

# INSIGHT

Issue 21  
May 2013

An Official Journal Of Kerala Govt. Optometrists' Association

Reg. No. 285



## Editorial Board

**Sabu G**  
Chief Editor

**Sreekumar P**  
Associate Editor

**Arun R J**  
Editor

**Biju V S**  
**Sudheesh B R**  
**K R Biju**  
Sub Editors

**Address:**  
Post Box No: 5819  
Mancaud P O  
Thiruvananthapuram

email : [insight@keralaoptometry.org](mailto:insight@keralaoptometry.org)  
[www.keralaoptometry.org](http://www.keralaoptometry.org)

Printed at  
GP Offset  
Thiruvananthapuram

*For internal circulation only*

## എഡിറ്റോറിയൽ

സുഹൃത്തുക്കളെ,

മാധ്യമ ലോകം ഇന്ന് വളരെ അധികം സ്വാധീനം ലോകജനതയുടെ ദൈനംദിന ജീവിതത്തിൽ ചെലുത്തുന്നു. നമ്മുടെ രാജ്യത്ത്, പ്രത്യേകിച്ച് കേരളത്തിൽ അതുണ്ടാക്കുന്ന പ്രത്യാഘാതങ്ങൾ വളരെ വലുതാണ്.

ബർമ്മൻ എഴുത്തുകാരി ആഞ്ച് സാൻ സുചിയുടെ പ്രസസ്തമായ “നിശബ്ദരാകേണ്ട കാലവും, ശബ്ദിക്കേണ്ട കാലവും നമുക്ക് മുന്നിലുണ്ട്, നമ്മൾ ഒന്നിച്ച് പോരാടിയേ തീരൂ. എങ്കിൽ മാത്രമേ ലക്ഷ്യം കൈവരിക്കാൻ കഴിയൂ” എന്ന വക്കുകൾ കടമെടുത്തുകൊണ്ട് പറയട്ടെ - നമ്മുടെ ഇൻസൈറ്റിന്റെ ഇതുവരെയുള്ള ഊർജ്ജവും, ആർജ്ജവവും അടിത്തറയാക്കി കാലികവും, സാമൂഹികവുമായ വിഷയങ്ങളെ ആധാരമാക്കി നമ്മുടെ അംഗങ്ങളിൽ നിന്നും വരും കാലങ്ങളിൽ ലേഖനങ്ങൾ ഉണ്ടാകണമെന്ന് വിനീതമായി അഭ്യർത്ഥിക്കുന്നു.

കഴിഞ്ഞ മൂന്ന് ലക്കങ്ങളിൽ പ്രസിദ്ധീകരിച്ച ‘ഒപ്റ്റോടൂൾസ്’ എന്ന പംക്തി ഏവർക്കും വിജ്ഞാനപ്രദമായി എന്നറിഞ്ഞതിൽ ചാരിദാർത്ഥ്യമുണ്ട്. നാളിതുവരെ നിങ്ങൾ നൽകിയ നിസ്സീമമായ സഹകരണത്തിന് ഒരിക്കൽ കൂടി നന്ദി അർപ്പിച്ചുകൊണ്ട്.

**അരുൺ ആർ ജെ**  
എഡിറ്റർ

ഈ ലക്കത്തിൽ പല സുപ്രധാന ഓർഡറുകളും നിങ്ങളിൽ എത്തിക്കേണ്ടതുകൊണ്ട് പലരുമയച്ച ലേഖനങ്ങൾ ഈ ലക്കത്തിൽ ഉൾപ്പെടുത്താൻ സാധിക്കാത്തതിൽ വേദിക്കുന്നു.

**PRESIDENT'S VOICE**

സുഹൃത്തുക്കളെ,

അക്ഷര നഗരമെന്ന് പ്രസിദ്ധിയാർജ്ജിച്ച കോട്ടയം പട്ടണത്തിൽ നിറഞ്ഞു കവിഞ്ഞ സദസ്സിനെ സാക്ഷിയാക്കി പ്രശസ്ത വ്യക്തികളുടെ സാന്നിധ്യത്തിൽ, കേരളത്തിന്റെ ബഹുമാന്യനായ ആഭ്യന്തര വകുപ്പ് മന്ത്രി ശ്രീ.തിരുവഞ്ചൂർ രാധാകൃഷ്ണൻ ഉദ്ഘാടനം ചെയ്ത കേരള ഗവൺമന്റ് ഒപ്റ്റോമെട്രിസ്റ്റ്സ് അസോസിയേഷന്റെ 21ാം സംസ്ഥാന സമ്മേളനം സംഘടനയുടെ ചരിത്രത്തിന്റെ താളുകളിൽ സുവർണ്ണ ലിപികളാൽ ആലേഖനം ചെയ്യപ്പെടുമെന്ന് തീർച്ചയാണ്. പ്രസ്തുത സമ്മേളനത്തിൽ എല്ലാ അംഗങ്ങളുടേയും അനുഗ്രഹാശിസ്സുകളോടെ ജി.ഒ.എ.കെ യുടെ പ്രസിഡന്റ് എന്ന മഹത്തായ സ്ഥാനം ഏറ്റെടുത്ത ഞാൻ ഉത്തരവാദിത്വ ബോധത്തോടെ പ്രവർത്തിക്കാൻ ശ്രമിച്ചിട്ടുണ്ട്. ഈ സംഘടനയെ നയിക്കുന്നതിൻ നിങ്ങൾ എന്നിലർപ്പിച്ച വിശ്വാസത്തിനും സഹകരണത്തിനും എല്ലാവർക്കും ഹൃദയം നിറഞ്ഞ നന്ദി രേഖപ്പെടുത്തുന്നു.

അന്ധതാ നിയന്ത്രണ പരിപാടികളുടെ ലക്ഷ്യം കൈവരിക്കുന്നതിൽ നെടുംതുണായി നിലനിൽക്കുന്ന സേവന സന്നദ്ധരായ കേളത്തിലെ ആരോഗ്യവകുപ്പിലേയും മെഡിക്കൽ വിദ്യാഭ്യാസ വകുപ്പിലേയും ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ താല്പര്യം സംരക്ഷിക്കുന്ന ഏക അംഗീകൃത സംഘടനയായ ജി.ഒ.എ.കെ ജീവകാരുണ്യ പ്രവർത്തനങ്ങൾക്കും പ്രാധാന്യം കൽപ്പിക്കുന്നു. അതിന്റെ ഭാഗമായി കോട്ടയം, ഒളശ്ശ അന്ധ വിദ്യാലയത്തിലെ മുഴുവൻ വിദ്യാർത്ഥികൾക്കും സംഘടനയുടെ നേതൃത്വത്തിൽ പഠന അനുബന്ധ ഉപകരണങ്ങൾ നൽകിയത് കൃതാർത്ഥതയോടെ ഓർമ്മിപ്പിക്കട്ടെ. ഇനിയും ഇത്തരം മഹനീയ പ്രവർത്തനങ്ങൾ നിങ്ങളുടെ സഹകരണത്തോടെ ഏറ്റെടുക്കുവാൻ തന്നെയാണ് ഉദ്ദേശിക്കുന്നത്.

അതുപോലെ 2013ലെ ജനറൽ ട്രാൻസ്ഫറിൽ

ഇടപെട്ട് പരമാവധി സുതാര്യമായ സ്ഥലം മാറ്റം നടത്തുന്നതിന് വേണ്ടി ശ്രമിച്ചു. എന്നാൽ പൊതുസ്ഥലം മാറ്റത്തിന്റെ മാനദണ്ഡം കാലാകാലങ്ങളിൽ അവസരവാദപരമായി മാറ്റിമറിക്കപ്പെടുന്നു എന്ന ആക്ഷേപം ഒപ്റ്റോമെട്രിസ്റ്റുകൾക്കിടയിൽ നിലനിൽക്കുന്നു. അതിനാൽ എല്ലാവർഷവും ഒരേ മാനദണ്ഡം അനുവർത്തിച്ച് എല്ലാവർക്കും തുല്യനീതി ലഭിക്കണമെന്ന് സംഘടന ആവശ്യപ്പെടുന്നു. ഡിസ്റ്റ്രിക്റ്റ് ഒഫ്ത്താൽമിക് കോർഡിനേറ്റർ, സീനിയർ ഒപ്റ്റോമെട്രിസ്റ്റ്, ഒപ്റ്റോമെട്രിസ്റ്റ് ഗ്രേഡ് 1 എന്നീ പ്രമോഷനുകളും ട്രാൻസ്ഫറുകളും വളരെ വേഗത്തിൽ നീതി പൂർവ്വമായി നടത്താൻ ജി.ഒ.എ.കെയുടെ നിർദ്ദേശങ്ങൾ പരിഗണിച്ച ഡി.എച്ച്.എസ്സ് അധികാരികൾക്ക് സംഘടനയുടെ അഭിനന്ദനം അറിയിക്കട്ടെ. ഇതുവരെ ഇല്ലാതിരുന്ന സ്റ്റേറ്റ് ഒഫ്ത്താൽമിക് കോർഡിനേറ്റർക്ക് നല്ല രീതിയിൽ ഡ്യൂട്ടിസ് ആൻഡ് റസ്പോൻസിബിലിറ്റീസ് ഉണ്ടാക്കിയെടുക്കാൻ സാധിച്ചത് സംഘടനയുടെ മുൻകൂട്ടിയുള്ള കാഴ്ചപ്പാടിന്റെ ഫലമാണ്.

നമുക്കവകാശപെട്ട 1:1:1 എന്ന റേഷ്യോ പ്രമോഷനും കാലോചിതമായ രീതിയിൽ അർഹമായ സേവന വേതന വ്യവസ്ഥകളും ലഭിക്കുന്നതിനും വേണ്ടിയുള്ള ശ്രമങ്ങൾ വിജയം വരെ തുടരുമെന്നറിയിക്കട്ടെ.

