizing The Used Cup, Using Disposable Syringes And Needles Are: 0% Is Not Done, 0% Done But Not Completely, 100% Done Completely. Based On Its Implementation, It Shows That The Attention Of Dentists In The City Of Yogyakarta To The Protection Of Patients Is Good. This Is Supported By A Statement Through A Questionnaire That 100% Dentists Performed This Action.

h. Sterilization Room

Of The 30 Dentists In The City Of Yogyakarta, Who Always Use Surface Protection Or Decontaminate Dental Unit (Button Of The Unit, The Handle Lights) Every Turn Of The Patient, Clean And Sanitize The Room Before Or After Practice, To Clean And Sanitize Handpiece, Scaler, Air Syringe, Saliva Ejector In Every Turn Of The Patient, The Liquid Waste Into The Sewer Which Is Connected To A Sanitation System; 20% Not Done, 15% Done But Incomplete, 65% Done Completely. Based On Its Implementation, It Shows That The Attention Of Dentists In The City Of Yogyakarta On The Room Rather Not Good.

Conclution

1. Availability And Utilization Of Facilities And Infrastructure For Control Infection:
   a. There Are Several Dentist Who Does Not Provide And Perform Equipment Sterilization Which Increasing Risk Of The Infection Transmission Between Doctor And Patient Or Patient With The Patient.
   b. There Are Several Dentist Who Does Not Provide And Perform Self Protection Which Increasing Risk Of The Infection Transmission Between Doctor And Patient.
   c. There Are Several Dentist Who Does Not Provide And Perform Protection Of Patients, Which Likelihood The Infection Transmission Through The Tools And Materials In Direct Contact With Patients.
   d. There Are Several Dentist Who Does Not Provide And Perform Room So The Possibility Of Infection Transmission Between Doctor And Patient Or Patient With The Patient Is Occurred.
2. The Process Of Implementation Of Infection Control In Dental Practices In The City Of Yogyakarta Are:
   a. Implementation Of Infection Control On The Sterilization Of Instruments Are Not Perfect Yet, So The Possibility Of Infection Transmission Between Doctor And Patient Or Patient With The Patient Is Occurred.
   b. Implementation Of Infection Control To The Self Protection Are Not Perfect Yet, So The Possibility Of Infection Transmission Between Doctor And Patient Is Occurred.
   c. Implementation Of Infection Control To The Protection Of Patients Is Good So The Possibility Of Infection Transmission Is Very Small.
   d. Implementation Of Infection Control On The Sterilization Room Was Poor/Moderate So The Possibility Of Infection Transmission Between Doctor And Patient Or Patient With The Patient Is Occurrred.

Suggestion

1. For Dentists
   a. The Dentist Should Increase Knowledge About Infection Control, Especially Regarding Self Protection, Sterilization And Medical Waste Management Through Seminars, Text Books, Journals And Training On Infection Control.
   b. The Dentist Should Comply With Minimum Standards Relating To Infection Control.
2. For Public Health
   a. Health Department And Indonesian Dental Association Should Conduct Training On Dental Infection Control For Dentist
   b. Health Departement And Indonesia Dental Association Should Conduct Routine Surveillance In Infec-tion Control.
3. For Other Similar Research
   a. It Is Necessary To Conduct Similar Research In The Hospitals In Yogyakarta Province.
   b. It Is Necessary To Conduct Similar Research In Other Cities Or Provinces.

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