

TERAPIA OCUPACIONAL NA ADAPTAÇÃO DE POSTO DE TRABALHO PARA PESSOA COM DEFICIÊNCIA FÍSICA: RELATO DE EXPERIÊNCIA SOB A ABORDAGEM DA ERGONOMIA*

Occupational Therapy in the adaptation of workstation for person with physical disability: experience report on ergonomic approach

Terapia Ocupacional en la adaptación de puesto de trabajo para persona con discapacidad física: relato de experiencia bajo enfoque de ergonomía

Resumo

A pessoa com deficiência enfrenta inúmeras dificuldades para inserção no posto de trabalho, principalmente relacionadas às barreiras atitudinais e físicas, bem como à restrição no acesso aos dispositivos de Tecnologia Assistiva. O objetivo do estudo foi apresentar a intervenção da Terapia ocupacional, sob abordagem da Ergonomia, no processo de adequação de postos de trabalho para um trabalhador com deficiência física. Trata-se de um relato de experiência, realizado em uma instituição pública, na cidade do Recife-PE, no período de abril a maio de 2018. A partir da análise ergonômica do trabalho (AET), foram verificados mobiliários e equipamentos com dimensões inadequadas em relação às medidas antropométricas da trabalhadora, layout inadequado do ambiente de trabalho e cadeira de rodas com medidas incompatíveis às necessidades da usuária. Diante dos achados, foram propostas recomendações para adequação do posto de trabalho às capacidades da trabalhadora, com base na NR 17, na NBR 9050 e nos princípios do Design Universal, bem como foram indicados dispositivos de Tecnologia Assistiva, com o intuito de promover o aproveitamento da capacidade laboral da trabalhadora e minimizar os impactos negativos da deficiência, tais como as dores e os riscos de acidentes.

Palavras-Chaves: Local de trabalho, Terapia Ocupacional, Ergonomia, Pessoa com deficiência física, Tecnologia Assistiva.

Abstract

People with disabilities face numerous difficulties for inclusion in the workplace, mainly related to attitudinal and physical barriers, as well as the restriction on access to Assistive Technology devices. The objective of the study was to present the intervention of Occupational Therapy, under Ergonomics approach, in the adequacy of jobs for a worker with physical disability. This is an experience report, carried out in a public institution, in the city of Recife-PE, from April to May 2018. From the ergonomic analysis of work (EAW), furniture and equipment with incompatible dimensions with the anthropometric measures of the worker, inadequate layout of the work environment and wheelchair with measures incompatible with the needs of the user. In view of the findings, recommendations were made for adapting the workstation to the worker's capabilities, based on NR 17, NBR 9050 and the Universal Design principles, as well as Assistive Technology devices, in order to promote the use of the workforce capacity and to minimize the negative impacts, such as pain and the risk of accidents.

Keywords: Workplace, Occupational Therapy, Ergonomics, Person with physical disability, Assistive Technology.

Resumen

Las personas con discapacidad enfrentan numerosas dificultades para su inclusión en el lugar de trabajo, principalmente relacionadas con las barreras físicas y de actitud, así como con la restricción del acceso a dispositivos de Tecnología de Asistencia. El objetivo del estudio fue presentar la intervención de la Terapia ocupacional, bajo el enfoque de la Ergonomía, en el proceso de adecuación de puestos de trabajo para un trabajador con discapacidad física. Se trata de un relato de experiencia, realizado en una institución pública, en la ciudad de Recife-PE, en el período de abril a mayo de 2018. A partir del análisis ergonómico del trabajo (AET), se verificaron mobiliarios y equipamientos con dimensiones incompatibles con las medidas antropométricas de la trabajadora, diseño inadecuado del ambiente de trabajo y silla de ruedas con medidas incompatibles a las necesidades de la usuaria. Ante los resultados, se propusieron recomendaciones para adecuación del puesto de trabajo a las capacidades de la trabajadora, con base en la NR 17, en la NBR 9050 y en los principios del diseño universal, así como se indicaron dispositivos de Tecnología Asistiva, con el fin de promover el aprovechamiento de la capacidad laboral de la trabajadora y minimizar los impactos negativos de la discapacidad, tales como los dolores y los riesgos de accidentes.