പലവിധ വെല്ലുവിളികളേയും അതിജീവിച്ചുകൊണ്ട് “ഒരൊറ്റ സംഘടന” എന്ന ഒപ്റ്റോമെട്രിസ്റ്റുമാരുടെ അഭിലാഷം സമ്പൂർണ്ണ ലക്ഷ്യത്തിലെത്തിക്കുന്നതിന് എന്നോടൊപ്പം അക്ഷീണം പ്രയത്നിച്ച ജനറൽ സെക്രട്ടറി ശ്രീ.പി ശ്രീകുമാറിനും എല്ലാ എക്സിക്യൂട്ടീവ് അംഗങ്ങൾക്കും അതിലുപരി സംഘടനയെ കൃഷ്ണമണി പോലെ കാത്തു സൂക്ഷിക്കുന്ന ഓരോ അംഗങ്ങൾക്കും എന്റെ വിനീതമായ നന്ദി രേഖപ്പെടുത്തുന്നു.

**സാബു ജി**  
പ്രസിഡന്റ്

FROM SECRETARY'S DESK

മാന്യസുഹൃത്തേ,

2012 ഡിസംബർ 9 - ന് കോട്ടയത്ത് നടന്ന അസോസിയേഷന്റെ 21-ാം സംസ്ഥാന സമ്മേളനത്തിൽ വെച്ച് എന്നെ വീണ്ടും ജനറൽ സെക്രട്ടറിയായി തിരഞ്ഞെടുത്തതിനുള്ള നന്ദി വാക്കുകൾക്ക് അതീതമാണ്.

കേരളത്തിലെ ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ അവകാശങ്ങൾ ഒരു പരിധിവരെയെങ്കിലും പരിഹരിക്കാനും നീതിനിഷേധങ്ങളിൽ ശക്തമായി ഇടപെട്ടുകൊണ്ട് അവ അധികാരികളുടെ ശ്രദ്ധയിൽ കൊണ്ടുവരാനും കഴിഞ്ഞു എന്നതിൽ അതിയായ ചാരിതാർത്ഥ്യമുണ്ട്.

ആരോഗ്യവകുപ്പിലെ ഏറ്റവും ശക്തമായ സംഘടനകളിലൊന്നായി മാറാൻ കേരള ഗവൺമെന്റ് ഒപ്റ്റോമെട്രിസ്റ്റ് അസോസിയേഷൻ കഴിഞ്ഞിട്ടുണ്ട്. ഇതിന് നിർലോഭമായ പിന്തുണ നൽകിയ കേരളത്തിലെ പ്രബുദ്ധരായ എല്ലാ ഒപ്റ്റോമെട്രിസ്റ്റുകളും അഭിനന്ദനം അർഹിക്കുന്നു.

ആരോഗ്യവകുപ്പ് ആസ്ഥാനത്തേക്ക് മാറ്റി നിയമിക്കപ്പെട്ട ഒഫ്താൽമിക് കോ- ഓർഡിനേറ്ററുടെ ഡ്യൂട്ടിയും ഉത്തരവാദിത്തങ്ങളും നിർണ്ണയിച്ച് ഉത്തരവ് പുറപ്പെടുവിക്കാനും സംഘടനയുടെ ഇടപെടലുകൾക്ക് കഴിഞ്ഞു. ഇക്കാര്യത്തിൽ അസോസിയേഷന്റെ നിർദ്ദേശങ്ങൾ മുഴുവനും അംഗീകരിക്കാനും അധികാരികൾ തയ്യാറായി. ആരോഗ്യവകുപ്പ് ഡയറക്ടറുടെ "ടെക്നിക്കൽ അഡ്വൈസർ" എന്ന സ്ഥാനത്തേക്ക് ടി തസ്തിക ഉയർത്താൻ കഴിഞ്ഞു എന്നത് ചെറിയ കാര്യമല്ല. (ഉത്തരവ് ഈ ലക്കം "ഇൻസൈറ്റിൽ" പ്രസിദ്ധീകരിച്ചിട്ടുണ്ട്). സ്റ്റേറ്റ് ഓഫ്താൽമിക് ഓഫീസർ എന്ന് ഈ തസ്തിക പുനർനാമകരണം ചെയ്യണമെന്ന അസോസിയേഷന്റെ ആവശ്യവും ഉടനടി അംഗീകരിക്കും എന്ന് പ്രതീക്ഷിക്കുന്നു.

ഒപ്റ്റോമെട്രിസ്റ്റുകൾക്ക് അർഹതപ്പെട്ട പ്രമോഷനുകൾ യഥാസമയം പുറത്തിറക്കാൻ അസോസിയേഷന്റെ ഇടപെടലുകൾക്ക് കഴിഞ്ഞു. "ചുവപ്പു നാടയും" ഫയലുകളുടെ "ഒച്ചിഴയും വേഗവും" ഒരു പഴങ്കഥയാക്കി അതിശയിപ്പിക്കുന്ന വേഗത്തിൽ ഉത്തരവുകൾ ഇറക്കുന്ന സെക്ഷൻ ഉദ്യോഗസ്ഥർ അഭിനന്ദനം അർഹിക്കുന്നു.

2013 -ലെ പൊതുസ്ഥലം മാറ്റം നീതിയുക്തമായും, സുതാര്യമായും നടത്തുന്നതിന് ആരോഗ്യവകുപ്പ് ഡയറക്ടർക്കും, വകുപ്പുമന്ത്രിയ്ക്കും നൽകിയ നിവേദനങ്ങളും ചർച്ചകളും വിജയം കണ്ടു എന്നു വേണം കരുതാൻ. 2013 -ലെ പൊതു സ്ഥലം മാറ്റത്തിൽ വന്ന ചെറിയ ചില അപാകതകൾ പ്രമോഷൻ ട്രാൻസ്ഫറുകൾ, പോസ്റ്റ് ക്രിയേഷൻ എന്നിവ വരുന്ന മുറയ്ക്ക് പരിഹരിക്കപ്പെടും എന്ന് അസോസിയേഷൻ ഉറപ്പ് നൽകിയിട്ടുണ്ട്.

എന്നാൽ പൊതു സ്ഥലംമാറ്റങ്ങളുടെ "മാനദണ്ഡം" മാറി മാറി വരുന്ന ഉദ്യോഗസ്ഥർ അവസരവാദപരമായി വ്യാഖ്യാനിക്കപ്പെടുന്നു എന്ന് ആക്ഷേപമുണ്ട്. ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ എല്ലാ പൊതു സ്ഥലമാറ്റങ്ങൾക്കും ഒരേ മാനദണ്ഡം തന്നെ എല്ലാ

വർഷവും പിൻതുടരണമെന്ന് അസോസിയേഷൻ ആവശ്യപ്പെടുന്നു. ഇല്ലെങ്കിൽ അസോസിയേഷന്റെ ഭാഗത്തു നിന്നുള്ള ശക്തമായ സമരപരിപാടികൾ തന്നെ അധികാരികൾക്ക് നേരിടേണ്ടതായി വരും.

ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ പുതിയ മൂന്ന് തസ്തികകൾ ഇതിനോടകം സൃഷ്ടിച്ചു കഴിഞ്ഞു. പദവി ഉയർത്തപ്പെട്ട എല്ലാ താലൂക്ക് ആശുപത്രികളിലും ഒപ്റ്റോമെട്രിസ്റ്റ് തസ്തിക സൃഷ്ടിക്കുന്നതിനുള്ള നടപടികൾ അന്തിമഘട്ടത്തിലാണ്. ആദ്യം മുതൽ തന്നെയുള്ള നമ്മുടെ ഈ ആവശ്യം തകിടം മറിക്കാൻ ശ്രമിച്ചിരുന്നവർ പോലും ഇപ്പോൾ അസോസിയേഷന്റെ വഴിക്ക് വന്നിട്ടുണ്ട്.

ഒപ്റ്റോമെട്രിസ്റ്റുകൾക്ക് അവകാശപ്പെട്ട റേഷ്യോ പ്രമോഷനുകൾ പരിഷ്കരിക്കണം എന്നും, എൻട്രി കേഡർ, ഗ്രേഡ് - 1 തസ്തികകളുടെ ശമ്പള സ്കെയിലുകൾ ഉയർത്തണമെന്നും 22/23- വർഷത്തെ സമയ ബന്ധിത ഹയർഗ്രേഡിന്റെ സ്കെയിലുകളിൽ നിലനിൽക്കുന്ന അപാകതകൾ പരിഹരിക്കണമെന്നും സർക്കാരിനോട് ആവശ്യപ്പെട്ടിട്ടുണ്ട്.

അസോസിയേഷന്റെ ശക്തമായ ഇടപെടലുകൾ കൊണ്ട് മിക്ക ജില്ലകളിലും വിഷൻ സെന്ററുകളിൽ ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ കരാർ നിയമനങ്ങൾ നടത്തിക്കാൻ കഴിഞ്ഞു.

മെഡിക്കൽ വിദ്യാഭ്യാസ വകുപ്പിലെ നേത്രപരിശോധകരുടെ തസ്തികകൾ "ഒപ്റ്റോമെട്രിസ്റ്റ്" എന്ന് പുനർനാമകരണം ചെയ്ത് ഏകീകരിക്കണമെന്ന് സർക്കാരിനോട് ആവശ്യപ്പെട്ടിട്ടുണ്ട്. നമ്മുടെ കാറ്റഗറിയുമായി ബന്ധപ്പെട്ട് ഈ വകുപ്പിൽ നടമാടുന്ന അനീതികൾക്ക് എതിരെ ശക്തമായി പ്രതികരിക്കാനും അധികാരികളെക്കൊണ്ട് നടപടികൾ തിരുത്തിക്കാനും കഴിഞ്ഞിട്ടുണ്ട്. അർഹതപ്പെട്ട പ്രമോഷനുകൾ തടഞ്ഞുവയ്ക്കുകയും, തസ്തികകൾ സ്ഥാപിത താൽപ്പര്യങ്ങൾക്കായി ഒഴിച്ചിടുന്നതിനെതിരെയും, മാനദണ്ഡങ്ങൾ കാറ്റിൽ പറത്തി നടത്തുന്ന സ്ഥലംമാറ്റങ്ങൾക്കെതിരെയും ശക്തമായ പ്രക്ഷോഭങ്ങൾ തന്നെ നടത്തേണ്ടിയിരിക്കുന്നു.

സർക്കാർ ആശുപത്രികളെ മാത്രം ആശ്രയിക്കുന്ന നല്ലൊരു വിഭാഗം സാധാരണക്കാരുടെ കാഴ്ച സംരംക്ഷണത്തിൽ ആത്മാർത്ഥമായ പങ്കാളിത്തം വഹിക്കുന്നതോടൊപ്പം ഈ തൊഴിലിന്റെ അന്തഃസ്ഥാനം മാഹാത്മ്യവും കാത്തു സൂക്ഷിക്കുന്നതിന് ഒപ്റ്റോമെട്രിസ്റ്റുകളുടെ ഏകസർക്കാർ അംഗീകൃത സംഘടനയായ കേരളഗവൺമെന്റ് ഒപ്റ്റോമെട്രിസ്റ്റ് അസോസിയേഷൻ നിങ്ങളോടൊപ്പം എന്നും ഉണ്ടാകും.

പി ശ്രീകുമാർ  
ജനറൽ സെക്രട്ടറി

# Subjective Refraction

Dr. S Maya Devi, Consultant(Ophthal)

A proper method of subjective refraction is very essential for giving comfortable vision to our patients.

In the great majority of cases, the Optometrist should aim at getting the vision up to the standard of 6/5 and if this is not attained, he is abiding to account for the visual defect Ophthalmologically. But this standard of acuity is usually attained only in the lower degrees of refractive error. Even in the absence of definite pathology in the media or fundus, subjects with high hypermetropia or those with marked astigmatism often do not reach this level of vision.

Subjective refraction can be carried out after objective refraction or even without that, Let us look at source of the basic rules to adopt while doing subjective refraction in the different types of refractive errors. Our aim should be comfortable vision rather than accurate vision.

## MYOPIC CORRECTION

- Basic rule is to always under correct to avoid minification and reading difficulties.
- Weaker concave lenses which give maximum vision should be prescribed.
- Myopia should never be over correct.
- Children should be fully corrected.
- Adults under 30 years usually accept full correction.
- Constant use of spectacles is a must to avoid development of squint and to enhance development of normal accommodative convergence reflex.
- Adults above 30 years wearing glasses for the first time may not tolerate full correction over 3D as their ciliary muscles are accustomed to accommodate. Such patients may be slightly under corrected by 1-2 D and a full correction given later if necessary.
- Full correction can rarely be tolerated in high myopia. It is better to under correct high myopia above 10 D to avoid problems of near vision and minification of images (under correct to 1-3 D according to age and degree of myopia).
- Myopes in the presbyopic age and high myopes

over 20 years may require weaker glasses for near work.

- To detect the end point of myopic refraction, instruct the patient to tell when the letters in the chart appear to become smaller. Often the patients will take an additional amount of minus lenses, because the letters will appear black and more distinct. More minus lenses demand more accommodation and lead to asthenopia. An extra 0.25 D will be unnoticed by a young myope but would be a bad mistake for a 45 year old.
- In children, do not prescribe myopic correction without cycloplegic refraction. Less than -4 D need not be corrected in infants. In children between 2-3 years of age -2/ -3 D needs correction. More than 3 years, optimum correction has to be prescribed.

## HYPERMETROPIC CORRECTION

- Young adults with error less than 3 D, with normal vision and without symptoms should rarely be corrected. If correction is to be given, they may be under corrected as there is some active accommodation.
- In elderly individuals with manifest hypermetropia, full amount should be corrected. One should not correct any amount of hypermetropia uncovered by cycloplegia. Rely entirely on manifest refraction.
- If manifest hypermetropia is small, that is, less than 1D, correct only if patient is symptomatic.
- In the presence of accommodative convergent squint full correction at first sitting.
- In children below 5 years, in the absence of defective vision, asthenopia or squint was significant hypermetropia upto +5 D may be left uncorrected.
- Maximum acceptance prescribed after fogging. Fogging makes the eye artificially myopic by adding convex lenses. Fogging induces relaxation of accommodation.

One method of fogging is to add plus lenses until denominator of snellen notation is doubled. It is better not to fog more than 6/36 or 6/60. For average patients, a wait of 1-2 minutes after fogging induces relaxation of accommodation. In

hypermetropes who have never worn glasses, relaxation of accommodation occurs only after 10-15 minutes.

Reduce fog slowly in steps of 0.25 D or 0.5 D. The first lens is not removed until the next is in position to prevent accommodation from being active. As fog is reduced, watch for increase in visual acuity with each degree in fogging. If visual acuity does not improve as expected, try correction of astigmatism. The fog should be decreased to a level so as to get vision of 6/12 or 6/9 sufficient to do the astigmatic tests. If the fog is completely reduced, accommodation will take over and wrong lenses will be prescribed.

### How to know if astigmatism is present?

Astigmatic fan or cross cylinder may be used, if there is no astigmatism, all the lenses with astigmatic fan equally clear. Cross cylinder is put over the correcting sphere with axis first at 90° and then at 180°. If neither position produces any increase in clarity, then oblique meridians are explored. If some improvement occurs in clarity in any position, astigmatism is present.

To find Axis: best to find out the axis of astigmatism first.

Manual rotation, Astigmatic fan or Cross Cylinder or stenopic slit.

What is done by many is to fog, then decrease the fog to get maximum vision and then try cylinders. Plus cylinder in elderly hypermetropes and minus in young myopes. Disadvantage of this method is where the fog is reduced to get maximum vision, accommodation takes over and the power of plus cylinder prescribed may not be correct. One may increase or undercorrect hypermetropic astigmatism because of accommodation.

Theoretically and practically the best procedure is to try with minus cylinder. Bring decrease the fog to levels to get 6/12 or 6/9 vision. Maintaining the fog on and thus relaxing the accommodation, tries with minus cylinder. Find out the minus cylinder which gives maximum visual acuity.

### Why not trial with plus cylinder?

Trail with plus cylinder with the fog as will further worsen the fog and acuity will be worsened by plus cylinder. After cylindrical power is obtained, adjust the sphere to get maximum vision. In the final prescription, cylinder can be given as plus or minus after transposition. Always check the

spherocylindrical combinations by adding a cylinder in the opposite axis.

Eg: In the prescription +1.5 D/+1 D cyl 180° if vision improves as adding -0.5 D cyl in 90°, then change the prescription to its equivalent of +1.00D/+1.5 D cyl 180°. If vision improves on adding +0.50 cyl in the 90° axis, then change the combination to its equivalent +2.00D/ +0.50 D cyl 180°.

### PRESBYOPIC CORRECTION

- Always find out the refractive error for distance and first correct it.
- Working distance of the patient is the most important factor.
- Test each eye separately.
- Presbyopic spectacle should never be prescribed mechanically by adding for age.
- The weaker convex lens which gives clear vision with maximum comfort and maximum working range are preferred.
- Near add should not produce any magnification.
- Better to under correct than to over correct so as to encourage accommodation. Full correction of presbyopia causes eye strain symptoms due to lack of accommodative convergence.
- Working distance for reading and writing is 13-15 inches. Gold smith needs higher correction for their work. But it should not be very high correction because the resultant magnification will alter the size of the finished Ornaments. Working distance of the carpenter is 24-30 inches. Computer users needs three focuses 13 inches for reading, 24 inches for computer screen for distance.

Eg: Constant spectacle - Distant +1.00 D, near +3 D, Computer - Monitor +2.00 D, near +3 D

Most of these tests take much longer to describe than to carry out in practice and practice becomes a routine and long custom makes their execution automatic and their interpretations instantaneous, they can be performed surprisingly, rapidly and at the same time accurately.

# Presbyopia

**Anupriya V S, Jyothi Gopinath, Soumya S K, Ananthulal, Sajitha & Sajeev**  
2nd Year DOA Students, Medical College, Thiruvananthapuram

Presbyopia (eye sight of old age) is not an error of refraction but a condition of physiological insufficiency of accommodation leading to a progressive fall in near vision.

## PATHOPHYSIOLOGY

To understand the pathophysiology of presbyopia a working knowledge about accommodation is mandatory. As we know in an emmetropic eye far point is at infinity and near point varies with age (being about 7cm at the age of 10 years, 25cm at the age of 40 years and 33cm at the age of 45 years). Therefore at the age of 10 years, amplitude of accommodation (A)=100/7 (dioptric power needed to see clearly at near point) - 1/a (dioptric power needed to see clearly at far point) that is A (at age 10) = 14 diopters : similarly A (at age 40)= 100/25 - 1/alpha =4 diopters.

Since, we usually keep the book at about 25cm, so we can read comfortably up to the age of 40 years, after the age of 40 years, the near point of accommodation recedes beyond the normal reading or working range. This condition of falling near vision due to age related decrease in the amplitude of accommodation or increase in punctum proximum is called presbyopia.

## CAUSES

Decrease in the accommodative power of crystalline lens with increasing age, leading to presbyopia, occurs due to :

1. Age related changes in the lens, which include : Decrease in the elasticity of lens capsule and progressive, increase in size and hardness (sclerosis) of lens substances which is less easily molded.

2. Age related decline in ciliary muscle power may also contribute in causation of presbyopia.

## CAUSES OF PREMATURE PRESBYOPIA

1. Uncorrected hypermetropia.
2. General debility causing pre-senile weakness of ciliary muscle.
3. Premature sclerosis of the crystalline lens.
4. Chronic simple glaucoma.

## SYMPTOMS

1. Difficulty in near vision, patients usually complain of difficulty in reading small prints (to start with in the evening and in dim light and later even in good light). Another important complaint of the patient is difficulty in threading a needle etc.
2. Asthenopic symptoms due to fatigue of the ciliary muscle are also complained after reading or doing any near work.
3. Intermittent diplopia at near may develop because of the interrelationship between accommodation and convergence.

## TREATMENT

**Optical** :- The treatment of presbyopia is the prescription of appropriate convex glasses for near work.

A rough guide for providing presbyopic glasses in an emmetrope can be made from the age of the patient. About +1DS is required at the age of 40 – 45 years. +1.5DS at 45 – 50 years, +2DS at 50 – 55 years. +2.5DS at 55 - 60 years.