Palabras clave: Trabajo, Terapia Ocupacional, Ergonomía, Persona con discapacidad física. Tecnología Asistiva.

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QD OLQKD PHGLDQD WRGR PHPEUR VXSHULRU HVTXHUGR H WRGR PHPEU
WXUD PpGLD GRV ORFDLV 3HP EUDQFR' FRPR WUD] D LPDJHP VLQDOL]D
PLWH GHYLGR j YDVFXODUL]DomR DOWHUDGD QDV UHJL}HV)RL SRVVtYH

PHWULD GH WHPSHUDWXUD HP UHJL}HV FRQWUDODWHUDLV GRV PHPEURY
VHUYDGR QD)LJXUD (VWH GHVEDODQoR GH WHPSHUDWXUD HQWUH iUH
YRFDGR SRU SUREOHPDV H[LVWHQWHV GH YDVFXODUL]DomR RX SRU H[SI
GH GHVFRQIRUWR TXH SRGH FDXVDU XPD YDVRFRQVWULomR QDV iUHDV
QXLomR GD FLUFXODomR ORFDO

)LJXUD 5HVXOWDGRV HQFRQWUDGRV QD HVFDOD GH DYDOLDomR GH GHV
FkPHUD WHUPR, JQWFD HODERUDGD SHODV DXWRUDV



'HQWUH DV SHUJXQWDV GRWR UHHDW GLVSRVLWLRYRV GH 7\$ H T
VREUH R VHX VHUYLoR PDQXWHQomR SURFHVVR GH HQWUHJD VHUYLoR
QKXP GRV LWHQV D HQWUHYLVDGD PDUFRX 7RWDOPHQWH VDWLVIHLWD
GH RLWR SHUJXQWDV VHLV IRUDP PDUFDGDV 3RXFR VDWLVIHLWD H Q
TXDWUR SHUJXQWDV WUrV IRUDP PDUFDGDV ³,QVDWLVIHLWD' 4XDQGR V
LWHQV PDLV LPSRUWDQWHV GD VXD FDGHLUD GH URGDV HVFROKHX GLP
³FRQIRUWR 2 FRQIRUWR PDLV HVSHFLILFDPHQWH HVWi GLUHWDPHQWH
FLD WpFQLFD H VHUYLoRV GH VXSRUWH FRQWtQXR

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\$ 7HUDSLD 2FXSDFLRQDO QR FDVR GDV SHVVRDV FRP GHILFLrQFLD

WUDEDOKR SRGH FRQWULEXLU QD DGHTXDomR GR DPELHQWH H GDV WD
GHV 6HJXQGR R &RQVHOKR)HGHUDO GH)LVLRWHUD]SIPDSIDUWHDGRV 2FX
SURFHGLPHQWRV GR WHUDSHXWD RFXSDFLRQDO DYDOLDomR GR GHVHP
QHQWHV GH GHVHPHQKR RFXSDFLRQDO DYDOLDomR SDUD SUHVFULomR
DGDSWDomR DPELHQWDO HP HPSUHVDV DYDOLDomR GD DFHVLELOLGDG
MDPHQWR HUIRQ{PLFR GD HPSUHVD UHGDSDWDomR SURILVLRQDO WUH
WLYD H RXWURV SURFHGLPHQWRV UHODFLRQDGRV j HUIRQRPLD H DWLYD

2V SURFHGLPHQWRV GH DYDOLDomR GHVFULWRV QD SHVTXLVD IRUD
DV HWDSDV GH GLDJQyVWLFV HUIRQ{PLFR GD HPSUHVD UHGDSDWDomR SDUD WLU GRV S
WURV DSUHVHQWDGRV