However, the presbyopic add should be estimated individually in each eye in order to determine how much is necessary to provide a comfortable range. It will also help us to understand any macular changes in one eye only.

**BASIC PRINCIPLES FOR PRESBYOPIC CORRECTION**

1. Always find out refractive error for distance and first correct it.
2. Find out the presbyopic correction needed in each eye separately and add it to the distant correction.
3. Near point should be fixed by taking due consideration for profession of the patient.
4. The weakest convex lens with which an individual can see clearly at the near point should be prescribed, since overcorrection will also result in asthenopic symptoms.

Presbyopic spectacles may be unifocal, bifocal or varifocal

**Surgical treatment:** Monovision CK, LASIK(C or PARM)

**To conclude**

A blind presbyopic correction with age should be discouraged. A scientific approach for assessing presbyopic correction and prescription is utmost important now a days.

**To Replace Costly Scans, Help Early Treatment**  
**Blood test to detect EYE CANCER**

Pushpa Narayan | TNN

**RECENT FINDINGS**

**A** blood test may soon replace scans to detect retinoblastoma, the cancer of the eye found in children. Research by the Chennai-based Sankara Nethralaya has found this possible by looking for the tumour-specific micro-RNA in blood. If the count is more than double the normal, the child has eye cancer. Every year, about 2,000 children are diagnosed with retinoblastoma, which begins in the retina.

During the study, the Sankara Nethralaya scientists tested blood samples of 20 children with retinoblastoma for five micro-RNAs seen in cancerous eye tumours. Scientists drew blood from the patients, separated the serum and extracted micro-RNA from it using special kits. In a real time PCR test, they evaluated the percentage of micro-RNA.

"These miRNA will be present in most children, but it will be highly elevated in patients with retinoblastoma, they said," Dr S Krishnakumar, the principal investigator of the project. Nearly 80% of children with retinoblastoma screened for the study showed between two to five fold increase in the presence of these molecules when compared to normal children. "The blood tests this will not only make diagnosis easy, but also help us devise a treatment plan to save vision," said ophthalmologist Dr Vikas Khetan, who specialises in treatment of such cancers.

If a child has a very bad tumour, the eye is removed as a life-saving procedure. Micro-RNA levels in the blood go down as soon as the tumour is removed. When both the eyes are affected, doctors try to save one eye by shrinking the tumour with chemotherapy or radiation. "Blood tests now tell us if the cancer cells are under check. We can plan

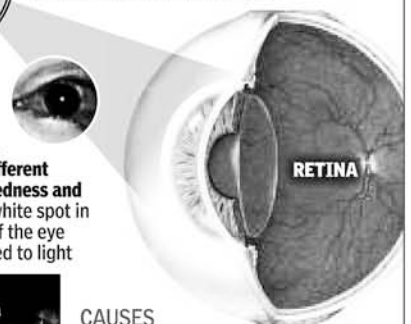


**THE DISEASE**

**Retinoblastoma is an eye cancer** that begins in the retina, affecting one or both the eyes. It mostly affects young children

**WARNING SIGNS**

Eyes that appear to be **looking in different directions, redness and swelling**. A white spot in the middle of the eye when exposed to light



**Retinoblastoma**

**DIAGNOSIS**

Physical examination to see the back of the eye using a magnifying instrument and a light source. **Ultrasound, CT scan and MRI scan are also used**

**INCIDENCE**

**About 2,000 children in India are diagnosed with retinoblastoma every year**

**NEW HOPE**

**The study, which tested 20 children aged 2-7 years, shows that blood tests could be used to diagnose retinoblastoma**

**CAUSES**

Genetic mutation of nerve cells in the retina. **The cells grow and multiply into a tumour**. If left untreated, it can spread to other areas of the body

**TREATMENT**

Chemotherapy, radiation therapy, brachytherapy, cryotherapy and thermotherapy. **As a last resort, the eye is surgically removed to prevent spread of the cancer**

**HOW IT IS DONE**

- ▶ Serum separated from blood drawn from the child
- ▶ Micro-RNAs linked to the disease extracted from serum
- ▶ If the micro-RNA is 2-10 fold higher, the child has retinoblastoma

to increase or decrease the chemotherapy cycles. It will give us valuable inputs to save vision," he said.

But for this, scientists will have to expand the scope of this study, which was funded by the department of biotechnology (DBT). Krishnakumar, who is the deputy director of Vision Research Foundation in Sankara Nethralaya, said his team had earlier

profiled about 45 micro-RNAs associated with retinoblastoma. "We shortlisted the five most prominent ones for research. With this study we have proved our hypothesis. We are now planning to study a larger population," he said.

The study has been accepted for publication in peer-reviewed medical journal Bioinformatics and Biology Insights.

# The Blind With Vision

Manoj K J

Blindness is a social curse. It affected people even from ancient times. There are comments on blindness even in epics. Dritarashtra, the king of Hasthinapur, in Mahabharatha is a powerful blind character. Gandhari, wife of Dritharashtra, voluntarily blindfolded herself throughout her married life as she decided to share the pain of her blind husband, lead a life similar to that of a blind. Hiranyanda and Tandavi, parents of Sravana Kumara are the blind characters in Ramayana. Tiresias in Greek mythology is a blind prophet of Thebes. Homer, author of the Greek epics, Odyssey and Iliad is believed to be blind.

There are a lot of visually challenged heroes in history who crossed the boundaries of blindness and challenged the world. Here narrates some of the famous 'flames' that lighted the world with their insight.

## HELEN KELLER:

Helen Keller was an American activist and lecturer. She lost her sight and hearing when she was at 18 months old following an unknown fever. Helen's teacher Anne Sullivan trained her to develop her ability to communicate. Helen was the first blind to graduate. She wrote several books and went around the world to fight for the rights of the blind and tried a lot to raise money for many organization for the blind.

## LOUIS BRAILLE:

Louis Braille was a French educator. He became blind at childhood accidentally following an eye injury while playing with some instruments in his father's work shop. The wound became severely infected and spread to his other eye. He was the inventor and designer of Braille writing which enables the blind to read from a series of organized bumps.

## ANDREA BOCELLI:

Andrea Bocelli born with poor vision due to congenital glaucoma and became blind at the age of 12 following a football accident. He was a well known Italian musician and multi instrumentalist.

## JOHN MILTON:

John Milton was an English poet. He became blind at the age of 43 due to glaucoma. He is well known for his epic poem 'Paradise Lost', the biblical story of the temptation of Adam and Eve by Satan and their expulsion from the Garden of Eden.

## SURDAS:

Surdas was an Indian saint, poet and musician. He is born as blind. He is known for his devotional songs dedicated to Lord Krishna. And is well known for his masterpiece 'SurSagar' which is composed of hundred thousand songs.

## STEVE WONDER:

Steve Wonder was a wonderful American singer and song writer. He became blind from infancy due to retinopathy of prematurity.

## HARRIET TUBMAN:

He was an-African-American humanitarian. She was a slave in her youth. After her escape she helped more than 60 slaves to escape using the network of antislavery activists. She became blind due to a severe head injury which was inflicted by a slave owner.

## JAMES THURBER:

Thurber was an American comedian and cartoonist. While playing with his brother shot an arrow to his eye. This injury later made him blind.

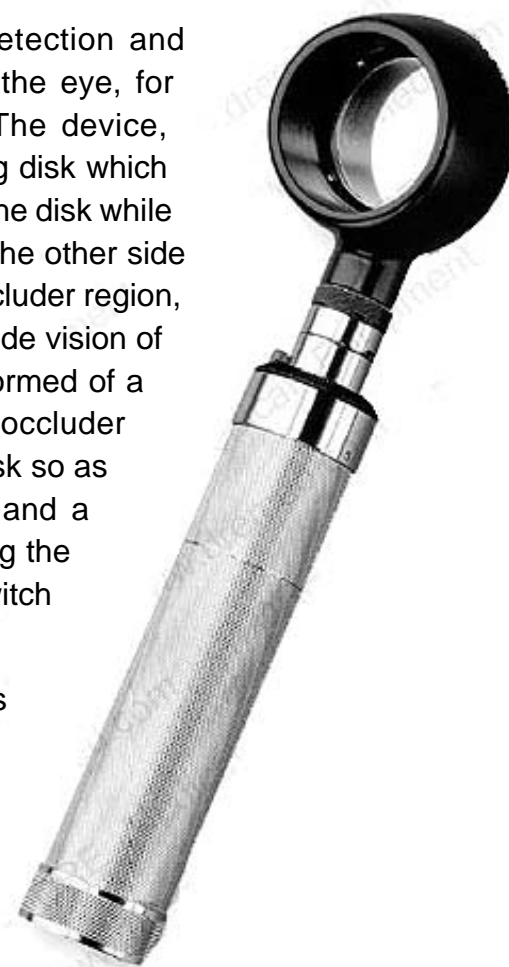


# Strabismoscope

OptoTools

Strabismoscope is a device for use in the detection and identification of various misalignment conditions of the eye, for example heterophorias, strabismus and the like. The device, includes a unidirectional occluder having an occluding disk which occludes an individuals sight in one direction through the disk while allowing direct observation of the occluded eye from the other side of the disk. The device has a handle region and an occluder region, the occluder region being of the size effective to occlude vision of a fixation target through one or both eyes, the disk formed of a reflective transparent material mounted within the occluder region, a light source positioned on one side of the disk so as to illuminate the side of the disk when energized, and a mechanism contained within the support for energizing the light source, the energizing mechanism including a switch mounted on the handle

The device helps to perform the cover test with visualization of the covered eye through the occluder and direct observation of heterophorias. The occluder is composed of an aluminium-polyester filter mounted on a support in front of a 2.2-V light bulb.



## Welch Allyn StrabismoScope - Unidirectional Occluder

StrabismoScope™ Unidirectional Occluder Makes diagnosing strabismus easier than ever. Ideal for visualizing dissociated vertical deviation. Efficient testing for strabismus, both latent (heterophorias) and manifest (heterotropias) Simultaneously view the movement of covered and uncovered eyes Halogen light increases the ambient light on the patient's side and aids visualization by the practitioner Durable—rugged ABS housing resists damage from drops Fits all Welch Allyn 3.5 V power sources Laminated wall chart for patient education

# Pseudomyopia

P V Sujatha, Optmetrist, CHC Perinjanam

**Pseudomyopia** is an intermittent and temporary shift in refraction of the eye towards myopia. In this sudden onset of myopia, the focussing of light in front of the retina is due to a transient spasm of ciliary muscle, causing an increase in the refractive power of the eye. It may occur because of organic causes like systemic or ocular medications, lesions or injuries of brain stem, or active ocular inflammations such as uveitis. Uncontrolled Diabetes Mellitus also can cause pseudomyopia.

Sometimes pseudomyopia may be functional in origin and is common in young adults who have active accommodation and classically occurs after a change in visual requirement.

Accommodation is the ability of the eye to adapt for clear vision at varying distances. The accommodation can increase the optic power of the eye by 12-13 dioptre. Accommodation spasm is defined as the abundantly sturdy accommodation stress caused by contractions of ciliary muscles that does not disappear when accommodation is not required. Today accommodation spasm is considered to be a major cause of myopia in children. Therefore, the early prophylaxis and treatment of accommodation spasm can prevent myopia.

The major symptom of pseudomyopia is, symptoms of asthenopia and intermittent blurring of distant vision, particularly after prolonged periods of near work.

Spasm of accommodation may be triggered by excessive near work in unfavourable conditions such as bad illumination, bad reading posture, bad eye-book distance (30-35cm optimal), lack of physical activity, weakness of neck and back muscles, lowered vitality, mental stress and blood supply disturbance in cervical spine.

The vision may clear temporarily while using concave lenses, but giving concave lenses can trigger pseudomyopia. Hence the diagnosis must be done by refraction using a strong cycloplegic like atropine or homatropine.

Prophylactic measures are important in preventing the incidence of pseudo myopia;

1. Reading - It is important to have correct posture while reading or doing close work and don't hold the reading or working material too close to your eyes.
2. Staring – Relax your eye muscles by staring at a faraway object, preferably greeneries. As we know, tiring muscles lead to pseudo myopia, and it is crucial to relax eye muscles as much as possible. Staring with each eye separately can strengthen our eyes individually.

## Treatment

Usually **pseudomyopia** clears up when the underlying cause is treated. Relaxation of ciliary muscles by atropine for a few weeks and prohibition of near work, allow prompt recovery from spasm of accommodation. Refractive error must be corrected after carefully performing cycloplegic refraction.

Near-work should be forbidden for a period and thereafter its amount should be curtailed and the working condition improved. The general condition of the patient must be well maintained.

**THIRUVANANTHAPURAM**

Sub:- Estt.- HSD - Duties and Responsibilities of District Ophthalmic Co-ordinator attached to Ophthalmology division in Directorate of Health Services – fixed Orders issued.

Read:- 1. G.O(MS)No.145/2011/H&FWD dated: 28-2-11  
2. G.O(Rt) No. 2557/2012/H&FWD dated: 01-8-12

**ORDER NO.EF4/58092/2011/DHS DATED: 30-04-2013**

As per G.O read 1<sup>st</sup> government have directed to post the senior most District Ophthalmic Co-ordinator in the ophthalmology division of Directorate of Health Services and to fix the Duties and Responsibilities of the officer. Accordingly to one post of District Ophthalmic Co-ordinator was shifted to Directorate of Health Services by the Director of Health Services as per Government Order read 1<sup>st</sup> above and as per Government Order read 2<sup>nd</sup> above government have rectified the action of the DHS. The following duties and responsibilities are assigned to the senior District Ophthalmic Co-ordinator at the Directorate of Health Services.

1. To function as Technical advisor to the DHS and Dy. DHS (Ophthalmology) in matters relating to NPCB activities.
2. Co-ordinate the activities of District Ophthalmic Co-ordinators.
3. Monitor the school health activities relating to ophthalmology.
4. Monitor the activities relating to eye camps.
5. Collection of data relating to eye care activities.
6. Assist the Dy. DHS (ophthalmology) in the implementation of NPCB.
7. Liaison with the Ophthalmology wing of all hospitals and assess the requirements relating to equipments/ manpower etc. and report the same to Dy. DHS (Ophthalmology).
8. To assist the Dy. DHS (Ophthalmology) in the preparation of state plan proposal and implementation same.

Sd/-

**DR.P.K.Jameela**  
**Director of Health Services.**

To

1. All DMO(H)s
2. All District Ophthalmic Co-ordinators.
3. Dy. DHS (Ophthalmology)
4. The senior District ophthalmic Co-ordinator,  
Directorate of Health Services, Thiruvananthapuram.
5. The Secretary to Govt., H&FWD, Thiruvananthapuram (with CL)
6. The Accountant General, Kerala, Thiruvananthapuram .
7. CA to DHS
8. Sri. Sreekumar.P, General Secretary Kerala Govt. Optometrists  
Association, P.B.No. 5819, Manacadu.P.O, Thiruvananthapuram-9.
9. CA to Addl. DHS (M)
10. File/Stock File/spare.

//Forwarded//

  
Superintendent

**PROCEEDINGS OF THE ADDITIONAL DIRECTOR OF HEALTH SERVICES  
(MEDICAL), DIRECTORATE OF HEALTH SERVICES, THIRUVANANTHAPURAM.**

Sub : Estt:- HSD- Ratio Promotion of Optometrist Gr.II to the cadre of Optometrist Gr.I – Orders issued.

Read: Order No.EF4-98020/08/DHS, dated 09.04.2013.

**ORDER No. EF4 - 98020/2008/DHS, Dated 11.04.2013.**

The total Strength of Optometrists in the department as on 01.06.2012 is shown below.

Senior Optometrist	-	66
Optometrist Gr. I	-	132
Optometrist Gr.II	-	<u>133</u>
<b>Total</b>		<b>331</b>

Two posts of Optometrist Gr.II were newly created at Taluk Head Quarters Hospital, Pampady, Kottayam and Taluk Head Quarters Hospital, Kanjirappally, Kottayam raising the number to 135. Hence the ratio of Optometrists are refixed as follows.

Senior Optometrist	-	66
Optometrist Gr. I	-	133
Optometrist Gr.II	-	<u>134</u>
<b>Total</b>		<b>333</b>

At Present 4 Vacancies of Optometrist Gr,I are existing and therefore the following Senior Most Optometrists Gr.II are granted ratio promotion as Optometrist Gr.I in the Scale of Pay Rs.13,900 - 24,040 with effect from the date noted against their names and allowed to continue in the present station.

Sl. No.	Rank No.	Name and Present Station and Date of Birth	Date of effect
1	79	Smt. Prasannakumari P.C, Community Health Centre, Vechuchira, Pathanamthitta (12.01.1961)	09.04.2013 Vice Ashalatha.G Promoted.
2	80	Smt.Ashadevi.E, Primary Health Centre, Koppam, Palakkad (26.11.1966)	09.04.2013 Vice Mani.C.V Promoted.
3	82	Smt. Ambili.P, General Hospital, Alappuzha (22.05.1971)	09.04.2013 Vice Kumari Radahamani.V Promoted.
4	83	Sri.Philip Simon.C, Community Health Centre, Uzhavoor, Kottayam.(22.04.1961)	10.04.2013 date of ratio refixation.

The Head of the institution will verify the date of Birth, Rank No and other details of the incumbents and if any discrepancy is noted the same should be reported to this office forthwith. A declaration may also be obtained from the incumbent to the effect that excess amount paid if any detected in subsequent scrutiny of their pay fixation consequent on their promotion will be refunded and the same will be kept pasted in the Service Book of the incumbents under proper attestation. Arrears of pay will be drawn and disbursed as per existing rules only.

Sd/-

**Dr. Kumari G. Prema,**  
**Addl. Director of Health Services. (Medical)**

To

The Incumbents.(Through Head of the Institution.)

Copy to: 1. The District Medical Officer of Health,  
 Pathanamthitta/Alappuzha/Kottayam/Palakkad.

## *A jab may help the blind to see* Injecting Light-Sensing Cells Into The Eye Restores Sight In Mice

**London:** Oxford scientists have developed injections of light-sensing cells into the eye, which they claim restored vision in completely blind mice.

Researchers from the Oxford University said their studies closely resemble the treatments that would be needed in people with degenerative eye disease.

Patients with retinitis pigmentosa gradually lose light-sensing cells from the retina and can become blind.

The research team used mice with a complete lack of light-sensing photoreceptor cells in their retinas. The mice were unable to tell the difference between light and dark, BBC News said.

They injected "precursor" cells which will develop into the building blocks of a retina once inside the eye. Two weeks after the injections a retina had formed.

"We have recreated the whole structure, basically it's the first proof that you can take a completely blind mouse, put the cells in and reconstruct the entire light-sensitive layer," professor Robert MacLaren said. Previous studies have achieved similar results with mice that had a partially degenerated



VISION OF THE FUTURE

retina. MacLaren said this was like "restoring a whole wide computer screen rather than just repairing individual pixels".

The mice were tested to see if they actually fled being in a bright area, if their pupils constricted in response to light and had their brain scanned to see if visual information was being processed by the mind.

Pete Coffee, from the Institute of Ophthalmology at University College London, said the findings were important as they looked at the "most clinically relevant and severe case" of blindness. "This is probably what you would need to do to restore sight in a patient that has lost their vision," he said.

Professor Robin Ali published his research in the journal *Nature* showing that transplanting cells could restore vision in night-blind mice and then showed the same technique worked in a range of mice with degenerated retinas.

"These papers demonstrate that it is possible to transplant photoreceptor cells into a range of mice even with a severe level of degeneration," he said.

Researchers are already trialling human embryonic stem cells, at Moorfields Eye Hospital, in patients with Stargardt's disease. Early results suggest the technique is safe but reliable results will take several years.