D 1%5 GD \$VVRFLDomR %UDVLOHLUD GH 1RUPDV 7pF QLFUDV \$%17 V
WpFQLFDWURV DQWURSRPpWULFRV SDUD R XVXiULR GH FDGHLUD G
E 15 WUDWD GD (UIRQRPLD HVWDEHOHFHQGR SDUKPHWURV TXH SHUF
o}HV GH WUDEDOKR jV FDUDFWHU tVWLFDV SVLFRILVLRQyJLFDV GRV WUD
F 'HVLJQ 8QLYHUVDO p R FRQFHLWR GH DFHVLELOLGDGH TXH GHYH VH
WRV GHVHQYROYLGRV GH IRUPD TXH VHMDP XVDGRV SHOR PDLRU Q~PH
FDV GLIHUHQWHV

\$ SDUWLU GD TXDUWD HWDSGD \$(7 FRP D GHVFULomR GR GLDJQy
LGHQWLILFDGRV RV IDWRUHV GH ULVFR H[LVWHQWHV QD VLWXDomR GH V
GH 7UDEDOKR H (PSUHJR ID]HP SDUWH GRV ULVFRV HUIRQ{PLFRV SRU H
UD LQDGHTXDGD DVVXPLGD GXUDQWH D UHDOL]DomR GD WDUHID H ULVF
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GH WUDEDOKR DFDUHWQGR HP SUHMxt]RV IXQFLRQDLV H SVLFRVVRFI

(P IXQomR GLVVR IRUDP HODERUDGDV UHFR-PRQGDomR LPSRUWDQFLH V
OLHQWDU TXH

\$ HUIRQRPLD QmR HVWDEHOHFH GLIHUHQoD TXDQWR DR WUDE
rQFLD RX QmR SRUWHVRLUSPQHTXH QmR H[LVWH XPD HUIRQR
SDUD SHVVRDV FRP GHILFLrQFLD PDV HOD SRGH DSUHVHQWDU
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\$SyV GHOLPLWDomR GRV SUREOHPDV H VXDV FDXVDV QD TXLQWD H
FLGDWFRPHQGDomR}HV SDUD PHOKRULD GDV VLWXDomR}HV LQDGHTXDGDV FR
GLDJQyVWLFV HUIRQ{PLFR (VWDV IRUDP VXEPHWLGDV j DQiOLVH H GLVF
TXDO SDUWLFVSRX GXUDQWH WRGR SURFHVVGR GD GHFLVmR H HVFROKD

4XDQWR DR PRELOLiULR QR SRVWRVbHPWGDIEEDKR LGGDORWXUD GD
GR DUPIULR H GLVSRVLomR GRV HTXLSDPHQWRV VFDQQHU H IRQWH GH
(VWD UHFRPHQGDomR HVWi UHODFLRQDGD DR DOFDQFH PDQXDO KDELOI
UHDOLJDomR H GGLPHQWR DR S~EOLFR SUHQFKLPHQWR GH GRVFXUPLHQWDO
WDV QD DQiOLVH GD DWLYLGDGH \$ WUDEDOKDGRUD FRQVHJXH UHDOLJD
D DGHTXDomR GRV PRELOLiULRV SRVVLELOLWDUi D UHDOLJDomR GD DWL
UDP XWLLOLJDGRV FRPR UHIHUrQFLD RV SDUKPHWURV DQWURSRPpWULFRV
FDGHLUD GH URGDV

&RQIRUPH D 15 RV PRELOLiULRV GR ORFDO GH WUDEDOKR GHYHFP
FDV GR WUDEDOKDGRU FRPR DOWXUD SHVR H F-RPSVUIGFH Q WVRU GRH FRPGRB
PXGDQoDV SRVWXUDLV DOpP GDV QHFHVVLGDGHV GD WDUHID SRLV QHC
YHO \$)LJXUD LOXVWUD D VLWXDomR DWXDO H DV VXJHVW}HV GH DMXV
DGHTXDomR GR PHVPR jV FDSDFLGDGHV ItVLFDV H VHQVRULDV GD WUDE

)LJXUD-3URSRVWD GH DGHTXDomR)GRWRHFLDLEULUDGD SHODV DXWRUDV

4XDQWR j FLUFXODomR H iUHD GH PDQREUD GD FDGHLUD GH URGDV
OKR WDPEpP FRQKHFLGD FRPR iVHDGGHFRIQFLomR DWQGDPHQWDO SDUD F
PHQWR GHQWUR GR HVSDoR H SDUD IDFLOLWDU R PDQXVHLFDGGRURH XP
HVSDoR p SODQHMDGR SDUD XP XVXiULR GH FDGHLUD GH URGDV p LPSR
SURSRUFLRQDU DR LQGLYtGXR PRELOLGDGH QD YHJXH DSSURRSHWR LHPFD
SODQWD EDLJD DQWHV H GHSRLV GD DGRomR GDV PHGLGDV

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6REUH DV SRUWDV GD VDOD DSHVDU GD PRGLILFDOR UHDOLJGDG REHGHHQGR j QRUPD GD \$%17 GH FRPSULPHQWR PQLVH R PHWUR DMXVWH Vy SHUPLWH D SDVVDJHP GD FDGHLUD GH URGDV PDV QmR SRV SRUWD GHYLGR j IDOWD GH HVSDOR SDUD D PDQREUD QR EDQKHLUR H Q PD UHFRPHQRDXVXEVWLWXLomR SRU XPD SRUWD GH FRUUHU (VVH VLVV PHQWR XPD YH] TXH D FDGHLUD SRGH VHU SRVLF&LRQV D JHQGDURDOR GH PHQRU FXVWR SRU SHOD LQVWDODOR GH EDUUD GH DSRLR QDV DEHUWXUD H IHFKDPHQWR

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\$V UHFRPHQGDOR HV D VHJXLU HVWmR HQTxdGUDGDV QD FDWHJRULD 7\$ D TXDO UHPHWH HVVHQFLDOPHQWH j LQFOXVmR H TXDOLGDGH GH TXH IDYRUHFHP FRPSHQVDP SRWHQFLDOL]DP H RX DX[LOLDP KDELOLGD SURPHWLGDV H VmR HVWUDWpJLDV IUHTXHQWHPHQWH XWLOL]GDV SHO

2V SULPHLURV SURGXWRV GH 7\$ SUHVFULWRV SDUD R FDVR YLVDUD FDGHLUD GH URGDV IRUDP HOHV DVVHQWR RUWRSpGLFR H DSRLR SDUD FRP VXSruwh GH SDQWXUULOKD \$ FDGHLUD GH URGDV p GHWHUPLQDQV FRP PRELOLGDGH UHGx]LGD TXDQGR DGHTXDGD DRV GLYHUVRV QtYHLV

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LQVWUXPHQWR GH WUDEDOKR SDUD R LQGLYtGXR TXH D XWLOL]D p XP
UHDOL]DomR GDV WDUHIDV ODERUDLV

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PRYLPHQWRV UHDOL]DGRV VmR RV GRV SXQKR V H GHGRV)RL LGHQWLIL
PRELOLGDGH UHGX]LGD QHVVDV HVWUXWXUDV DVVLP R SODQR LQFOLQ
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ULRUHV D DYDOLDomR GD DQJXODomR GR SODQR LQFOLQDGR VHUi UHDO
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&RQIRUPH YHULILFDGR DWUDYpV GD DERUGDJHP HUIRQ{PLFD p SR
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YHQo}HV GHVVH SURILVLRQDO YLVHP R DSURYHLWDPHQWR GDV FDSDFL
rQFLD FRP FRQIRUWR H VHJXUDQoD &RQIRUPH)HUUHLUD R DPELHQWH
GHYH VH UHVWULQJLU DSHQDV DR FRQRUQR DPELHQWDO GR ORFDO PI
PpWRGRV GH WUDEDOKR H D VXD RUJDQL]DomR 'R PHVPR PRGR p GH S
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HVSHUDGRV GLYHUVRV QtYHLV GH WROHUKQFLD IUHQWH jV GLILFXOGDG
R ROKDU GHYH VHU HVSHfILFR SDUD FDGD WUDEDOKDGRU H SRVWR GH