Retinal chips or bionic eyes are also being trailed in patients with retinitis pigmentosa. The study was published in the *Proceedings of the National Academy of Sciences* journal. AGENCIES

Times Of India 09-01-2013



**GOVERNMENT OF KERALA**

**Abstract**

Leave Travel Concession to the State Government Employees - Rules/guidelines  
- Orders Issued.

=====

**FINANCE (EXPENDITURE -C) DEPARTMENT**

G.O(P)No. 5/2013/Fin.

Dated, Thiruvananthapuram, 02/01/2013

Read: 1. GO (P) No. 85/2011/Fin dated 26/02/2011.

2. GO (P) No. 713/2012/Fin dated 31/12/2012.

**ORDER**

Government have accorded sanction in principle for Leave Travel Concession (LTC) to the State Government employees and teachers vide reference 2<sup>nd</sup> cited. It was ordered therein that the guidelines/Rules in respect of the LTC will be issued separately. Accordingly Government are pleased to issue the guidelines/Rules in respect of the LTC scheme as follows:

2. These rules shall apply to the persons:
  - (i) Who are appointed to State Government Service.
  - (ii) Staff of Aided Schools and Aided Colleges.
  - (iii) Full time employees borne on the contingent & work charged establishments, employees of Local bodies.
3. These rules shall not apply to those:
  - (a) Who are employed on Casual/Daily Wage basis/Contract basis.
  - (b) Who are re-employed after their retirement.
  - (c) Persons during the period of leave without allowance for other employment/join spouse.
  - (d) During the course of suspension.
  - (e) Persons eligible for any other form of LTC.
  - (f) Persons appointed on consolidated pay.
  - (g) Part Time Contingent employees.

#### 4. Definitions

##### a. 'Family' means-

- (i) An employee's wife/husband and their surviving unmarried children/step children or legally adopted children wholly dependent upon the employee;
- (ii) In order to avail LTC to the family members, every Government employee should furnish a list of family members who are dependent on him and the same has to be recorded in the Service Book of the employee. As and when there is change in the family members, either due to addition or deletion, the employee should furnish a revised list duly furnishing reasons for the same. Such revised list of family members should also be recorded in the relevant page (Family Particulars-page 5) of Service Book of the employee. At the time of submitting application for availing LTC, the Government employee should indicate the details of family members for whom the concession is proposed to be utilized. The authority competent to permit the employee to avail LTC should verify the correctness of the family members furnished in the application with the entries recorded in the service book of the employee and satisfy itself before according permission.

b. 'Hometown' means- The town or village or any other place declared as such by Government servant and accepted by the Controlling Officer. (If the home town is situated outside the state, the claim shall be limited to last point within the State in that direction.)

c. Shortest direct route- The Government's assistance will be limited to the fare by the shortest direct route calculated on a through ticket fare, irrespective of the fact whether the journey was performed by shortest or any other route.

'Shortest direct route' means the route by which a traveller can most speedily reach his destination by ordinary modes of travelling. In case of doubt, the Government shall decide the shortest of two or more routes. (KSR Part II Rule 13(b)).

#### 5. Admissibility of Leave Travel Concession-

- (i) The Leave Travel Concession shall be admissible to the persons of the categories specified in clause (i), (ii), (iii) of Rule (2) above with family, only once during the entire service, if they have

completed fifteen years (15 years) of regular continuous service under the State Government or in aided educational institutions or taken together on the date of journey sought to be performed. For the purpose of computing this period, the service rendered by the Government servant qualifying for pension alone will be reckoned.

- (ii) The Leave Travel Concession shall be admissible to all eligible persons for a maximum period of 15 days including holidays.
- (iii) The Leave Travel Concession shall be admissible during any period of leave, other than Casual leave, Special casual leave and Maternity leave in the case of regular employees. The period of absence on account of availing Leave Travel Concession shall be regularised by granting earned leave, half pay leave, commuted leave or leave without allowance under Rule 88, Part I, KSRs.
- (iv) Teachers of schools and colleges will be allowed LTC on vacation.
- (v) LTC shall be admissible during leave preparatory to retirement.
- (vi) Originals of the train tickets/bus tickets/air tickets etc should be produced with the claims.

6. **Place of Visit**- Place of visit can be any place in India subject to a maximum of 6,500 km (combined distance of to and fro journeys to the destination), subject to the other provisions in the rules.

7. **Place of visit to be declared in advance**- When the concession to visit any place in India is proposed to be availed of by the Government Servant and members of his family, the intended place of visit should be declared by the Government Servant in advance to his Controlling Authority. It cannot be changed after the commencement of the journey.

**Exception:** *Government may consider the request for change made before the commencement of the journey owing to conditions beyond the control of the Government Servant.*

8. **Reimbursement**- Government will reimburse 100% of the to and fro fare by air/rail/road/steamer, as per the entitlements of the Government servant on tour as contemplated in Part II KSRs. The assistance admissible will be the actual fare admissible subject to entitlement, for the actual distance travelled from the home town of the Government Servant to the declared destination. But incidental expenses and DA for halt as admissible on Tour T.A, will not be granted.



9. **Different Classes in the same journey-** A Government Servant may travel by train in a lower or higher class, but Government assistance would be limited to the fare of the accommodation of the entitled class to the officer on tour T.A as per rules in Part II KSRs. However, for travel in a lower class, the admissibility of assistance would be the rate of actual fare charged in that class. The extra cost incurred for the reservations/safety charges will also be reimbursable.

10. **Grant of Advance-**

- (a) Advance upto 90% of the estimated fare which Government would have to reimburse in respect of the cost of the journey both ways shall be admissible.
- (b) The Sanctioning Authority can sanction advance to an officer at the rate prescribed at (a) above.
- (c) The final bill should be preferred within one month of the completion of return journey. If that is not done, the entire advance should be recovered from the next salary bill of the incumbent after completion of 30 days' grace period. The Drawing and Disbursing Officer (DDO) will be responsible and liable to pay the entire amount with penal interest, if he does not make the recovery in time. If the advance amount is not utilized for the purpose, or if the journey is not commenced within 30 days from the drawal of advance from Treasury, the entire amount should be recovered with 18% interest and disciplinary action should be taken.
- (d) When no advance is drawn by the Government Servant, the right of a Government Servant for reimbursement of LTC claim stands forfeited or deemed to have been relinquished, if the claim for it is not preferred within three months of the date of completion of return journey.
- (e) In the case of an officer on deputation who avails of LTC immediately on reversion but before joining his parent office, the borrowing department may grant the advance in consultation with the parent department and enclose a copy of the order to the parent department to enable them to watch the adjustment of the advance.

- (f) If an Officer takes an advance under this scheme, he should ensure that the outward journey is commenced within 30 days from the date of grant of the advance.
- (g) A proper record of advance sanctioned under the scheme should be maintained by the controlling officer and the sanctioning authority.
- (h) Appropriate entries should be made in the service book of the employees.
- (i) The Head of Department /Controlling Officer should keep a watch over the position of outstanding advances paid up to the end of the previous month and issue necessary orders regarding recovery of advance due for adjustment.
- (j) Normally, the advance should be refunded in full if the outward journey is not commenced within 30 days of the grant of advance.
- (k) The claims for adjustment of the advance should be preferred within one month of the completion of the return journey. If no advance has been drawn, the claim should be preferred within 3 months.
- (l) The Controlling Officers should maintain a register of LTC claims and advance registers. The register should be closed monthly on the last day and put up to the Head of office for obtaining orders in regard to recovery of outstanding advances due for adjustment.
- (m) After disbursing the advance, if the government employee dies before actually performing the journey, the entire advance shall be recovered from the entitlements due to the legal heirs.
- (n) If the government employee dies after performing the journey but before preferring the claim, the family members may claim the entitlements to be disbursed by the DDO concerned.

**11. Government servants deputed to posts in PSUs, Autonomous bodies**

**etc.-** The Government servants on deputation / foreign service with the PSUs /Autonomous bodies/ Boards etc will be eligible for the concession, provided that provision for its admissibility has been incorporated in the orders placing them on deputation. The cost of the concession in all such cases shall be met by the borrowing organization.

**12. Provision applicable when both husband and wife are employed-**

- (a) When the spouse of the Government servant is employed, the State Government servant should furnish a certificate at the time of preferring the claims for LTC as prescribed in Appendix II.
- (b) When both husband and wife are employed in State Government service, LTC claim should be preferred by any one of them only.

(c) The husband or wife who avails LTC as a member of the family of the spouse, cannot claim independently for self.

13. **Mode of conveyance for availing LTC-** LTC will be admissible for the journey performed by rail / by road / by steamer / by air. However, the claim will be restricted to the actual expenses limited to the railway/road/steam/air fare by the authorised class of accommodation according to the eligibility of the officer on tour as contemplated in KSRs Part-II.

14. **Sanctioning Authority-** The Controlling Officers are authorised to sanction LTC to their subordinate Officers. In the case of Head of Department, the sanctioning authority will be the Government in the Administrative Department concerned. A copy of the sanctioning order shall be endorsed to the Accountant General (Audit).

15. **Check list for determining amount of LTC Advance-**

1. Rail fare to and fro by the entitled class or the class by which the official purposes to travel, whichever is less :₹
2. Number of entitled persons for whom advance is claimed :₹
3. Amount reimbursable to the Official :₹
4. Amount of advance admissible (90%) :₹

16. **Checklist for scrutinizing LTC claims-**

1. Whether the Government Servant has completed 15 years of continuous service on the date of the journey?
2. Whether the claim has been preferred within one/three months of the date of completion of the return journey?
3. Whether the claim is for the journey performed within India to a maximum of 6500 KMs, (combined distance of to and fro journey to the destination)?
4. Relationship of the employee with the members of the family and age.
5. Whether the claim is by the shortest route?
6. Whether the Government Servant has previously intimated before the journey was undertaken?
7. Whether the journey has been recorded in the Service Book of both the parties, if husband and wife are employed under State Government?

8. Whether the concession has been availed previously?
9. Whether tickets/cash receipts in original are produced with the claims?
17. **'Penalty for misuse or abuse of LTC'**- In case, where misuse/abuse of LTC is proved, the competent authorities shall take action as indicated below:
- (i) The entire amount, if drawn and disbursed shall be recovered in one lumpsum with 18% interest.
  - (ii) The right of the Government employee for availing the LTC shall be forfeited for the rest of the service.
  - (iii) Disciplinary action shall be taken against the employee as per Rules.
  - (iv) If the Government servant is fully exonerated of the charge of fraudulent claim of Leave Travel Concession, he shall be allowed to avail the concession withheld earlier.
18. **Penalties for misuse/abuse of advance drawn for Leave Travel Concession-** In case where misuse/abuse in refunding the unutilized portion of advance drawn and paid, is proved, the competent authorities shall take action as indicated below:
- (i) The entire amount of unutilized advance alongwith the penal interest @ 18% per annum and as modified from time to time shall be recovered in one lumpsum.
  - (ii) The action referred to in items (ii) and (iii) of clause (17) above shall also be taken.
19. **Head of Account-** Expenditure under LTC shall be met from the provision under '04-1 Tour TA' of the relevant head of account to which the Travel Expenses of the employee is normally debited.

By Order of the Governor  
**Dr. V.P. JOY**  
 Principal Secretary (Finance)

To

The Principal Accountant General (Audit), Kerala,  
 Thiruvananthapuram.  
 The Accountant General (A & E), Kerala, Thiruvananthapuram.  
 All Heads of Departments and Offices.  
 All Drawing and Disbursing Officers.  
 All Departments (all sections) of Secretariat.  
 The Secretary, Kerala Public Service Commission (with C.L.)  
 The Registrar of High Court, Kerala (with C.L.)  
 The Registrar, Kerala/Cochin/Kozhikode/Kannur/Kottayam/

**PROCEEDINGS OF THE DIRECTOR OF HEALTH SERVICES, THIRUVANANTHAPURAM**

.....

Sub :- Establishment – Health Services Department – General Transfer 2013 - Senior  
Optometrist – Final Orders issued.

Read:- Order No. EF4-12899/13/DHS dated 12-03-2013

**ORDER No. EF4-12899/13/DHS DATED 03-04-13**

The following Senior Optometrists are transferred and posted at the Institution noted against each. The date of relief and joining duty should be reported promptly. The transfer of Serial No. 1,2,3,4,5,6,11,12,15 are at request.

<b><u>Sl.No.</u></b>	<b><u>Name and Institution</u></b>	<b><u>Institution to which transferred</u></b>
1.	Smt. Sanitha.D Taluk Head Quarters Hospital Alappuzha	Government Model District Hospital Peroorkada, Thiruvananthapuram vice Smt.Geethakumari.R transferred
2.	Smt.Beena.V Taluk Head Quarters Hospital Haripad, Alappuzha	Taluk Head Quarters Hospital Nedumangad, Thiruvananthapuram vice Smt.Jasium.U transferred
3.	Sri.Subhash.K.S. Taluk Head Quarters Hospital Karunagappally, Kollam	District Hospital Neyyattinkara, Thiruvananthapuram vice Smt.Sudha Devi.J transferred
4.	Smt.G.Ushakumari Taluk Head Quarters Hospital Mannarkkad, Palakkad	Taluk Head Quarters Hospital Parassala, Thiruvananthapuram vice Sri. Rajendran.A transferred
5.	Sri.Vimal Roy.T General Hospital Changanassery, Kottayam	Taluk Head Quarters Hospital Sasthamcotta, Kollam vice Smt.Retnakumari.L transferred
6.	Smt.Ushakumari.S General Hospital Pala Kottayam	Taluk Head Quarters Hospital Karunagappally, Kollam vice Sri.K.A.Subhash transferred
7.	Smt.Ameer Hamsath Beegum District Hospital Kozhencherry, Pathanamthitta	District Hospital Tirur, Malappuram vice Vishnumaya transferred
8.	Smt.R.Geethakumari Government Model District Hospital, Peroorkada, TVM	Taluk Head Quarters Hospital Pulinkunnu, Alappuzha vice Smt.Sanitha.D transferred

- |   |  |
|---|--|
| 9. Smt.Jasim.U<br>Taluk Head Quarters Hospital<br>Nedumangad                    | General Hospital, Changanassery<br>Kottayam<br>vice Vimal Roy.T transferred                    |
| 10. Smt.Sudha Devi.A<br>District Hospital<br>Neyyattinkara, TVM                 | General Hospital Pala,<br>Kottayam<br>vice Ushakumari.S transferred                            |
| 11. Smt.Sujatha.B<br>Taluk Head Quarters Hospital<br>Chavakkad, Thrissur        | Taluk Head Quarters Hospital<br>Harippad, Alappuzha<br>vice Beena.V transferred                |
| 12. Sri.V.G.Sathianesan<br>Taluk Head Quarters Hospital<br>Ottappalam, Palakkad | Taluk Head Quarters Hospital<br>Chavakkad, Thrissur<br>vice Sujatha.B transferred              |
| 13. Sri.A.Rajendran<br>Taluk Head Quarters Hospital<br>Parassala, TVM           | Taluk Head Quarters Hospital<br>Ottappalam, Palakkad<br>vice Sri.V.K.Sathianesan transferred   |
| 14. Smt.Retna Kumari.L<br>Taluk Head Quarters Hospital<br>Sasthamcotta, Kollam  | Taluk Head Quarters Hospital<br>Mannarkkad, Palakkad<br>vice G.Ushakumari transferred          |
| 15. Smt.Vishnu Maya.T<br>District Hospital, Tirur<br>Malappuram                 | District Hospital, Kozhencherry<br>Pathanamthitta<br>vice Smt.Ameer Hamsath Beegum transferred |

Sd/-  
DR.P.K.JAMEELA  
DIRECTOR OF HEALTH SERVICES

To The Incumbents (through the Head of Institution)

Copy to: 1) All District Medical Officers of Health  
2) Website for publication,  
3) File/Stock file/Spare

//FORWARDED//

  
SUPERINTENDENT

**PROCEEDINGS OF THE DIRECTOR OF HEALTH SERVICES,  
THIRUVANANTHAPURAM**

Sub:- HSD - Estt. - Promotion to the Cadre Dist. Ophthalmic Coordinator - Orders issued.

Read:- Government notification letter No.6442/H1/2013/H&FWD dated 23/03/13

**ORDER NO.EF4/2799(1)/2010/DHS DATED: 06.04.2013**

The following Senior Optometrists who are included in the select list of the Departmental promotion committee and approved by Government are provisionally promoted as DISTRICT OPHTHALMIC Coordinator in the scale of pay of Rs.19240-34500 as per rule 28 b(1) of KSS & SR and posted at the stations noted against each.

- |  |  |
|--|--|
| 1. <del>Smt.A</del> Anithakumary.T<br>Taluk Head Quarters Hospital<br>Chittor,<br>Palakkad | District Model Hospital<br>Palakkad        |
| 2. Sri.Abdul Jabbarudeen.M<br>General Hospital<br>Pathanamthitta                           | District Hospital<br>Mannanthavady, Wynadu |
| 3. Smt.Baiju.K.R<br>Taluk Head Quarters Hospital<br>Thrippunithura<br>Ernakulam            | District Hospital<br>Kanhangad, Kasargode  |

The RTC should be forwarded promptly.

**Sd/-**

**Dr.P.K.JAMEELA  
Director of Health Services.**

To The Officers( through the Superintendents)

Copy to:-

1. The Accountant General, Kerala, Thiruvananthapuram.
2. The District Medical Officer of Health, Ernakulam/Kasaragod/Wynadu/Pathanamthitta/Palakkad
3. The Superintendent, District Hospital Kanhangad, Kasaragod/Wynadu/Palakkad/The Superintendent, General Hospital Pathanamthitta/ Taluk Head Quarters Hospital ,Thrippunithura/Chittor, Palakkad
4. File/Stock file/Spare.

//Forwarded//

  
**SUPERINTENDENT**

**PROCEEDINGS OF THE DIRECTORE OF HEALTH SERVICES,**  
**THIRUVANANTHAPURAM**

Sub:- Estt.- H.S.Dept-Transfer & Postings of Senior Optometrists - Orders issued.

**ORDER No. EF4-12899/2013/DHS. DATED 09.04.2013**

The following Senior Optometrists are transferred and posted at the stations noted against each, at request.

1. Smt. Sreelatha. M.M., Taluk Head Quarters Hospital, Nedumkandam, Idukki	General Hospital, Pathanamthitta (vice Sri. Abdul Jabbarudeen. M promoted)
2. Smt. V. Ushakumari, District Hospital, Palakkad.	Taluk Head Quarters Hospital, Thrippunithura, Ernakulam (vice Smt. Baiju. K.R. promoted)
3. Smt. Ambikakumari. V.R., District Hospital, Kanhangad, Kasaragod.	Taluk Head Quarters Hospital, Nedumkandam, Idukki ( vice Smt. Sreelatha. M.M., transferred)

RTC should be forwarded promptly.

Sd/-  
Dr. P.K. Jameela  
Director of Health Services .

To  
The incumbents (through the Superintendent)

Copy to:

1. The Accountant General, Kerala.
2. The District Medical Officer of Health, Pathanamthitta/  
Ernakulam/Palakkad/Kozhikode.
3. The Superintendent, District Hospital, Palakkad/ Kozhikode.  
General Hospital, Pathanamthitta/THQH. Nedumkandam,  
Idukki./ Thrippunithura, Ernakulam.
4. File/Stock file.

// Forwarded //

  
Superintendent.



**PROCEEDINGS OF THE DIRECTOR OF HEALTH SERVICES, THIRUVANANTHAPURAM**

Sub:- Estt – HSD – Ratio Promotion of Senior Optometrists – Orders issued.

Read:-Order No. EF4-2799(1)/10/DHS/dtd: 6.4.2013.

**ORDER No.EF4-98020/08/DHS/DATED: 09.04.2013**

Consequent on promotion of Smt. Anithakumari.T, Sri. Abdul Jabbarudeen.M and Smt.Baiju.K.R, Senior Optometrist as District Ophthalmic Co-Ordinators, three vacancies of Senior Optometrists are arised. Therefore the following Senior most Optometrists Grade I are granted ratio promotion as Senior Optometrist in the scale of pay of Rs. 18740-33680 w.e.f the date noted against each and posted at the institution noted against their names.