&RPR R IRFR GD HUIRQRPLD ODERUDO HVWi HP UHODFLRQDU R FRQ
OKR FRP R IXQFLRQDPHQWR H DV FRQVHTXrQFLDV JHUDGDV DR WUDEDOK
HVWXGR GDV KDELOLGDGHV H HVWUXWXUDV QHFHVViULDV SDUD GHVHQY
FHQWUDO QD SUIWLFD GR WHUDSHXWD RFXSDFLRQDO TXH DWXD QD VD~

'HYLGR DR WUDEDOKR SRVVXLU XP SDSHO IXQGDPHQWDO QD YLGD C
SDFLRQDO DWXD UHDOL]DQGR D LGHQWLILFDomR GRV IDWRUHV GH ULVF
WUDEDOKDGRU QR PHUFDGR GH WUDEDOKR LQFOXQLQGR D SHVVRD FRP C
HP FRQVLGHUDomR D 5HVROXomR QR TXH GLVS}H VREUH VXDV FRPSH
OKDGRU DWXDQGR HP SURJUDPDV GH HVWUDWpJLDV LQFOXVLYDV GH S
GD VD~GH (VSHFLILFDPHQWH QRV LQFLVRV 9 H 9,, FRQVWDP

9 ±, GHQWLILFDU DYDOLDU H REVHUYDU RV IDWRUHV DPELHQWDLV TXH S
RFXSDFLRQDO GR WUDEDOKDGRU H D SDUWLU GR GLDJQRVMDLFR LQWH
VHJXUR H IXQFLRQDO SDUD R GHVHPHQKR ODERUDO

9,- 5HDOL]DU D DQiOLVH HUIRQ{PLFD GD DWLYLGDGH ODERUDO FRQVLG
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PHQV}HV GR WUDEDOKR GH DFRUGR FRP D FODVVLILFDomR GD HUIRQR
FRJQLWLYRV H RUJDQL]DFLRQDLV

3RU ILP GLDQWH GRV DFKDGRV GHVWDFDPRV TXH WHUDSHXWD RFX
D LQFOXVmR ODERUDO GR WUDEDOKDGRU FRP GHILFLrQFLD D SDUWLU G
GDV H[LJrQFLDV GDV WDUHIDV ODERUDLV GH PRGR D DGHTXDU R SRVWR
FHVVLGDGHV H OLPLWDo}HV GHVVH WUDEDOKDGRUHLSDP&GDGRV FR&DERU
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H GRV RXWURV WUDEDOKDGRUHV VREUH D UHDO FDSDFLGDGH GDV 3
SRGHULD FRODERUDU FRP SURJUDPDV GH FRQVFLHQWL]DomR H HVFO
H FRQVHTXrQFLDV IXQFLRQDLV EXVFDQGR GHVSHUWDU D HPSDWLD H D
YLGRV QD HPSUHVD

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'LDQWH GDV DQiOLVHV D SDUWLU GR HVWXGR HUIRQ{PLFR IRUDP
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7\$ XWLOL]DGD

)RUDP SURSRVWDV UHFRPHQGD0}HV D VHUHP LPSOHPHQWDGDV QR D
OKR HP LQWHUYHQomR GD 7HUDSLD 2FXSDFLRQDORXDFHTXDRRBJQL]Bom
ELOLiULR H SUHVFULomR GH WHFQRORJLD DVVLVWLYD IDYRUHFHQGR R
UDO GD WUDEDOKDGRUD H SHUPLWLQGR D VDWLVIDomR SHVVRDO PLQLF
PR DV GRUHV H RV ULVFRV GH DFLGHQWHV

)RL SRVvtYHO DSUHVHQWDU D LQWHUYHQomR GR WHUDSHXWD RFXS
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FLD GR SURFHVVGR GH DYDOLDomR H FROHWD GH GDGRV TXH IRUQHfH VX
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RFXSDFLRQDO SRGH GHOLPLWDU REMHWLYRV H HVWUDWpJLDV YROWDGD
VHPHQKR RFXSDFLRQDOGR WUDEDOKDGRU QR ORFDO GH WUDEDOKR
H SRVWR GH WUDEDOKR jV VXDV SRWHQFLDOLGDGHV H QHFHVVLGDGHV

\$ XWLOL]DomR GH IHUUDPHQWDV TXH JHUDUDP GDGRV TXDQWLWDW
FkPHUD WHUPRJUiILFD DVVRFLDGDV jV TXDOLWDWLYDV FRQIHULX PDLR
DYDOLDU YLVXDOPHQWH DV UHJL}HV RQGH Ki TXHL[D GH GRU H R SUySU
ODWyULR GR SDFLHQWH GXUDQWH D DQiOLVH GDV DWLYLGDGHV

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FDGHLUD GH URGDV YLVDQGR SURPRYHU SRVFLRQDPHQWR FRQIRUWR
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MXQ @ 'LVSQRtYHO HP KWWS ZZZ SODQDOWR JRY EU FFLYLOB GHF

9LRODQWH 55 /HLWH /3\$ (PSUHJDELOLGDGH GDV SHVVRDV FRP GHILFL
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OKR 6mR 3DXOR -

\$VVRFLDomR \$PHULFDQD GH 7HUDSLD 2FXSDFLRQDO \$27\$ (VWUXWXUD
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6LOYD)01 9HQG)DQJHOKR 5RGULJXHV '6 \$ 7HUDSLD 2FXSDFLRQDO H
OKDGRU SDQRUDPD GH SURGXomR ELEOLRJuILFD &DG 7HU 2FXS 8)6&

%UDVLO &RQVHOKR)HGHUDO GH)LVLRWHUDSLD H 7HUDSLD 2FXSDFLR
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)HUUHLUD 0& (UJRQRPLD GD \$WLYLGDGH DSOLFDDGD j 4XDOLGDGH GH 9
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%UDVLO 0LQLVWpULR GR 7UDEDOKR H (PSUHJR 07(0DQXDO GH DSO
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6RiUHV 3& .RZDOVNL &&*)HUUD] 0% &LFRQHOO 50 7UDGXomR SDU
YDOLGDomR GH XP TXHVWLRQiULR GH DYDOLDomR GH SURGXWLYLGDGH
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JLDV HOHWLYDV JHUDLV 5HY \$VVRFLDomR %UDVLOHLUD GH (UJRQRPLD

&DUYDOKR .(& --QLRU 0%* 6i .1 7UDGXomR H YDOLGDomR GR 4XHEH
WLVIDFWLRQ ZLWK \$VVLVWLYH 7HFKQRORJ\ 48(67 SDUD R LGLRPD SI
%UDVLOHLUD GH 5HXPDRORJLD 6mR -3DXOR

%RXJLGD 1 %HQGDGD \$ 0DOGDJXH ;3 9LVXDOLJDWLRQ RUH@G\ WKHU
LPDJLQJ -RXUQDO RI 7KHUPDO %LRORJ\ 4XHEHF

6DOHV 5%& 3HUHLUD 55 \$JXLODU 073 &DUGRVR \$9 7KHUPDO FRPIRU
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KRPH MVI

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6LPRQHool \$3 &DPDURWWR -\$ \$QiOLVH GH DWLYLGDGHV SDUD D LQI

FLD QR WUDEDOKR XPD SURSRVWD GH PRGHOR 5HYLVWD *HVWmR GH 3U
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%DKLD -

\$EUDKmR -, 5HHVWUXWXUDomR 3URGXLWD H 9DULDELOLGDGH GR 7U
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&DYDOFDQWL \$ *DOYmR & 7HUDSLD RFXSDFLRQDO IXQGDPHQWDomR
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/DXUD %H]HUUD±FROHWDomR QD DQiOLVH GRV GDGRV UHYLVmR GR WH[WR H RUJDQL]D
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\$FHLWR HP

3XEOLFDGR HP