SL. No.	Name & Institution and Date of Birth	Rank No.	Date of effect	Station posted
1.	Smt. Ashalatha.G, CHC, Upputhara, Idukki (04.03.1966)	152	6.4.2013	District Hospital, Palakkad.
2.	Smt. Mani.C.V, PHC, Manaloor, Thrissur (01.05.1967)	153	6.4.2013	THQH, Chittur, Palakkad
3.	Smt.Kumari Radhamani.V, CHC, Vellarada, Thiruvananthapuram (29.05.1960)	154	6.4.2013	District Hospital, Kanhanged, Kasargod

The head of the Institution will verify the Date of birth, Rank No. and other details of the incumbents and if any discrepancy is noted the same should be reported to this office forth with. A declaration may also obtained from the incumbent to the effect that excess amount paid if any detected in subsequent scrutiny of their pay fixation and consequent on their promotion will be refunded and the declaration should be pasted in the Service Book under proper attestation. Arrears of pay will be drawn and disbursed as per existing rules only.

**Sd/-**  
**DR.P.K.JAMEELA**  
**DIRECTOR OF HEALTH SERVICES**

To

The Incumbents (Through Head of the Institution)

Copy to:-

1. The Accountant General Kerala, Thiruvananthapuram
2. The District Medical Officer (H), Thiruvananthapuram/Idukki/Thrissur/  
Palakkad/Kasargod.
3. The Superintendent, District Hospital, Palakkad/Kanhanged, Kasargod.
4. The Superintedent, THQH, Chittur, Palakkad.
5. The Medical Officer i/c, CHC, Upputhara, Idukki/PHC, Manaloor, Thrissur/CHC,  
Vellarada, Thiruvananthapuram.
6. File/Stock File/Spare.

**//Forwarded//**

  
**Superintendent**

**PROCEEDINGS OF THE ADDITIONAL DIRECTOR OF HEALTH SERVICES  
(MEDICAL), DIRECTORATE OF HEALTH SERVICES, THIRUVANANTHAPURAM.**

Sub : Estt:- HSD- General Transfer 2013 – Optometrist Gr. I & II – Final orders issued.

Read: 1. Order No.EF4-15388/13/DHS, dated 11.03.2013.  
2. Transfer applications from Optometrists.  
3. GO(P) No.12/2004/P&ARD, dated 10.09.2004.

**ORDER No.EF4 - 15388/2013/DHS, Dated 10.04.2013.**

The following Optometrists Gr. I & II are transferred and posted at the stations noted against each. The date of relief and joining duty should be reported promptly.

Sl. No.	Name and Present Station	Institution to which posted
1	Smt. Sindhumol.P, PHC, Kattapana,Idukki.	CHC, Paika, Kottayam (Vice Ambili K.S transferred)
2	Smt. Ambili K.S, CHC, Paika, Kottayam.	CHC, Malippuram, Ernakulam. (Vice Saliha Beevi transferred)
3	Smt. Saliha Beevi, CHC, Malippuram, Ernakulam.	CHC, Konni, Pathanamthitta. (Vice Sinisha.A transferred ).
4.	Smt. Sindhumol K.S, General Hospital, Alappuzha.	CHC, Palathara, Kollam. (Vice Sajeev.P transferred)
5.	Sri. Sajeev.P, CHC, Palathara,Kollam.	CHC, Vithura,Thiruvananthapuram. (Vice Beena S.K transferred )
6	Smt. Beena S.K, CHC, Vithura, Thiruvananthapuram	PHC, Kattappana, Idukki. (Vice Sindhumol.P transferred )
7	Smt. Jesia P A, PHC, Varappetty, Ernakulam.	PHC, Purappuzha, Idukki. (Vice Bhuvanewari S.K transferred)
8	Smt. Bhuvanewari.S.K, PHC, Purappuzha, Idukki.	CHC, Edamaruku, Kottayam. (Vice Sreelekha K.N transferred)
9.	Smt. Sreelekha K.N, CHC, Edamaruku, Kottayam.	CHC, Muhamma, Alappuzha. (Vice Sageena.K transferred)
10.	Smt. Sageena.K, CHC, Muhamma, Alappuzha.	CHC, Chengamanad, Ernakulam. (Vice Jitha Varghese transferred)
11.	Smt. Jitha Varghese, CHC, Chengamanad, Ernakulam.	CHC, Thalayolapparambu, Kottayam. (Vice Sunila M. Nair transferred)
12.	Smt. Sunila M.Nair, CHC, Thalayolapparambu, Kottayam.	CHC, Vengola, Ernakulam. (Vice Sugandhi.B transferred)

13.	Smt. Suganthi.B, CHC, Vengola, Ernakulam.	PHC, Kottamkara,Kollam. (Vice Bindhi.V transferred)
14	Smt. Bindhi.V, PHC, Kottankara, Kollam.	General Hospital, Alappuzha. (Vice Sindhumol ) transferred
15.	Smt. K.C Rajani, CHC, Ramamangalam, Ernakulam.	CHC, Muttom, Idukki. (Vice Ambili.P Kumar transferred)
16.	Smt. Ambili.P Kumar, CHC, Muttom, Idukki.	PHC,Varapetty, Ernakulam. (Vice Jesia P A transferred)
17.	Smt. Raji V.R, CHC, Melattur, Malappuram. (wife of Jawan)	CHC, Vellarada, Thiruvananthapuram. (Vice Kumari. Radhamani.V Promoted)
18.	Smt. Sujatha P.V, PHC, Pizhala, Ernakulam.	CHC, Perinjanam, Thrissur. (Vice Swapna V.B transferred)
19.	Smt. Swapna V.B, CHC, Perinjanam, Thrissur.	PHC, Mattathur, Thrissur. (Vice Vincent.J transferred)
20.	Smt. Suchitra V.R, General Hospital, Manjeri.	CHC, Vellanad, Thiruvananthapuram. (Vice Smt. Remani. R.S transferred)
21.	Smt. Ramani.R.S, CHC, Vellanad, Thiruvananthapuram	Taluk Head Quarters Hospital, Kanjirapally, Kottayam (Newly created Post.)
22.	Sri. Justin Abraham, CHC, Kanyakulangara, Thiruvananthapuram.	CHC, Ramamangalam, Ernakulam, (Vice K.C Rajani transferred).
23.	Smt. Jaya.V, CHC, Thuravoor, Alappuzha.	CHC, Mynagappally, Kollam. (Vice Bindhu K.S transferred)
24.	Smt. Bindhu K.S, CHC, Mynagappally, Kollam.	CHC, Thuravoor, Alappuzha. (Vice Jaya.V transferred)
25.	Smt. Sinisha, CHC, Konni, Pathanamthitta.	PHC, Cheruthana, Alappuzha. (Vice Girija .U transferred)
26.	Girija .U PHC, Cheruthana, Alappuzha.	CHC, Kanyakulangara, Thiruvananthapuram. (Vice Justin Abraham transferred)
27.	Smitha.T, CHC, Keechery, Ernakulam.	PHC, Aaloor, Thrisur. (Vice Sangeetha Varghese transferred)
28.	Smt. Sangeetha Varghese, PHC, Aaloor,Thrissur.	CHC, Keecheri, Ernakulam, (Vice Smitha.T transferred)
29.	Sri. Shahul Hameed, PHC, Urangathiri, Malappuram.	General Hospital, Manjeri. (Vice Viji Mathew transferred)
30.	Smt. Viji Mathew, General Hospital, Manjeri.	General Hospital, Kozhikode. (Vice Dilshad M.T transferred)
31.	Sri. Dilshad M.T, General Hospital, Kozhikode.	PHC, Kondotty, Malappuram. (Vice Smt. Abida.K transferred)

32.	Smt. Abida.K, PHC, Kondotty, Malappuram.	PHC, Urangathiri, Malappuram. (Vice Shahul Hameed) transferred
33.	Smt. Divya Chandran, PHC, Kuzhalmannam, Palakkad.	CHC, Cherppu, Thrissur. (Vice Saritha Kumari S.L transferred.)
34.	Smt. Saritha Kumari S.L, CHC, Cherpu, Thrissur.	CHC, Erumapetty, Thrissur.. (Vice Sheena P.T transferred.)
35.	Sri. K.A Babu, PHC, Parali, Palakkad.	CHC, Manalur, Thrissur. (Vice Smt. Mani.C.V promoted)
36.	Smt. Sandhya Lakshmi, PHC, Alanelloor, Palakkad.	PHC, Pizhala, Ernakulam. (Vice Sujatha P.V transferred.)
37.	Smt. Resmi.M, CHC, Kumbala, Kasargode.	PHC, Upputhura, Idukki, (Vice Smt.G.Asalatha promoted)
38.	Smt. Anooja Gangadharan, THQH, Peringome, Kannur	CHC, Melathur, Malappuram. (Vice Raji V.R transferred.)
39.	Smt. Lijeena.A, CHC, Iriveri, Kannur.	PHC, Parali, Palakkad. (Vice K.A Babu transferred)
40.	Sri. Vincent.J, CHC, Mattathur, Thrissur.	General Hospital, Manjeri, (Vice Suchitra V.R transferred)
41.	Smt. Sheena P.T, CHC, Erumapetti, Thrissur.	CHC, Kuzhalmannam, Palakkad. (Vice Divya Chandran transferred)

**Sd/-**  
**Dr. Kumari G. Prema,**  
**Addl. Director of Health Services. (Medical)**

To  
The incumbents.

- Copy to: 1. The District Medical Officer of Health,  
Thiruvananthapuram/Kollam/Kottayam/ Alappuzha/Ernakulam/Thrissur/  
Palakkad/Malappuram/ Idukki/Pathanamthitta/Wayanad/Kozhikode/  
Kannur/Kasaragod.  
2. The Superintendent.....  
3. The Medical Officer in-charge, CHC/PHC .....

4. Web Site for Publication.  
5. File/S.F

//Forwarded//

  
**Superintendent.**